

EPA's Mission

The mission of the Environmental Protection Agency (EPA) is to protect and safeguard human health and the environment. This budget supports the Administration's commitment to environmental results as we work to increase the pace of improvement and identify new and better ways to carry out our mission. It also emphasizes the need for sound management of our federal resources, as delineated in the President's Management Agenda.

Annual Performance Plan and Congressional Justification

The EPA's Fiscal Year (FY) 2008 Annual Performance Plan and the Congressional Justification requests \$7.2 billion in discretionary budget authority and 17,324 Full Time Equivalents (FTE). This request reflects the Agency's efforts to work with its partners towards protecting air, water, and land, as well as providing for EPA's role in safeguarding the nation from terrorist attacks. This request echoes the Administration's commitment to setting high environmental protection standards, while focusing on results and performance, and achieving goals outlined in the President's Management Agenda.

The budget builds on EPA's long record of accomplishments since its founding 37 years ago. The agency and nation as a whole has achieved enormous successes. This budget builds on these successes by strengthening our geographic initiatives, better leveraging our nation's resources, strengthening citizen involvement, maintaining our enforcement capabilities, and implementing the President's commitment to efficiently manage Federal resources.

Homeland Security

Following the cleanup and decontamination efforts of 2001, the Agency has focused on ensuring we have the tools and protocols needed to detect and recover quickly from deliberate incidents. The emphasis for FY 2008 is on several areas: decontaminating threat agents, protecting our water and food supplies, and ensuring trained personnel and key lab capacities are in place to be drawn upon in the event of an emergency. Part of these FY 2008 efforts will continue to include activities to implement a common identification standard for EPA employees and contractors, the SmartCard initiative.

Human Capital

EPA will continue its systematic approach to workforce planning throughout the Agency by setting targets and closing competency gaps in the mission-critical occupations (MCOs) that have been identified. This will be done through the ongoing use of human capital strategies to ensure that the Agency recruits and retains a qualified pool of employees to protect human health and safeguard the air, water, and land. EPA has met many important milestones in implementing its revised Human Capital Strategy and the Human Capital Accountability Plan.

In FY 2006, the core competencies were assessed for the Agency's senior leadership, human resources management, and information technology positions. The Agency will implement plans to close the competency gaps identified. In FY 2007 and 2008, the Agency will

continue to assess the competencies for its priority MCOs. The assessment results will be used by the Agency to target developmental resources and recruiting practices to ensure that EPA can meet its mission and retain a highly-skilled, diverse, and results-oriented workforce with the right mix of technical expertise, professional experience, and leadership capabilities.

Workforce

EPA values its world class workforce and its expertise enables us to meet our urgent responsibilities across a broad range of national and local environmental issues. In FY 2007, we are making adjustments to EPA's workforce management strategy that will help us better align resources, skills, and Agency priorities. A key step in this adjustment is improving the alignment between the total number of positions authorized and actual FTE utilization. As such, in FY 2008 EPA is proposing to reduce its Agency authorized FTE ceiling by approximately 235.9 positions to 17,323.8, which is consistent with the Agency's historical FTE levels. The result of these reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs and will not result in an overall change in the number of FTEs at EPA. The program project descriptions provided later in this document, provide the details of these changes.

Organization of the Annual Performance Plan and Congressional Justification

In response to the President's Management Agenda, this budget more clearly integrates budget and performance. EPA developed a submission that presents the budget in a more succinct, programmatic format. It also closely aligns performance information with program narratives. Verification and validation documents will be provided electronically.

Annual Performance Plan and Congressional Justification Components

EPA's Annual Performance Plan is integrated into the Annual Budget Request. Where applicable, programmatic funding increases are tied to performance measures and associated targets by program/project. To fully explain the Agency's resource needs, the Budget contains annual performance goals and performance measures that the Agency uses to achieve its results.

Annual Performance Plan and Congressional Justification

Chapters include:

Resource Summary Tables

- Appropriation Summary (\$s)
- Appropriation Summary (FTEs)

Goal Overview (Goals 1-5)

- Goal, Appropriation Summary (\$s)
- Goal, Appropriation Summary (FTEs)

Program/Project by Appropriation (EPM, ST, STAG, IG, BF, SF, LUST & OIL)

- Resources for Appropriation
- Annotated Bill Language by Appropriation
 - Resource Table by Appropriation, Program/Project
 - Program/Project Fact Sheets (the following is included within each factsheet)
 - Resource Chart (\$s, FTEs)
 - Program/Project description
 - FY 2008 Activities and Highlights
 - Performance Targets
 - FY 2008 Changes from FY 2007 President's Budget
 - Statutory Authorities

Program Performance and Assessment

- PART - OMB Report
- PART - Supplemental Information
- Performance
 - 4-year array of APGs, PMs and Baselines
 - 4-year array of APGs, PMs and Baselines for Enabling Support Programs

Appendix

- Coordination with other Federal Agencies by Goal/Objective – Environmental Programs
- Coordination with other Federal Agencies by Goal/Objective – Enabling Support Programs (ESPs)
- Major Management Challenges – Organized by Goal/Objective
- User Fees
- Working Capital Funds
- Acronyms for Statutory Authority
- STAG – Statutory Authority and Eligible Uses
- Program/Projects by Appropriations
- Long Term Analyses
- Salary Calculations
- Legislative Proposals
- E-Government

Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification

Table of Contents - Resource Summary Tables

APPROPRIATION SUMMARY	1
Budget Authority	1
Full-time Equivalents (FTE)	2

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud
Science & Technology	\$764,737.6	\$766,465.0	\$788,274.0	\$754,506.0
Environmental Program & Management	\$2,331,934.7	\$2,338,242.0	\$2,306,617.0	\$2,298,188.0
Inspector General	\$36,501.5	\$35,100.0	\$35,100.0	\$38,008.0
Building and Facilities	\$41,672.2	\$39,816.0	\$39,816.0	\$34,801.0
Oil Spill Response	\$15,895.5	\$16,506.0	\$16,506.0	\$17,280.0
<i>Superfund Program</i>	\$1,294,641.5	\$1,176,936.0	\$1,217,827.9	\$1,211,431.0
<i>IG Transfer</i>	\$13,243.5	\$13,316.0	\$13,316.0	\$7,149.0
<i>S&T Transfer</i>	\$32,283.4	\$30,011.0	\$27,811.1	\$26,126.0
Hazardous Substance Superfund	\$1,340,168.4	\$1,220,263.0	\$1,258,955.0	\$1,244,706.0
Leaking Underground Storage Tanks	\$86,184.4	\$69,056.0	\$72,759.0	\$72,461.0
State and Tribal Assistance Grants	\$3,409,572.7	\$3,009,348.0	\$2,797,448.0	\$2,744,450.0
<i>SUB-TOTAL, EPA</i>	\$8,026,667.0	\$7,494,796.0	\$7,315,475.0	\$7,204,400.0
<i>Rescission of Prior Year Funds</i>				
Rescission of Prior Year Funds	\$0.0	\$0.0	\$0.0	(\$5,000.0)
TOTAL, EPA	\$8,026,667.0	\$7,494,796.0	\$7,315,475.0	\$7,199,400.0

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

APPROPRIATION SUMMARY

Full-time Equivalents (FTE)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud
Science & Technology	2,433.0	2,431.6	2,405.8
Science and Tech. - Reim	3.8	3.0	3.0
Environmental Program & Management	10,765.6	11,007.5	10,867.0
Envir. Program & Mgmt - Reim	134.2	1.5	1.5
Inspector General	247.5	267.7	287.7
Oil Spill Response	84.2	98.7	102.2
Oil Spill Response - Reim	5.9	0.0	0.0
<i>Superfund Program</i>	2,965.7	3,097.1	3,056.8
<i>IG Transfer</i>	88.4	94.1	44.1
<i>S&T Transfer</i>	110.3	106.2	105.0
Hazardous Substance Superfund	3,164.4	3,297.4	3,205.9
Superfund Reimbursables	89.4	77.5	77.5
Leaking Underground Storage Tanks	69.8	76.9	75.3
FEMA - Reim	3.7	0.0	0.0
WCF-REIMB	114.7	110.7	110.7
Rereg. & Exped. Proc. Rev Fund	187.0	187.2	187.2
Pesticide Registration Fund	51.4	0.0	0.0
TOTAL, EPA	17,354.6	17,559.7	17,323.8

Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification

Table of Contents - Goal and Objective Overview

GOAL, APPROPRIATION SUMMARY	1
Budget Authority	1
Authorized Full-time Equivalents (FTE)	3
Clean Air and Global Climate Change	7
Clean and Safe Water	12
Land Preservation and Restoration	16
Healthy Communities and Ecosystems	22
Compliance and Environmental Stewardship	29

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

GOAL, APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud
Clean Air and Global Climate Change	\$927,328.8	\$918,152.7	\$933,690.8	\$911,568.1
Environmental Program & Management	\$441,310.4	\$454,102.6	\$447,900.0	\$439,346.3
Science & Technology	\$213,853.5	\$208,719.8	\$214,789.2	\$216,316.5
Building and Facilities	\$9,101.0	\$8,748.4	\$8,748.4	\$7,636.6
State and Tribal Assistance Grants	\$255,366.5	\$238,344.6	\$253,692.5	\$239,194.0
Inspector General	\$4,816.5	\$4,864.4	\$5,174.0	\$5,550.1
Hazardous Substance Superfund	\$2,881.0	\$3,372.8	\$3,386.7	\$3,524.7
Clean and Safe Water	\$3,314,952.7	\$2,824,280.4	\$2,729,396.0	\$2,714,315.3
Environmental Program & Management	\$484,561.6	\$454,825.8	\$449,866.5	\$454,008.1
Science & Technology	\$131,483.3	\$165,869.6	\$170,692.3	\$150,194.4
Building and Facilities	\$6,253.9	\$6,039.4	\$6,039.4	\$5,309.6
State and Tribal Assistance Grants	\$2,672,948.2	\$2,180,239.7	\$2,085,435.0	\$2,085,766.0
Inspector General	\$19,705.8	\$17,305.9	\$17,362.7	\$19,037.2
Land Preservation and Restoration	\$1,760,905.0	\$1,653,880.8	\$1,690,385.8	\$1,663,120.2
Environmental Program & Management	\$218,819.5	\$221,386.8	\$218,760.6	\$220,537.8
Science & Technology	\$16,756.8	\$11,806.4	\$12,149.9	\$12,367.4
Building and Facilities	\$5,042.9	\$4,871.3	\$4,871.3	\$4,270.1
State and Tribal Assistance Grants	\$117,693.0	\$145,158.0	\$140,912.2	\$125,620.0
Leaking Underground Storage Tanks	\$86,184.4	\$69,001.1	\$72,759.0	\$72,461.0
Oil Spill Response	\$15,895.5	\$16,506.0	\$16,506.0	\$17,280.0
Inspector General	\$2,255.4	\$2,411.0	\$2,494.6	\$2,659.0
Hazardous Substance Superfund	\$1,298,257.5	\$1,182,740.2	\$1,221,932.2	\$1,207,924.8

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud
Healthy Communities and Ecosystems	\$1,264,197.4	\$1,353,184.0	\$1,227,659.4	\$1,171,565.0
Environmental Program & Management	\$628,547.0	\$646,757.4	\$637,032.8	\$619,420.0
Science & Technology	\$345,535.3	\$338,578.8	\$348,424.1	\$332,682.3
Building and Facilities	\$14,996.2	\$13,951.7	\$13,951.7	\$12,167.4
State and Tribal Assistance Grants	\$251,621.8	\$338,253.9	\$213,656.3	\$192,117.0
Inspector General	\$6,344.9	\$7,116.2	\$6,576.1	\$6,863.1
Hazardous Substance Superfund	\$17,152.3	\$8,526.1	\$8,018.3	\$8,315.2
 Compliance and Environmental Stewardship	 \$759,283.1	 \$744,109.2	 \$734,343.1	 \$743,831.4
Environmental Program & Management	\$558,696.3	\$560,920.1	\$553,057.1	\$564,875.8
Science & Technology	\$57,108.7	\$41,025.9	\$42,218.6	\$42,945.5
Building and Facilities	\$6,278.3	\$6,205.1	\$6,205.1	\$5,417.3
State and Tribal Assistance Grants	\$111,943.2	\$106,877.9	\$103,752.0	\$101,753.0
Inspector General	\$3,378.9	\$3,402.5	\$3,492.5	\$3,898.6
Hazardous Substance Superfund	\$21,877.6	\$25,677.7	\$25,617.7	\$24,941.2
 <i>Sub-Total</i>	 \$8,026,667.0	 \$7,493,607.1	 \$7,315,475.0	 \$7,204,400.0
Rescission of Prior Year Funds				
Total	\$8,026,667.0	\$7,493,607.1	\$7,315,475.0	\$7,204,400.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

GOAL, APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud
Clean Air and Global Climate Change	2,623.7	2,664.4	2,620.6
Environmental Program & Management	1,859.9	1,891.4	1,853.4
Science & Technology	680.6	688.3	680.0
Inspector General	32.7	39.5	42.0
Hazardous Substance Superfund	17.5	17.6	17.5
Envir. Program & Mgmt - Reim	2.9	0.3	0.3
Science and Tech. - Reim	2.7	3.0	3.0
FEMA - Reim	2.3	0.0	0.0
WCF-REIMB	25.0	24.3	24.3
 Clean and Safe Water	 2,888.3	 2,890.8	 2,895.6
Environmental Program & Management	2,221.6	2,229.1	2,229.6
Science & Technology	495.7	511.6	504.1
Inspector General	133.6	132.4	144.1
Envir. Program & Mgmt - Reim	19.4	0.3	0.3
WCF-REIMB	18.0	17.4	17.5
 Land Preservation and Restoration	 4,624.4	 4,693.5	 4,582.0
Environmental Program & Management	1,190.0	1,237.1	1,203.7
Science & Technology	51.5	51.2	50.8
Leaking Underground Storage Tanks	69.8	76.9	75.3
Oil Spill Response	84.2	98.7	102.2
Inspector General	15.3	19.0	20.1
Hazardous Substance Superfund	3,012.0	3,120.1	3,039.4
Envir. Program & Mgmt - Reim	91.8	0.1	0.1
Oil Spill Response - Reim	5.9	0.0	0.0
FEMA - Reim	1.4	0.0	0.0
Superfund Reimbursables	89.4	77.5	77.5
WCF-REIMB	13.1	12.9	13.0
 Healthy Communities and Ecosystems	 3,808.5	 3,825.4	 3,743.9

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud
Environmental Program & Management	2,420.2	2,511.7	2,441.8
Science & Technology	1,028.1	1,016.1	1,002.9
Inspector General	43.0	50.2	51.9
Rereg. & Exped. Proc. Rev Fund	187.0	187.2	187.2
Hazardous Substance Superfund	27.5	21.3	21.1
Envir. Program & Mgmt - Reim	9.5	0.5	0.5
Science and Tech. - Reim	1.1	0.0	0.0
Pesticide Registration Fund	51.4	0.0	0.0
WCF-REIMB	40.7	38.5	38.4
 Compliance and Environmental Stewardship	 3,409.1	 3,485.6	 3,481.7
Environmental Program & Management	3,073.4	3,138.2	3,138.5
Science & Technology	176.9	164.5	167.9
Inspector General	22.9	26.6	29.5
Hazardous Substance Superfund	107.4	138.5	127.9
Envir. Program & Mgmt - Reim	10.5	0.3	0.3
WCF-REIMB	17.9	17.5	17.6
 Total	 17,353.9	 17,559.7	 17,323.8

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Clean Air and Global Climate Change

Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.

STRATEGIC OBJECTIVES:

- Through 2011, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.
- Through 2012, working with partners, reduce human health risks by reducing exposure to indoor air contaminants through the promotion of voluntary actions by the public.
- By 2030, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and overexposure to ultraviolet radiation, particularly among susceptible subpopulations, such as children, will be reduced.
- Through 2011, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.
- Through EPA's voluntary climate protection programs, contribute 80 million metric tons of carbon equivalent (MMTCE) annually to the President's 18 percent greenhouse gas (GHG) intensity goal by 2012. (An additional 24 MMTCE to result from the sustained growth in the climate programs are reflected in the Administration's business-as-usual projection for GHG intensity improvement.)
- Through 2011, provide and apply sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 1.

GOAL, OBJECTIVE SUMMARY

Budget Authority

Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Clean Air and Global Climate Change	\$927,328.8	\$918,152.7	\$933,690.8	\$911,568.1	(\$22,122.7)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Healthier Outdoor Air	\$599,210.0	\$587,353.5	\$628,676.1	\$588,247.2	(\$40,428.9)
Healthier Indoor Air	\$46,589.0	\$48,768.1	\$47,831.5	\$45,698.8	(\$2,132.7)
Protect the Ozone Layer	\$17,252.1	\$22,097.2	\$21,665.6	\$17,130.9	(\$4,534.7)
Radiation	\$38,012.1	\$39,447.7	\$39,452.7	\$39,318.1	(\$134.6)
Reduce Greenhouse Gas Intensity	\$124,735.0	\$127,658.9	\$99,750.4	\$122,937.2	\$23,186.8
Enhance Science and Research	\$101,530.5	\$92,827.4	\$96,314.5	\$98,235.9	\$1,921.4
Total Authorized Workyears	2,623.7	2,660.0	2,664.4	2,620.6	-43.8

EPA implements the Clean Air and Global Climate Change goal through national and regional programs designed to provide healthier outdoor and indoor air for all Americans, protect the stratospheric ozone layer, minimize the risks from radiation releases, reduce greenhouse gas intensity, and enhance science and research. In implementing the goal, EPA carries out its responsibilities through programs that include several common elements: setting risk-based priorities; facilitating regulatory reform and market-based approaches; partnering with state, Tribal, and local governments, non-governmental organizations, and industry; promoting energy efficiency; and using sound science.

EPA's key clean air programs – including those addressing particulate matter, ozone, acid rain, air toxics, indoor air, radiation and stratospheric ozone depletion – focus on some of the highest health and environmental risks faced by the Agency. These programs have achieved results. Every year, state and Federal air pollution programs established under the Clean Air Act prevent tens of thousands of premature mortalities, millions of incidences of chronic and acute illness, tens of thousands of hospitalizations and emergency room visits, and millions of lost work days.

Clean Air Rules

The Clean Air Rules are a major component of EPA work under Goal 1 and include a suite of actions that will dramatically improve America's air quality. Three of the rules specifically address the transport of pollution across state borders (the Clean Air Interstate Rule, Clean Air Mercury Rule and Clean Air Nonroad Diesel Rule). These rules provide national tools to achieve significant improvement in air quality and the associated benefits of improved health, longevity and quality of life for all Americans. Taken together, they will make the next 15 years one of the most productive periods of air quality improvement in America's history. In FY 2008, EPA will be working with the states and industry to implement these rules.

Energy Policy Act

In addition to the suite of Clean Air Rules, EPA is investing over \$8 million to develop and operate the market-based credit trading system required by the Renewable Fuels Standard (RFS) program, in addition to annual State-by-State surveys to determine market shares of conventional and reformulated gasoline containing ethanol, and data collection and analysis activities needed to evaluate the impacts of the RFS program on the environment, air quality, and on the nation's energy security. The Renewable Fuels Standards (RFS) rule is scheduled to be promulgated in 2007 and work will continue on the development of several more actions required by the Energy Policy Act (EPA) of 2005. Some of these EPA actions involve a study of the changes in emissions of air pollutants and air quality, and a fuel system harmonization study. In 2008, EPA will promulgate new standards for locomotives and marine diesel engines, as well as new standards for large commercial ships. EPA also will issue a rule addressing exhaust and evaporative emissions from small gasoline engines (under 50 horsepower), including all recreational marine gasoline engines, non-handheld engines (such as those used in lawnmowers), and handheld engines (such as those used in trimmers and chainsaws).

Reduce Risks to Indoor Air and Radon Programs

The Indoor Air Program characterizes the risks of indoor air pollutants to human health, develops techniques for reducing those risks, and educates the public about what they can do to reduce their risks from indoor air. Through voluntary partnerships with non-governmental and professional organizations, EPA educates and encourages individuals, schools, industry, the health care community, and others to take action to reduce health risks in indoor environments using a variety of approaches, including national public awareness and media campaigns, as well as community-based outreach and education. EPA also uses technology-transfer to improve the design, operation, and maintenance of buildings – including schools, homes, and workplaces – to promote healthier indoor air. EPA also carries out a national radon program that encourages and facilitates voluntary national, regional, state, and Tribal programs and activities that support initiatives targeted to radon testing and mitigation, as well as radon resistant new construction. Radon is second only to smoking as a cause of lung cancer.

Climate Protection

For more than a decade, businesses and other organizations have partnered with EPA through voluntary climate protection programs to pursue common sense approaches to reducing greenhouse gas emissions and meeting the President's greenhouse gas intensity goal. Voluntary programs such as Energy Star and SmartWay Transport have increased the use of energy-efficient products and practices and reduced emissions of carbon dioxide as well as methane and other greenhouse gases with very high global warming potentials. These partnership programs spur investment in advanced energy technologies and the purchase of energy-efficient products and create emissions reduction benefits that accrue over the lifetime of the investment or product. In 2008, EPA will invest \$4.4 million in the Methane to Markets by assessing the feasibility of methane recovery and

use projects at landfills, coal mines, and natural gas and oil facilities and by identifying and addressing institutional, legal, regulatory and other barriers to project development in partner countries. In addition EPA plans to invest \$5 million to support the Asia-Pacific Partnership programs. In FY 2008 this partnership between the United States Australia, China, India, Japan, and South Korea will focus on developing country-specific strategies to improve energy security and reduce pollution. EPA also will work with the Asia-Pacific region to develop and deploy new and emerging technologies and tailor programs, such as methane capture and use, to meet the specific conditions of each area. Both the Methane to Markets program and Asia Pacific Partnerships will coordinate with other agencies to achieve the goals in these programs.

Stratospheric Ozone – Domestic and Montreal Protocol

In FY 2008 EPA's Domestic Stratospheric Ozone Protection Program will invest \$9.8 million support cost-effective projects that are designed to build capacity and eliminate ODS production and consumption in over 60 developing countries. The Multilateral Fund continues to support over 5,150 activities in 139 countries, and when fully implemented, will prevent annual emissions of more than 223,729 metric tons of ODS. Over 80% of already agreed project activities have been implemented to date, with remaining work in these already agreed projects expected to be fully implemented by 2009. In addition to continuing to implement the provisions of the Clean Air Act and the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), and contributing to the reduction and control of ozone-depleting substances (ODSs) in the U.S. and lowering health risks to the American public associated with exposure to UV radiation.

Radiation Monitoring

In FY 2008, EPA will continue upgrading the national radiation monitoring system, thus improving response time, data dissemination, and population/geographic coverage of the U.S., should there be an accidental or intentional release of radiation either domestically or internationally. EPA will also maintain readiness of deployable monitors allowing for sampling density at locations near and downwind from radiological incidents. The Agency will continue to enhance laboratory response capacity and capability to ensure a minimal level of surge capacity for radiological incidents.

Global Change Research

EPA conducts research that provides a scientific foundation for the Agency's actions to protect the air all Americans breathe. In FY 2008, EPA's air research program will supports implementation of the Clean Air Act, especially the National Ambient Air Quality Standards (NAAQS). The NAAQS program will focus on setting limits on how much tropospheric ozone, particulate matter, carbon monoxide; sulfur dioxide, nitrogen oxides, and lead are allowed in the atmosphere. EPA also conducts research to improve understanding of the risks from hazardous air pollutants, also known as air toxics.

In FY 2008, the Agency's air research program will continue research to understand the sources and composition of air pollution; develop methods for controlling sources' emissions; study atmospheric chemistry and model U.S. air quality; investigate Americans' exposure to air pollution; and conduct epidemiological, clinical, and toxicological studies of air pollution's health effects. The Agency also will award research grants to universities and nonprofits to study topics such as how long-term exposure to fine particles in the atmosphere influences heart disease. In FY 2008, an important focus of the program will be air pollution near roads.

Recognizing that environmental policy and regulatory decisions will only be as good as the science upon which they are based, EPA makes every effort to ensure that its science is of the highest quality and relevance, thereby providing the basis for sound environmental results. EPA uses the federal Research and Development (R&D) Investment Criteria of quality, relevance, and performance in its decision-making processes through a) the use of research strategies and plans, b) program review and evaluation by the Board of Scientific Counselors (BOSC) and the Science Advisory Board (SAB), and c) peer review.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Clean and Safe Water

Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.

STRATEGIC OBJECTIVES:

- Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters.
- Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.
- By 2011, conduct leading-edge, sound scientific research to support the protection of human health through the reduction of human exposure to contaminants in drinking water, fish and shellfish, and recreational waters and to support the protection of aquatic ecosystems-specifically, the quality of rivers, lakes, and streams, and coastal and ocean waters.

GOAL, OBJECTIVE SUMMARY

Budget Authority

Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Clean and Safe Water	\$3,314,952.7	\$2,824,280.4	\$2,729,396.0	\$2,714,315.3	(\$15,080.7)
Protect Human Health	\$1,233,605.2	\$1,186,716.6	\$1,176,754.8	\$1,155,717.4	(\$21,037.4)
Protect Water Quality	\$1,953,776.5	\$1,503,178.8	\$1,412,834.3	\$1,422,163.4	\$9,329.1
Enhance Research to Support Clean and Safe Water	\$127,571.0	\$134,385.0	\$139,806.8	\$136,434.5	(\$3,372.3)
Total Authorized Workyears	2,888.3	2,896.3	2,890.8	2,895.6	4.8

EPA implements the Clean and Safe Water goal through programs designed to provide improvements in the quality of surface waters and drinking water. In FY 2008, EPA will work with states and Tribes to continue to accomplish measurable improvements in the safety of the nation's drinking water and in the conditions of rivers, lakes, and coastal waters. With the help of these partners, EPA expects to make significant progress in these areas, as well as support a few more focused water initiatives.

The National Water Program will continue to pay special attention to sustainable infrastructure and watershed stewardship, through its “four pillars” program, specifically focusing on innovative financing and leveraging for infrastructure sustainability, banking for wetlands conservation, and trading among point sources and non-point sources for water quality upgrades. Additionally, in FY 2008, the Agency will continue advancing the water quality monitoring initiative and a water quality standards strategy under the Clean Water Act, as well as, important rules and activities under the Safe Drinking Water Act, involving lead and emerging contaminants. Related efforts to improve monitoring and surveillance will help advance water security nationwide.

Drinking Water

During FY 2008, EPA, the states and community water systems will build on past successes while working toward the FY 2008 goal of assuring that 90 percent of the population served by community water systems receives drinking water that meets all applicable health-based standards. To promote compliance with drinking water standards, states carry out a variety of activities, such as conducting onsite sanitary surveys of water systems and working with small systems to improve their capabilities. EPA will work to improve compliance rates by providing guidance, training, and technical assistance; ensuring proper certification of water system operators; promoting consumer awareness of drinking water safety; maintaining the rate of system sanitary surveys and onsite reviews; and taking appropriate action for noncompliance. To help ensure that water is safe to drink, the FY 2008 President’s Budget requests \$842 million for the Drinking Water State Revolving Fund.

Clean Water

In FY 2008, EPA will work with states to continue progress toward the clean water goals to implement core clean water programs, including innovations that apply programs on a watershed basis, and to accelerate efforts to improve water quality on a watershed basis. Building on the progress toward clean water achieved over the past 30 years, EPA is working with states and Tribes to implement the Clean Water Act by focusing on: scientifically sound water quality standards; effective water monitoring; strong programs for controlling nonpoint sources of pollution; and strong discharge permit programs.

The Agency’s request continues the monitoring initiative begun in 2005 to strengthen the nationwide monitoring network and complete the baseline water quality assessment of lakes and streams. These efforts will result in scientifically defensible water quality data and information essential for cleaning up and protecting the nation’s waters. Progress in improving coastal and ocean waters documented in the National Coastal Condition Report will be maintained by focusing on: assessing coastal conditions; reducing vessel discharges; implementing coastal nonpoint source pollution programs; managing dredged material; and supporting international marine pollution control. EPA will continue to provide annual capitalization to the Clean Water State Revolving Fund (CWSRF). The FY 2008 President’s Budget provides \$688 million and will allow EPA to meet the Administration’s Federal

capitalization target of \$6.8 billion total for 2004-2011 and enable the CWSRF to eventually revolve at a level of \$3.4 billion.

Private Activity Bonds

Included in the President's Budget is a proposal to exempt Private Activity Bonds (PABs) used to finance drinking water and wastewater infrastructure from the private activity bond unified state volume cap. PABs are tax-exempt bonds issued by a State or local government, the proceeds of which are used by another entity for a public purpose or by the government entity itself for certain public-private partnerships. By removing drinking water and wastewater bonds from the volume cap, this proposal will provide States and communities greater access to PABs to help finance their water infrastructure needs and increase capital investment in the Nation's water infrastructure.

This Water Enterprise Bond proposal would provide an exception to the unified annual State volume cap on tax-exempt qualified private activity bonds for exempt facilities for the “furnishing of water” or “sewage facilities.” To ensure the long-term financial health and solvency of these drinking water and wastewater systems, communities using these bonds must have demonstrated a process that will move towards full-cost pricing for services within five years of issuing the Private Activity Bonds. This will help water systems become self-financing and minimize the need for future subsidies.

Homeland Security

EPA has a major role in supporting the protection of the nation's critical water infrastructure from terrorist threats. In FY 2008, EPA will continue to support the Water Security Initiative (formerly known as Water Sentinel) pilot program and water sector-specific agency responsibilities, including the Water Alliance for Threat Reduction (WATR), to protect the nation's critical water infrastructure. The FY 2008 budget provides \$22 million for the Water Security Initiative completing deployment of final pilot systems. In FY 2008, the Agency in collaboration with our water sector security stakeholders will continue our efforts to develop, implement and initiate tracking of national measures related to homeland security critical infrastructure protection activities.

Research

EPA's drinking water and water quality research programs conduct leading edge, problem-driven research to provide a sound scientific foundation for Federal regulatory decision-making. These efforts will result in strengthened public health and aquatic ecosystem protection by providing data methods, models, assessments, and technologies for EPA program and regional offices, as well as state and local authorities.

In FY 2008, these research programs will conduct studies and deliver science products needed by the nation to realize clean and safe water. The drinking water research program will focus on filling key gaps in data, methods and technologies to support the Agency's mission to protect drinking water from chemical and microbial contaminants including

developing contaminant detection methods, conducting health effects studies, developing and evaluating cost-effective treatment technologies, and constructing tools to protect source waters. The water quality research program will continue providing approaches and methods that the Agency and its partners need to develop, and apply criteria to support designated uses, tools to diagnose and assess impairment in aquatic systems, and tools to restore and protect aquatic systems. These programs also will conduct research that will yield tools and strategies to manage our nation's aging water infrastructure.

Other important areas of research in FY 2008 will include: 1) development of molecular microarrays for detection of bacterial pathogens and non-pathogenic microbes in drinking water source waters; 2) epidemiological studies on the illness rate for untreated groundwater and distributions systems; 3) studies on the practice of blending together waste water effluents in various stages of the disinfection process to prevent peak wet weather flows from overwhelming treatment facilities while protecting water quality; and 4) providing more efficient monitoring and diagnostic tools through continued research to develop methods of using landscape assessments for monitoring and assessing watershed conditions. These programs will help assess risks and priorities for ensuring clean water.

Recognizing that environmental policy and regulatory decisions will only be as good as the science upon which they are based, EPA makes every effort to ensure that its science is of the highest quality and relevance, thereby, providing the basis for sound environmental results. EPA uses the Research and Development (R&D) Investment Criteria of quality, relevance, and performance in its decision-making processes through the use of research strategies and plans, program review and evaluation by the Board of Scientific Counselors (BOSC) and the Science Advisory Board (SAB), and peer review.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Land Preservation and Restoration

Preserve and restore the land by using innovative waste management practices and cleaning up contaminated properties to reduce risks posed by releases of harmful substances.

STRATEGIC OBJECTIVES:

- By 2011, reduce adverse effects to land by reducing waste generation, increasing recycling, and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.
- By 2011, control the risks to human health and the environment by mitigating the impact of accidental or intentional releases and by cleaning up and restoring contaminated sites or properties to appropriate levels.
- Through 2011, provide and apply sound science for protecting and restoring land by conducting leading-edge research, which through collaboration, leads to preferred environmental outcomes.

GOAL, OBJECTIVE SUMMARY

Budget Authority

Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Land Preservation and Restoration	\$1,760,905.0	\$1,653,880.8	\$1,690,385.8	\$1,663,120.2	(\$27,265.6)
Preserve Land	\$223,407.8	\$250,024.2	\$242,510.5	\$231,574.8	(\$10,935.7)
Restore Land	\$1,479,533.9	\$1,350,189.8	\$1,397,705.7	\$1,382,938.7	(\$14,767.0)
Enhance Science and Research	\$57,963.3	\$53,666.8	\$50,169.6	\$48,606.7	(\$1,562.9)
Total Authorized Workyears	4,624.4	4,691.6	4,693.5	4,582.0	-111.5

Land is one of America's most valuable resources. Uncontrolled, hazardous and nonhazardous wastes on the land can migrate to the air, groundwater, and surface water, contaminating drinking water supplies, causing acute illnesses or chronic diseases, and threatening healthy ecosystems in urban, rural, and suburban areas. To address these issues, EPA implements the Land Preservation and Restoration goal utilizing a three pronged approach—prevention, protection, and response activities to address immediate needs; enforcement and compliance

assistance to determine what needs to be done and who should pay; and sound science and research to address risk factors and new, innovative solutions.

Prevention, Protection, and Response Activities

EPA leads the country's activities to prevent and reduce the risks posed by releases of harmful substances and to preserve and restore land with effective waste management and cleanup methods. In FY 2008, the Agency will continue to apply the most effective approach to controlling these risks by developing and implementing prevention programs, improving response capabilities, and maximizing the effectiveness of response and cleanup actions. This approach will help ensure that human health and the environment are protected and that land is returned to beneficial use.

In FY 2008, EPA also will continue to use a hierarchy of approaches to protect the land: reducing waste at its source, recycling waste, managing waste effectively by preventing spills and releases of toxic materials, and cleaning up contaminated properties. The Agency especially is concerned about threats to our most sensitive populations, such as children, the elderly, and individuals with chronic diseases, and prioritizes cleanups accordingly.¹

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund) and the Resource Conservation and Recovery Act (RCRA) provide the legal authority for most of EPA's work toward this goal. The Agency and its partners use Superfund authority to clean up uncontrolled or abandoned hazardous waste sites, allowing land to be returned to productive use. Under RCRA, EPA works in partnership with states and Tribes to address risks associated with leaking underground storage tanks and with the generation and management of hazardous and nonhazardous waste.

EPA also uses authorities provided under the Clean Air Act, Clean Water Act, and Oil Pollution Act of 1990 to protect against spills and releases of hazardous materials. Controlling the many risks posed by accidental and intentional releases of harmful substances presents a significant challenge. In FY 2008, EPA will continue to ensure that it is adequately prepared to minimize contamination and harm to the environment from spills and releases of hazardous materials by improving its readiness to respond to emergencies through training as well as maintaining a highly skilled, well-trained, and equipped response workforce.

The following themes characterize EPA's land program activities under Goal 3 in FY 2008: Revitalization; Recycling, Waste Minimization and Energy Recovery; Emergency Preparedness, Response, and Homeland Security; and implementation of the recently-authorized Energy Policy Act of 2005 (EPAct).

- **Revitalization:** All of EPA's cleanup programs (Superfund Remedial, Superfund Federal Facilities Response, Superfund Removal, RCRA Corrective Action, Brownfields, and Underground Storage Tanks) and their partners are taking proactive steps to facilitate the

¹ Additional information on these programs can be found at: www.epa.gov/superfund, <http://www.epa.gov/superfund/programs/er/index.htm>, <http://www.epa.gov/epaoswer/hazwaste/ca/>, and <http://www.epa.gov/swerrims/landrevitalization>.

cleanup and revitalization of contaminated properties. Revitalizing these once productive properties helps communities by removing blight, satisfying the growing demand for land, helping limit urban sprawl, fostering ecologic habitat enhancements, enabling economic development, and maintaining or improving quality of life. In reflection of the high priority the Agency has placed on land revitalization, the Superfund program is participating in efforts to implement cross-program revitalization measures to capture a broader array of accomplishments across all of EPA's cleanup programs resulting from the assessment and cleanup of properties. One example is the new Superfund Remedial PART measure "Acres of land ready for reuse." In addition, in FY 2006 the Superfund program developed the "Site-wide Ready for Anticipated Use" measure to track National Priority List (NPL) sites where construction of the remedy is complete; where cleanup goals in the Record of Decision (ROD) have been achieved such that there are no unacceptable risks associated with current and reasonably anticipated future uses; and where all institutional controls required in the ROD have been implemented. In FY 2008, the Agency expects 30 NPL sites to achieve this accomplishment.

- Recycling, Waste Minimization and Energy Recovery: EPA's strategy for reducing waste generation and increasing recycling will continue to be based on: 1) establishing and expanding partnerships with businesses, industries, Tribes, states, communities, and consumers; 2) stimulating infrastructure development and environmentally responsible behavior by product manufacturers, users, and disposers; and 3) helping businesses, government, institutions, and consumers reduce waste generation and increase recycling through education, outreach, training, and technical assistance. In FY 2008, EPA will continue the Resource Conservation Challenge as a major national effort to find flexible, yet more protective ways to conserve our valuable natural resources through waste reduction, energy recovery, and recycling.
- Emergency Preparedness, Response, and Homeland Security: EPA has a major role in reducing the risk to human health and the environment posed by accidental or intentional releases of harmful substances and oil. In FY 2008, EPA will continue to improve its capability to effectively prepare for and respond to these incidents, including natural disasters such as hurricanes, by working closely with other Federal agencies within the National Response Plan. EPA will also continue to develop a national environmental laboratory capability and decontamination options to ensure that the nation can quickly recover from nationally significant incidents.
- Implementing the EPAAct: The EPAAct² contains numerous provisions that significantly affect Federal and state underground storage tank (UST) programs and requires that EPA and states strengthen tank release and prevention programs. In FY 2008, EPA is requesting \$34 million to provide assistance to states to help them meet their new responsibilities, which include 1) mandatory inspections every three years for all underground storage tanks, 2) operator training, 3) prohibition of delivery for non-complying facilities³, 4) secondary containment

² For more information, refer to http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ058.109.pdf (scroll to Title XV - Ethanol And Motor Fuels, Subtitle B – Underground Storage Tank Compliance, on pages 500-513 of the pdf file).

³ Refer to *Grant Guidelines to States for Implementing the Delivery Prohibition Provision of the Energy Policy Act of 2005*, August 2006, EPA-510-R-06-003, http://www.epa.gov/oust/fedlaws/epact_05.htm#Final.

or financial responsibility for tank manufacturers and installers, 5) various compliance reports, and 6) grant guidelines. EPA is also submitting new legislative language to allow states to use alternative mechanisms such as the Environmental Results Program (ERP) to meet the mandatory three-year inspection requirement. This proposal provides States with a less costly alternative to meet the objectives of the Energy Policy Act. In FY 2008, EPA will also implement the UST Tribal strategy⁴ developed in FY 2006 in Indian country.

Enforcement

Enforcement authorities play a unique role under the Superfund program: they are used to leverage private-party resources to conduct a majority of the cleanup actions and to reimburse the Federal government for cleanups financed by appropriations. The Superfund program's "enforcement first" policy ensures that sites that have viable potentially responsible parties (PRPs) are cleaned up by those parties, allowing EPA to focus appropriated resources on sites where viable PRPs either do not exist or lack funds or capabilities needed to conduct the cleanup. In tandem with this approach, various reforms have been implemented to increase fairness, reduce transaction costs, and promote economic development.⁵

EPA has ongoing cleanup and property transfer responsibilities at some of the Nation's most contaminated Federal properties, which range from realigning and closing military installations and former military properties containing unexploded ordnance, solvents, and other industrial chemicals to Department of Energy sites containing nuclear waste. EPA's Superfund Federal Facilities Response and Enforcement program helps Federal and local governments, Tribes, states, redevelopment authorities and the affected communities ensure contamination at Federal or former Federal properties is addressed in a manner that protects human health and the environment.⁶

In FY 2008, the Agency will continue to encourage the establishment and use of Special Accounts within the Superfund Trust Fund. As of the end of FY 2006, EPA maintains more than 500 Special Accounts within the Superfund Trust Fund. These accounts segregate site-specific funds obtained from responsible parties that complete settlement agreements with EPA. These funds may create an incentive for other PRPs at that specific site to perform work they otherwise might not be willing to perform. In addition, these funds may be used by the Agency to fund cleanup activities if there are not known or viable PRPs. As a result, the Agency can get more sites cleaned up while preserving the appropriated Trust Fund dollars for sites without viable PRPs.

In FY 2008, the Agency will negotiate remedial design/remedial action cleanup agreements and removal agreements at contaminated properties. Where negotiations fail, the Agency will either take unilateral enforcement actions to require PRP cleanup or use appropriated dollars to

⁴ Refer to *Strategy for an EPA/Tribal Partnership to Implement Section 1529 of the Energy Policy Act of 2005*, August 2006, EPA-510-F-06-005, http://www.epa.gov/oust/fedlaws/epact_05.htm#Final.

⁵ For more information regarding EPA's enforcement program and its various components, please refer to <http://www.epa.gov/compliance/cleanup/superfund/>.

⁶ For more information on the Superfund Federal Facilities Response and Enforcement program, please refer to <http://www.epa.gov/fedfac>.

remediate sites. When appropriated dollars are used to clean up sites, the program will recover this money from the PRPs whenever possible.

EPA's financial management offices provide a full array of support services to the Superfund program including managing oversight billing for Superfund site cleanups and financial cost recovery. The Department of Justice supports EPA's Superfund Enforcement program through negotiations and judicial actions to compel PRP cleanup and litigation to recover Trust Fund monies spent.

Enhancing Science and Research to Restore and Preserve Land

The FY 2008 land research program supports the Agency's objective of reducing and controlling potential risks to human health and the environment at contaminated waste sites by providing the science to accelerate scientifically defensible and cost-effective decisions for cleanup of sites in accordance with CERCLA, RCRA and other applicable statutes. Recognizing that environmental policy and regulatory decisions will only be as good as the science upon which they are based, EPA makes every effort to ensure that its science is of the highest quality and relevance, thereby providing the basis for sound environmental results.

In FY 2008, EPA is requesting \$48.6 million to enhance science and research in support of EPA's land preservation and restoration programs. Research activities in FY 2008 will focus on contaminated sediments, ground water contamination, site characterization, analytical methods, and site-specific technical support. Research activities will advance EPA's ability to accurately characterize the risks posed by contaminated sediments and determine the range and scientific foundation for remedy selection options. EPA's land research program will also address the transport of contaminants in ground water and subsequent intrusion of contaminant vapors into buildings. Oil spill remediation research will continue to focus on physical, chemical, and biological risk management methods for petroleum and non-petroleum oils spilled into freshwater and marine environments, as well as development of a protocol for testing solidifiers and treating oil. UST research will address the development of online transport models that can be used by state project managers. Research in resource conservation, corrective action, hazardous waste treatment, landfills, leaching, containment systems, and landfill bioreactors will constitute the major areas of research and support for RCRA activities in FY 2008. In addition, EPA's land research program will continue to provide site-specific assistance on technical issues across the land remediation and restoration programs.

EPA will continue to collaborate with states and the private sector to conduct field sampling and optimize operations and monitoring of long-term remedies and research activities. Furthermore, in response to an independent review of the RCRA portion of the land research program, a shift in the research program will be made in FY 2008 to address nanotechnology fate and transport research issues in an effort by the program to focus on emerging issues and strategic research topics.

2006 PART

The following programs were assessed by OMB's Program Assessment Rating Tool (PART) for the 2006 PART process:

- Land Protection and Restoration Research
- Underground Storage Tank Program

More detailed information is provided in specific program project descriptions.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Healthy Communities and Ecosystems

Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

STRATEGIC OBJECTIVES:

- By 2011, prevent and reduce pesticide and industrial chemical risks to humans, communities, and ecosystems.
- Sustain, clean up, and restore communities and the ecological systems that support them.
- Protect, sustain, and restore the health of critical natural habitats and ecosystems.
- Through 2011, identify and synthesize the best available scientific information, models, methods, and analyses to support Agency guidance and policy decisions related to the health of people, communities, and ecosystems. Focus research on pesticides and chemical toxicology; global change; and comprehensive, cross-cutting studies of human, community, and ecosystem health.

GOAL, OBJECTIVE SUMMARY

Budget Authority

Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Healthy Communities and Ecosystems	\$1,264,197.4	\$1,353,184.0	\$1,227,659.4	\$1,171,565.0	(\$56,094.4)
Chemical and Pesticide Risks	\$400,291.2	\$397,124.7	\$386,011.2	\$387,165.5	\$1,154.3
Communities	\$288,984.5	\$377,124.2	\$251,034.0	\$234,758.2	(\$16,275.8)
Restore and Protect Critical Ecosystems	\$190,453.1	\$200,050.5	\$198,150.5	\$178,373.7	(\$19,776.8)
Enhance Science and Research	\$384,468.6	\$378,884.6	\$392,463.7	\$371,267.6	(\$21,196.1)
Total Authorized Workyears	3,808.5	3,820.7	3,825.4	3,743.9	-81.5

In FY 2008, the Environmental Protection Agency will protect, sustain or restore the health of communities and ecosystems by bringing together a variety of programs, tools, approaches and resources, including partnerships with stakeholders and Federal, state, Tribal, and local government agencies. EPA manages environmental risks to watersheds, communities, homes, and workplaces to protect human health and the environmental integrity of ecosystems. The Agency employs a mix of regulatory programs and partnership approaches to achieve results in ways that are efficient, innovative, and sustainable. Ideally, EPA can implement a strategy of preventing pollution at the source; however, where programs to prevent pollution or ecosystem damage are not viable, EPA promotes waste minimization, avoidance of impact on habitat, safe disposal, and remediation.

In managing risk, EPA directs its efforts toward the greatest threats in our communities, homes, and workplaces, including threats to sensitive populations such as children and the elderly, and to communities with potential disproportionately high and adverse environmental and public health effects including minorities and/or low-income communities. Pound for pound, children breathe more air, drink more water, and eat more food than adults, and their behavior patterns may increase their exposure to potential toxics. Even older Americans in good health may be at increased risk from exposure to environmental pollutants. As people age, their bodies are less able to detoxify and eliminate toxins. Native Americans represent another segment of the population with a different risk profile. Their traditional sources for food and ways of life may lead to higher levels of exposure to certain toxics.

Pesticides Programs

A key component of protecting the health of people, communities, and ecosystems is identifying, assessing, and reducing the risks presented by the thousands of chemicals on which our society and economy have come to depend. Toward that end, EPA is investing \$122.4 million in Pesticides Licensing programs in FY 2008. Chemical and biological pesticides help meet national and global demands for food; provide effective pest control for homes, schools, gardens, highways, utility lines, hospitals, and drinking water treatment facilities; and control animal vectors of disease. In accordance with the provisions of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), the Agency is restructuring the presentation of FIFRA implementation funding and replacing the Pesticides Registration, Reregistration and Field programs with these new programs in FY 2008:

- Pesticides: Protect Human Health from Pesticides Risk
- Pesticides: Protect the Environment from Pesticides Risk, and
- Pesticides: Realize the Value of Pesticides Availability

In 2008, as required by the Food Quality Protection Act (FQPA), EPA will continue to establish a process for periodic review of pesticide registrations with the goal of completing the process every 15 years. The Agency will also focus its reregistration resources to support the 2008 FQPA deadline for completing non-food use Registration Eligibility Decisions (REDs).

Toxics Programs

EPA programs under this goal have many indirect benefits. For example, each year the Toxic Substances Control Act (TSCA) New Chemicals program reviews and manages the potential risks from approximately 1,500 new chemicals and 40 products of biotechnology that enter the marketplace. This new chemical review process not only protects the public from the possible immediate threats of harmful chemicals, but it has also contributed to changing the behavior of the chemical industry, making industry more aware and responsible for the impact these chemicals have on human health and the environment.

The Acute Exposure Guideline Levels (AEGLs) program was designed by EPA to provide scientifically credible data to directly support chemical emergency planning, response, and prevention programs mandated by Congress. Emergency workers and first responders addressing accidental or intentional chemical releases need to know how dangerous a chemical contaminant may be to breathe or touch, and how long it may remain dangerous. The program develops short-term exposure limits applicable to the general population for a wide range of extremely hazardous substances and has assigned values to 190 chemicals to date.

In addressing chemicals that have entered the market before the inception of the New Chemical Review program, EPA will continue to implement its voluntary High Production Volume (HPV) Chemicals program. The HPV Chemicals Program challenges industry to develop chemical hazard data on existing chemicals that it chooses to “sponsor.” EPA will make data publicly available for approximately 1,400 HPV chemicals sponsored under the program and issue initial risk screening reports for the highest priority of those chemicals. Complementing HPV is the Voluntary Children’s Chemical Evaluation Program (VCCEP), a high-priority screening program targeting existing chemicals believed to have particular impact on children’s health.

The Agency will continue to manage its programs to address specific chemicals and toxics of concern, including lead, mineral fibers, mercury, polychlorinated biphenyls (PCBs), perfluorooctanoic acid (PFOA), and persistent, bioaccumulative and toxic (PBT) chemicals generally. The Lead program is focusing efforts on reducing lead hazards, and a \$1 million investment, as requested for FY 2008, will allow the Agency to promulgate a final regulation to address lead-safe work practices for renovation, repair and painting activities in homes with lead-based paint. The program will also continue to improve methods to reach vulnerable populations and communities with a high concentration of children with elevated blood-lead levels and emphasize grant-supported activities such as state-implemented lead-based paint training and certification programs.

EPA’s Community Action for a Renewed Environment (CARE) is a competitive grant program that offers an innovative way for communities to take action to reduce toxic pollution. Through CARE, communities create local collaborative partnerships that

implement local solutions to reduce releases of toxic pollutants and minimize exposure to toxic pollutants.

Water Programs

EPA's ecosystem protection programs encompass a wide range of approaches that address specific at-risk regional areas and larger categories of threatened systems, such as estuaries and wetlands. Locally generated pollution, combined with pollution carried by rivers and streams and through air deposition, can accumulate in these ecosystems and degrade them over time. Large water bodies, such as the Gulf of Mexico, the Great Lakes, and the Chesapeake Bay, have been exposed to substantial pollution over many years. Coastal estuaries and wetlands are also vulnerable. As the populations in coastal regions grow, the challenges to preserve and protect these important ecosystems increase. Working with stakeholders, EPA has established special programs to protect and restore these unique resources.

In FY 2008, EPA will continue cooperation with Federal, state and Tribal governments and other stakeholders to achieve the President's goal, set in 2004, to restore, improve, and protect three million acres of wetlands by 2009. A \$17.2 million request in FY 2008 will support and monitor all 28 NEPs in implementing approved Comprehensive Conservation and Management Plans (CCMPs), which identify more than 2,000 priority actions needed to protect and restore the estuaries.

The Great Lakes program ecosystem is requesting \$21.8 million in the FY 2008 budget to continue support of the Great Lakes Regional Collaboration and the Great Lakes Water Quality Agreement. The program will monitor ecosystem indicators; support toxics reduction through contaminated sediment remediation and pollution prevention; protect and restore habitat; and address strategic issues such as aquatic invasive species and the need to investigate the decline of *Diporeia*, a key lower-food web organism. The FY 2008 request to implement the Great Lakes Legacy Act, which supports cleanup of contaminated sediments, is \$35 million. EPA is committed to its long-term goal of 100 percent attainment of dissolved oxygen standards in waters of the Chesapeake Bay and 185,000 acres of submerged aquatic vegetation (SAV). In FY 2008, \$4.5 million will bring the Agency closer to improving key priority coastal and ocean issues in the Gulf of Mexico.

Brownfields

Building the capacity for a community to make decisions that affect their environment is at the heart of EPA's community-centered work. EPA's efforts to share information and build community capacity offer the tools communities need to consider the many aspects of planned development or redevelopment. EPA encourages community development by providing funds to assist communities with inventory, assessment, and clean up the lightly contaminated properties ("Brownfields") that lie abandoned or unused. In addition, along the U.S.-Mexico border, addressing local pollution and infrastructure deficiencies are priorities for Mexico and the United States under the Border 2012

Agreement. Addressing these challenges requires combining innovative and community-based approaches with national guidelines and interagency coordination to achieve results.

Smart Growth

The Smart Growth program works with stakeholders to create an improved economic and institutional climate for Brownfields redevelopment. Critical issues for Brownfield redevelopment in FY 2008 include land assembly, development permitting issues, financing, parking and street standards, and other factors that influence the economic viability of Brownfields redevelopment. The Smart Growth program removes barriers and creates incentives for Brownfield redevelopment by changing development standards that affect the viability of Brownfields redevelopment; and creating cross-cutting solutions that improve the economic, regulatory and institutional climate for Brownfield redevelopment.

International Affairs

To sustain and enhance domestic and international environmental progress, the Agency collaborates with other nations and international organizations to identify, develop, and implement policy options to address environmental problems of mutual concern. By assisting developing countries in managing their natural resources and protecting the health of their citizens, EPA helps reduce transboundary movement of pollution in the air and in water. EPA also works to include environmental protection provisions and commitments to effectively enforce environmental laws and regulations in all international trade agreements negotiated by the United States.

Environmental Justice

EPA is committed to environmental justice for all people, regardless of race, color, national origin, or income. Toward that end, the Agency will focus its environmental justice efforts on the following eight priorities:

- Reducing asthma attacks,
- Reducing exposure to air toxics,
- Increasing compliance with regulations,
- Reducing incidence of elevated blood lead levels,
- Ensuring that fish and shellfish are safe to eat,
- Ensuring that water is safe to drink,
- Revitalizing brownfields and contaminated sites, and
- Using collaborative problem-solving to address environmental and public health concerns.

Research

In order to adequately protect or restore the health of communities and ecosystems, environmental policy and regulatory decisions must be based on sound science. Strong

science allows identification of the most important sources of risk to human health and the environment as well as the best means to detect, abate, and avoid possible environmental problems, and thereby guides our priorities, policies, and deployment of resources.

To enable the Agency to enhance science and research for healthy people, communities, and ecosystems, EPA will continue to conduct high priority, multidisciplinary research in the areas of human health, ecosystems, mercury, global change, pesticides and toxics, endocrine disruptors, computational toxicology, nanotechnology, and Homeland Security. The Agency also will cultivate the next generation of environmental scientists by awarding fellowships to pursue higher education in environmentally related fields and by hosting recent graduates at its facilities.

In FY 2008, the human health research program will continue research efforts on cumulative risks. Research will focus on risk intervention and prevention strategies that ultimately reduce human risk associated with exposures to single and multiple environmental stressors, including reducing chemical exposure in schools. The Agency's human health risk assessment (HHRA) research program will develop and implement a process to identify, compile, characterize, and prioritize new scientific studies for science assessments of criteria air pollutants to assist EPA's air and radiation programs in determining the National Ambient Air Quality Standards (NAAQS). Also, the HHRA research program will complete 16 human health assessments of high priority chemicals for interagency review or external peer review and deliver revised science assessments for Sulfur Dioxide and Nitrogen Oxides.

In order to balance human well-being with the need to protect the environment, it is important to understand the type of services that ecosystems provide, the stressors that affect these services, and how to successfully optimize the services provided by the ecosystem as a whole. In FY 2008, the ecosystems protection program will continue research on the development of decision-support tools for managing resources in ways that improve their resilience to disturbance, thus reducing the need for future costly restoration efforts. The program will also use spatial analysis methods to develop options for maximizing existing ecosystem services and for analyzing tradeoffs among the types of services that can be achieved.

Computational toxicology research, which facilitates a better understanding of the relationships between sources of environmental pollutant exposure and adverse outcomes, will support four key areas in FY 2008:

- Information technology,
- Chemical prioritization and categorization tools,
- Systems biology models, and
- Cumulative risk assessment.

Specifically, initial results for the "ToxCast," will emerge in FY 2008. The "ToxCast" is the Agency's chemical prioritization research program that offers promise in revolutionizing the effective and efficient use of animals in toxicology testing schemes.

In addition, modeling research, which now plays a crucial role in practically all areas of biological research, will begin developing a computational model of the liver by integrating biological information in order to achieve an improved understanding of how susceptibility to toxicant exposure depends on environmental, behavioral and genetic factors, and on age and health status.

Endocrine Disruptors research will continue to develop methods and models to evaluate the effects associated with exposure to endocrine disruptors as well as continue to develop improved molecular and computational tools that can be used to prioritize endocrine disrupting chemicals for screening and testing. Nanotechnology research is another area of high visibility in FY 2008. Efforts will continue to focus on nanotechnology's environmental applications and investigate its implications on the environment, health, and safety.

In FY 2008, continued research in the pesticides and toxics research program will characterize toxicity and pharmacokinetic profiles of perfluoroalkyl chemicals, examine the potential for selected perfluorinated telomers to degrade to perfluorooctanoic acid or its precursors, and develop methods and models to forecast the fate of pesticides and byproducts from source waters through drinking water treatment systems and ultimately to the U.S. population.

Recognizing that environmental policy and regulatory decisions will only be as good as the science upon which they are based, EPA makes every effort to ensure that its science is of the highest quality and relevance, thereby providing the basis for sound environmental results. EPA uses the Research and Development (R&D) Investment Criteria of quality, relevance, and performance in its decision-making processes through the use of research strategies and plans, program review and evaluation by the Board of Scientific Counselors (BOSC) and the Science Advisory Board (SAB), and peer review.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Compliance and Environmental Stewardship

Improve environmental performance through ensuring compliance with environmental requirements by enforcing environmental statutes, preventing pollution, and promoting environmental stewardship. Protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public that remote environmental stewardship and long-term sustainable outcomes.

STRATEGIC OBJECTIVES:

- By 2011, maximize compliance to protect human health and the environment through enforcement and other compliance assurance activities by achieving a 5 percent increase in the pounds of pollution reduced, treated, or eliminated by regulated entities, including those in Indian country. (Baseline to be determined in 2006)
- Improve Environmental Performance through Pollution Prevention and the Adoption of other Stewardship Practices that Lead to Sustainable Outcomes. By 2011, enhance public health and environmental protection and increase conservation of natural resources by promoting pollution prevention and the adoption of other stewardship practices by companies, communities, governmental organizations, and individuals.
- Protect human health and the environment on tribal lands by assisting federally-recognized tribes to: build environmental management capacity; assess environmental conditions and measure results; and implement environmental programs in Indian country.
- Conduct leading-edge, sound scientific research on pollution prevention, new technology development, socioeconomic, sustainable systems, and decision-making tools. By 2011, the products of this research will be independently recognized as providing critical and key evidence in informing Agency policies and decisions and solving problems for the Agency and its partners and stakeholders

GOAL, OBJECTIVE SUMMARY

Budget Authority

Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Compliance and Environmental Stewardship	\$759,283.1	\$744,109.2	\$734,343.1	\$743,831.4	\$9,488.3
Achieve Environmental Protection	\$487,509.6	\$499,045.8	\$491,948.8	\$508,148.3	\$16,199.5

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
through Improved Compliance					
Improve Environmental Performance through Pollution Prevention and Innovation	\$124,170.1	\$115,775.8	\$113,157.8	\$108,612.8	(\$4,545.0)
Improve Human Health and the Environment in Indian Country	\$78,499.8	\$76,018.8	\$74,073.6	\$74,303.9	\$230.3
Enhance Societies Capacity for Sustainability through Science and Research	\$69,103.6	\$53,268.9	\$55,163.0	\$52,766.5	(\$2,396.5)
Total Authorized Workyears	3,409.1	3,491.1	3,485.6	3,481.7	-3.9

The Environmental Protection Agency will work to improve the nation's environmental protection practices and enhance natural resource conservation on the part of government, business, and the public. To accomplish these goals, the Agency will employ a mixture of effective inspection, enforcement and compliance assistance strategies; provide leadership and support for pollution prevention and sustainable practices; reduce regulatory barriers; and refine and apply results-based, innovative, and multi-media approaches to environmental stewardship and safeguarding human health.

In addition, EPA will assist Federally-recognized Tribes in assessing environmental conditions in Indian country, and will help build their capacity to implement environmental programs. EPA will also strengthen the scientific evidence and research supporting environmental policies and decisions on compliance, pollution prevention, and environmental stewardship.

Improving Compliance with Environmental Laws

In order to be effective, the EPA requires a strong enforcement and compliance program, one which: identifies and reduces noncompliance problems; assists the regulated community in understanding environmental laws and regulations; responds to complaints from the public; strives to secure a level economic playing field for law-abiding companies; and deters future violations.

In order to meet the Agency's goals, the program's strategy employs an integrated, common-sense approach to problem-solving and decision-making. An appropriate mix of data collection and analysis; compliance monitoring, assistance and incentives; civil and criminal enforcement resources; and innovative problem-solving approaches are used to address significant environmental issues and achieve environmentally beneficial outcomes.

Further, the Agency's Enforcement and Compliance Assurance program uses compliance assistance and incentive tools to encourage compliance with regulatory requirements and reduce adverse public health and environmental problems. To achieve compliance, the regulated

community must first understand its obligations and then learn how to best comply with regulatory obligations.

The Agency's Compliance Monitoring program reviews and evaluates the activities of the regulated community to determine compliance with applicable laws, regulations, permit conditions and settlement agreements, and to determine whether conditions presenting imminent and substantial endangerment exist. FY 2008 Compliance Monitoring activities will be both environmental media- and sector-based. The traditional media-based inspections complement those performed by states and Tribes, and are a key part of our strategy for meeting the long-term and annual goals established for the air, water, pesticides, toxic substances, and hazardous waste environmental goals included in the EPA Strategic Plan.

The Enforcement program addresses violations of environmental laws, to ensure that violators come into compliance with Federal laws and regulations. In FY 2008, the program will work to achieve the Agency's environmental goals through consistent, fair and focused enforcement of all environmental statutes. The overarching goal of the Enforcement program is to protect human health and the environment, targeting its actions according to degree of health and environmental risk. In FY 2008, EPA will continue to implement its National Compliance and Enforcement Priorities (NCEP), which address the most widespread types of violations that also pose the most substantive health and environmental risks. The NCEP list will use statistically valid noncompliance information developed by Compliance Monitoring. In addition, in FY 2008 EPA anticipates reducing, treating, or eliminating an estimated 550 million pounds of pollutants building upon our achievements to date in reducing pollution through enforcement settlement agreements and compliance incentives by an estimated 4.5 billion pounds over the last six fiscal years.

Maximum compliance requires the active efforts of the regulated community. Evaluation of self-reporting will occur in order to understand the effectiveness and accuracy of such self-reporting. Throughout FY 2008, EPA will continue to investigate options for encouraging self-directed audits and disclosures. Also in FY 2008, EPA's Enforcement and Compliance Assurance program will continue to develop meaningful measures to assess the impact of enforcement and compliance activities and target areas that pose the greatest risks to human health or the environment, display patterns of noncompliance, or include disproportionately exposed populations.

NEPA Federal Review: EPA fulfills its uniquely Federal responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act by reviewing and commenting on other Federal agency Environmental Impact Statements (EISs), and making the comments available to the public. NEPA requires that Federal agencies prepare and submit EISs to identify potential environmental consequences of major proposed activities, and develop plans to mitigate or eliminate adverse impacts.

Improving Environmental Performance through Innovation and Pollution Prevention and Stewardship

Pollution prevention will continue being one of the Agency's primary tools for minimizing and preventing adverse environmental impacts by preventing the generation of pollution at the source. Through pollution prevention integration, EPA will work to bring about a performance-oriented regulatory system that develops innovative, flexible strategies to achieve measurable results; promotes environmental stewardship in all parts of society; supports sustainable development and pollution prevention; and fosters a culture of creative environmental problem solving.

Partnering with Businesses and Consumers: In 2008, through the Pollution Prevention (P2) program, EPA will promote stronger regional partnerships and geographically tailored approaches to address unique community problems. Also in FY 2008, EPA will continue to encourage, empower, and assist government and business to "green" the nation's supply and demand structures to make them more environmentally sound. Through the Environmentally Preferable Purchasing Program, the Agency will provide enhanced guidance to the Federal building community on model green construction specifications and help Federal agencies identify and procure those products that generate the least pollution, consume fewest non-renewable natural resources, and constitute the least threat to human health and to the environment. EPA's innovative Green Suppliers Network (GSN) Program works with large manufacturers to increase energy efficiency; identify cost-saving opportunities; optimize resources and technology through the development of sound business approaches incorporating pollution prevention; and to promote those approaches among their numerous suppliers. P2 Grants to states and Tribes enable them to provide technical assistance, education and outreach to assist businesses and industries in identifying strategies and solutions to reduce wastes and pollution at the source. The importance of tracking outcomes from P2 grants has been reinforced by adding key P2 environmental outcome targets to program guidance reporting measures.

In FY 2008, through the National Partnership for Environmental Priorities (NPEP), the Agency will continue to reduce priority chemicals in wastes. As of August 2006, the NPEP program has obtained industry commitments for 2.1 million pounds of priority chemical reductions through 2011. Reductions will be achieved primarily through source reduction made possible by safer chemical substitutes.

Promoting Innovation and Stewardship: In FY 2008, EPA will work to bring about a performance-oriented regulatory system that develops innovative, flexible strategies to achieve measurable results; promote environmental stewardship in all parts of society; support sustainable development and pollution prevention; and foster a culture of creative environmental problem solving.

The Performance Track (PT) program will improve program reporting, develop and implement national and regional challenge commitments, and leverage state environmental leadership programs by aligning PT with 20 state programs. In addition, EPA will sponsor a formal program evaluation of the program in FY 2008 and FY 2009.

Also in FY 2008, EPA will continue to grow its partnerships and track environmental performance trends with major manufacturing sectors, such as steel, cement, forest products, and shipbuilding, plus important non-manufacturing sectors like agribusiness, construction, and ports. The Agency will address barriers to improved performance, provide sector-specific “drivers” for continuous improvement and stewardship, and use the partnerships to tackle high priority environmental issues.

EPA will also continue to promote environmental performance through the Environmental Results Program (ERP), a state-run program promoting environmental performance and efficiency through assistance and incentives to both states and businesses. In FY 2008, EPA will support the growing demand for the ERP program, beyond the 15 States and 10 sectors currently active in the program.

Finally, EPA will continue the State Innovation Grant (SIG) program in FY 2008, which provides support to states, allowing them to develop their own innovative approaches, including flexible permitting, ERP, and environmental leadership programs (e.g. PT). Measurement and program evaluation also will continue to be priorities.

Building Tribal Capacity

The EPA Indian Policy of 1984 promotes working with federally recognized Tribes on a government-to-government basis. Under Federal environmental statutes, the Agency will work to assure human health and environmental protection in Indian country. EPA has worked to establish the internal infrastructure and organize its activities in order to meet this responsibility. EPA’s American Indian Environmental Office works to ensure environmental protection in Indian country. EPA’s strategy for achieving this objective has three major components:

Establish an Environmental Presence in Indian Country: The Agency will continue to work to create an environmental presence for each Federally-recognized Tribe.

Provide Access to Environmental Information: EPA will provide the information Tribes need to meet EPA and Tribal environmental priorities, as well as characterize the environmental and public health improvements that result from joint actions.

Implementation of Environmental Goals: The Agency will provide opportunities for the implementation of Tribal environmental programs by Tribes, or directly by EPA, as necessary.

In FY 2008, the budget provides \$56.9 million for GAP grants, which will build Tribal environmental capacity to assess environmental conditions, utilize available Federal information, and build an environmental program tailored to Tribes’ needs. The grants will develop environmental education and outreach programs, develop and implement integrated solid waste management plans, and alert EPA to serious conditions that pose immediate public health and ecological threats. Through GAP program guidance, EPA emphasizes outcome based results.

Sustainability

EPA has developed and evaluated tools and technologies to monitor, prevent, control, and clean up pollution throughout its history. Since the Pollution Prevention Act of 1990, the Agency has increasingly focused on preventative and sustainable approaches to health and environmental problems. EPA's efforts in this area support research specifically designed to address the issue of advancing sustainability goals – EPA's Science and Technology for Sustainability (STS) program.

Sustainable approaches require: innovative design and production techniques that minimize or eliminate environmental liabilities; integrated management of air, water, and land resources; and changes in the traditional methods of creating and distributing goods and services.

In FY 2008, EPA's Sustainability research program will embark on a new effort that is aimed at creating a suite of science-based sustainability metrics that are readily understood by the public. This work will address both large and small systems. In addition, the People, Prosperity, and Planet (P3) Award will support up to 50 student design projects from around the country, focusing on challenges in areas such as materials and chemicals, energy, resources, and water.

FY 2006 PART

- EPA's Pollution Prevention Program, including the Categorical Grant Program, underwent PART review in FY 2006 and received a "moderately effective" rating.

**Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification**

Table of Contents - Science and Technology

Resource Summary Table	1
Program Projects in S&T.....	1
Program Area: Air Toxics And Quality	5
Clean Air Allowance Trading Programs.....	6
Federal Support for Air Quality Management	10
Federal Support for Air Toxics Program	12
Federal Vehicle and Fuels Standards and Certification	14
Radiation: Protection	18
Radiation: Response Preparedness	20
Program Area: Climate Protection Program.....	22
Climate Protection Program.....	23
Program Area: Enforcement	26
Forensics Support.....	27
Program Area: Homeland Security	29
Homeland Security: Critical Infrastructure Protection	30
Homeland Security: Preparedness, Response, and Recovery	33
Homeland Security: Protection of EPA Personnel and Infrastructure	37
Program Area: Indoor Air	38
Indoor Air: Radon Program	39
Reduce Risks from Indoor Air	41
Program Area: IT / Data Management / Security	44
IT / Data Management	45
Program Area: Operations and Administration.....	48
Facilities Infrastructure and Operations.....	49
Program Area: Pesticides Licensing	51
Pesticides: Registration of New Pesticides	52
Pesticides: Review / Reregistration of Existing Pesticides.....	54
Pesticides: Protect Human Health from Pesticide Risk	56
Pesticides: Protect the Environment from Pesticide Risk.....	58
Pesticides: Realize the Value of Pesticide Availability	61
Program Area: Research: Clean Air.....	64
Research: Air Toxics.....	65
Research: Clean Air	66
Research: Global Change.....	71
Research: NAAQS	75
Program Area: Research: Clean Water	77
Research: Drinking Water.....	78
Research: Water Quality	82
Program Area: Research: Human Health And Ecosystems	87
Human Health Risk Assessment.....	88
Research: Computational Toxicology.....	93

Research: Endocrine Disruptor	97
Research: Fellowships	101
Research: Human Health and Ecosystems	104
Program Area: Research: Land Protection	114
Research: Land Protection and Restoration	115
Program Area: Research: Sustainability	119
Research: Economics and Decision Science(EDS)	120
Research: Sustainability	122
Program Area: Toxic Research and Prevention	126
Research: Pesticides and Toxics	127
Program Area: Water: Human Health Protection	131
Drinking Water Programs	132

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Science & Technology
Resource Summary Table
(Dollars in Thousands)**

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Science & Technology				
Budget Authority	\$764,737.6	\$788,274.0	\$754,506.0	(\$33,768.0)
Total Workyears	2,432.8	2,431.6	2,405.8	-25.8

**Program Projects in S&T
(Dollars in Thousands)**

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Air Toxics and Quality				
Clean Air Allowance Trading Programs	\$8,036.1	\$9,259.4	\$8,259.0	(\$1,000.4)
Federal Support for Air Quality Management	\$9,647.9	\$10,272.9	\$10,886.0	\$613.1
Federal Support for Air Toxics Program	\$2,029.6	\$2,264.7	\$2,252.0	(\$12.7)
Federal Vehicle and Fuels Standards and Certification				
Energy Policy Act & Related Authorities Implementation	\$0.0	\$11,400.0	\$8,388.0	(\$3,012.0)
Federal Vehicle and Fuels Standards and Certification (other activities)	\$61,604.3	\$56,924.5	\$57,334.0	\$409.5
Subtotal, Federal Vehicle and Fuels Standards and Certification	\$61,604.3	\$68,324.5	\$65,722.0	(\$2,602.5)
Radiation: Protection	\$2,311.9	\$2,054.3	\$2,120.0	\$65.7
Radiation: Response Preparedness	\$3,263.4	\$3,585.9	\$3,721.0	\$135.1
Subtotal, Air Toxics and Quality	\$86,893.2	\$95,761.7	\$92,960.0	(\$2,801.7)
Climate Protection Program				
Climate Protection Program	\$19,650.5	\$12,549.6	\$13,104.0	\$554.4
Enforcement				
Forensics Support	\$13,044.2	\$13,185.2	\$15,075.0	\$1,889.8
Homeland Security				
Homeland Security: Critical Infrastructure Protection				
Water sentinel and related training	\$707.8	\$41,735.2	\$21,884.0	(\$19,851.2)
Homeland Security: Critical	\$12,598.3	\$3,515.8	\$3,702.0	\$186.2

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Infrastructure Protection (other activities)				
Subtotal, Homeland Security: Critical Infrastructure Protection	\$13,306.1	\$45,251.0	\$25,586.0	(\$19,665.0)
Homeland Security: Preparedness, Response, and Recovery				
Decontamination	\$11,345.1	\$24,666.7	\$20,738.0	(\$3,928.7)
Laboratory Security: Preparedness, Response, and Recovery	\$578.2	\$600.0	\$600.0	\$0.0
Safe Building	\$2,441.4	\$4,000.0	\$4,000.0	\$0.0
Homeland Security: Preparedness, Response, and Recovery (other activities)	\$18,328.1	\$15,231.4	\$15,430.0	\$198.6
Subtotal, Homeland Security: Preparedness, Response, and Recovery	\$32,692.8	\$44,498.1	\$40,768.0	(\$3,730.1)
Homeland Security: Protection of EPA Personnel and Infrastructure	\$3,013.8	\$2,079.0	\$594.0	(\$1,485.0)
Subtotal, Homeland Security	\$49,012.7	\$91,828.1	\$66,948.0	(\$24,880.1)
Indoor Air				
Indoor Air: Radon Program	\$583.9	\$442.2	\$428.0	(\$14.2)
Reduce Risks from Indoor Air	\$759.9	\$828.7	\$788.0	(\$40.7)
Subtotal, Indoor Air	\$1,343.8	\$1,270.9	\$1,216.0	(\$54.9)
IT / Data Management / Security				
IT / Data Management	\$4,412.9	\$4,268.0	\$3,499.0	(\$769.0)
Operations and Administration				
Facilities Infrastructure and Operations	\$8,841.7	\$70,239.5	\$73,859.0	\$3,619.5
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	\$0.0	\$0.0	\$3,294.0	\$3,294.0
Pesticides: Protect the Environment from Pesticide Risk	\$0.0	\$0.0	\$2,115.0	\$2,115.0
Pesticides: Realize the Value of Pesticide Availability	\$0.0	\$0.0	\$472.0	\$472.0
Pesticides: Registration of New Pesticides	\$2,631.7	\$2,766.1	\$0.0	(\$2,766.1)
Pesticides: Review / Reregistration of Existing Pesticides	\$2,347.0	\$2,820.4	\$0.0	(\$2,820.4)
Subtotal, Pesticides Licensing	\$4,978.7	\$5,586.5	\$5,881.0	\$294.5
Research / Congressional Priorities				
Congressionally Mandated Projects	\$56,300.5	\$0.0	\$0.0	\$0.0

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Research: Clean Air				
Research: Air Toxics	\$18,535.1	\$12,274.2	\$0.0	(\$12,274.2)
Research: Clean Air	\$0.0	\$0.0	\$81,054.0	\$81,054.0
Research: Global Change	\$17,495.2	\$17,456.4	\$16,908.0	(\$548.4)
Research: NAAQS	\$65,242.5	\$65,455.6	\$0.0	(\$65,455.6)
Subtotal, Research: Clean Air	\$101,272.8	\$95,186.2	\$97,962.0	\$2,775.8
Research: Clean Water				
Research: Drinking Water	\$52,015.9	\$49,242.5	\$48,548.0	(\$694.5)
Research: Water Quality	\$48,233.9	\$56,988.2	\$56,454.0	(\$534.2)
Subtotal, Research: Clean Water	\$100,249.8	\$106,230.7	\$105,002.0	(\$1,228.7)
Research: Human Health and Ecosystems				
Human Health Risk Assessment	\$33,663.5	\$34,488.5	\$38,856.0	\$4,367.5
Research: Computational Toxicology	\$13,264.5	\$14,983.1	\$15,103.0	\$119.9
Research: Endocrine Disruptor	\$11,234.3	\$9,081.2	\$10,131.0	\$1,049.8
Research: Fellowships	\$15,609.9	\$8,383.0	\$8,438.0	\$55.0
Research: Human Health and Ecosystems				
Human Health	\$0.0	\$0.0	\$72,055.0	\$72,055.0
Ecosystems	\$0.0	\$0.0	\$72,761.0	\$72,761.0
Research: Human Health and Ecosystems (other activities)	\$169,126.0	\$161,312.7	\$230.0	(\$161,082.7)
Subtotal, Research: Human Health and Ecosystems	\$169,126.0	\$161,312.7	\$145,046.0	(\$16,266.7)
Subtotal, Research: Human Health and Ecosystems	\$242,898.2	\$228,248.5	\$217,574.0	(\$10,674.5)
Research: Land Protection				
Research: Land Protection and Restoration	\$12,101.5	\$10,552.8	\$10,737.0	\$184.2
Research: Sustainability				
Research: Economics and Decision Science(EDS)	\$2,487.6	\$2,494.6	\$0.0	(\$2,494.6)
Research: Environmental Technology Verification (ETV)	\$2,761.9	\$0.0	\$0.0	\$0.0
Research: Sustainability	\$27,042.4	\$21,404.9	\$22,478.0	\$1,073.1
Subtotal, Research: Sustainability	\$32,291.9	\$23,899.5	\$22,478.0	(\$1,421.5)
Toxic Research and Prevention				
Research: Pesticides and Toxics	\$28,343.3	\$26,223.7	\$24,795.0	(\$1,428.7)

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Water: Human Health Protection				
Drinking Water Programs	\$3,101.9	\$3,243.1	\$3,416.0	\$172.9
Subtotal, Drinking Water Programs	\$3,101.9	\$3,243.1	\$3,416.0	\$172.9

Program Area: Air Toxics And Quality

Clean Air Allowance Trading Programs

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$17,710.5	\$19,126.4	\$19,388.0	\$261.6
<i>Science & Technology</i>	<i>\$8,036.1</i>	<i>\$9,259.4</i>	<i>\$8,259.0</i>	<i>(\$1,000.4)</i>
Total Budget Authority / Obligations	\$25,746.6	\$28,385.8	\$27,647.0	(\$738.8)
Total Workyears	89.6	92.2	89.1	-3.1

Program Project Description:

The CAIR emissions allowance trading programs build upon the successful and cost-effective Acid Rain SO₂ cap-and-trade program created in 1990. The Clean Air Interstate Rule (CAIR), promulgated on May 12, 2005, uses a multi-pollutant control approach to provide states with a solution to the problem of ozone and fine particulate matter (PM_{2.5}) -- pollution that drifts from one state to another. Using a market-based approach, CAIR is projected to achieve the deepest cuts in sulfur dioxide (SO₂) and nitrogen oxides (NO_x) emissions in more than a decade. Reductions in these emissions will lower both PM_{2.5} and ozone.

CAIR provides a Federal framework requiring 28 states and the District of Columbia to reduce emissions of SO₂ and/or NO_x. These states contribute significantly to unhealthy levels of fine particles and ozone in downwind states. Under CAIR, annual emissions are permanently capped, and there is an additional seasonal NO_x cap for states that contribute significantly to transported ozone pollution. These reductions will be substantial and cost-effective in many areas the reductions are large enough to meet the air quality standards however some areas may need to take additional local actions.

All of the affected states have indicated to EPA that they intend to achieve the mandated reductions primarily by controlling power plant emissions through an EPA-administered interstate cap-and-trade program. When fully implemented, CAIR is projected to reduce SO₂ emissions from electrical power generation sources in the covered states by over 70 percent and NO_x emissions by over 60 percent from 2003 levels. By enabling states to cost-effectively reduce air pollutants from power plants, CAIR will protect public health and the environment without interfering with the steady flow of affordable energy for American consumers and businesses.

On May 15, 2005, EPA promulgated the Clean Air Mercury Rule (CAMR), the first-ever Federal rule to reduce and permanently cap mercury emissions from coal-fired power plants. CAMR establishes "standards of performance" limiting mercury emissions from new and existing coal-fired power plants in two phases with caps. In the first phase, which begins in 2010, mercury emissions nationwide will be reduced to 38 tons by taking advantage of "co-benefit"

reductions—that is, mercury reductions achieved by reducing SO₂ and NO_x emissions under CAIR. In the second phase, due in 2018, coal-fired power plants will be subject to a second cap, which will reduce emissions to 15 tons upon full implementation.

Other important features of this landmark rule include: stringent emission monitoring and reporting requirements, a model cap-and-trade program that states can adopt to achieve and maintain their mercury emissions budgets, and significant penalties for noncompliance. CAMR also creates an EPA-administered market-based allowance trading program that states may join by adopting the model trading rule in state regulations or promulgating regulations that mirror the necessary components of the model trading rule.

EPA is responsible for managing the Clean Air Status and Trends Network CASTNET, a national long-term atmospheric deposition monitoring network established in 1987 that serves as the nation's primary source for atmospheric data on the dry deposition component of total acid deposition, rural ground-level ozone and other forms of atmospheric pollution that enter the environment as particles and gases. Used in conjunction with the National Atmospheric Deposition Program (NADP) and other networks, CASTNET's long-term datasets and data products are used to determine the efficacy of national emission control programs through monitoring geographic patterns and temporal trends in ambient air quality and atmospheric deposition in rural areas of the country. Maintaining a robust long-term atmospheric deposition monitoring network is critical for the accountability of the Acid Rain Program, CAIR, and other programs for controlling transported air pollutants.

FY 2008 Activities and Performance Plan:

In FY 2008 EPA will:

- Continue to provide litigation program support for CAIR and CAMR: Conduct legal, technical, and economic analyses to support timely implementation of these rules; continue assessing regulatory impacts on the US economy, environment, small business, and local communities.
- Continue to assist states with CAIR implementation: Provide technical assistance to states in implementing state plans and rules for CAIR. Assist states in resolving issues related to source applicability, emissions monitoring and reporting, and the compliance supplement pool as well as provide technical support. Required emissions monitoring and reporting for CAIR annual and ozone-season NO_x programs begins in 2008.
- Work with states and tribes on CAMR implementation: EPA will work with states and Tribes on emissions monitoring provisions. Required mercury monitoring and reporting for CAMR begins in 2009. Work will begin to develop a mercury deposition baseline to assess and validate the effectiveness of CAMR's mercury control program. EPA also will assist the states and Tribes which elect to participate in the EPA-administered interstate CAMR allowance trading program to establish allowance allocations and implement reconciliation procedures.
- Continue modifying data systems and operating infrastructure for CAIR/CAMR: Effective and efficient operation of these programs depends critically upon further

development of the e-GOV infrastructure supporting the Acid Rain electronic allowance trading and emissions reporting systems. Data systems must be modified for mercury emissions reporting.

- Ensure accurate and consistent results for the program: Successful air pollution control and trading programs require accurate and consistent monitoring of emissions from affected sources. Work on performance specifications and investigate monitoring alternatives and methods to improve the efficiency of monitor certification and emissions data reporting, especially for mercury emissions and sources that are new to market-based control programs.
- Assist states considering regional programs for Electric Generating Units (EGUs) outside of the CAIR region: EPA will work with states to create cap-and-trade programs where they potentially could be more cost-effective than application of Best Available Retrofit Technology (BART).
- In FY 2008, the program will continue the refurbishment project to modernize and enhance CASTNET. The program has made progress in evaluating alternative technologies and in procuring new equipment to be deployed for testing operational performance under realistic field conditions. The upgraded site equipment, reconfigured network and improved geographic coverage will help ensure CASTNET's continued viability and enhance the monitoring capacity to support ongoing and future accountability needs, particularly relating to interstate pollutant transport.

Working with other Federal agency partners, EPA will continue developing a new, coordinated network for monitoring atmospheric mercury that is scientifically credible and with sites strategically located to meet CAMR accountability needs (e.g., in source-impacted areas). The program assessment capability, also to be developed through intra- and inter-agency partnerships and cooperation, will focus on the mercury "chain-of-accountability"— specifically, how changes in mercury emissions affect human health and wildlife.

In FY 2008, EPA will continue to work closely with the National Institute of Standards and Technology (NIST), Electric Power Research Institute (EPRI), and industry in the development, implementation, and commercialization of mercury continuous emissions monitoring systems (CEMS) and other source monitoring capability. In addition, the program will continue to provide analytical support for the interagency National Acid Precipitation Assessment Program (NAPAP). NAPAP coordinates Federal acid deposition research and monitoring of emissions, acidic deposition, and their effects, including assessing the costs and benefits of Title IV. In 2008, the program will continue analyzing the costs and benefits of the Acid Rain Program for inclusion in NAPAP's Integrated Assessment Report.

The National Ambient Air Quality Standards Federal program, PARTed in 2005, received a rating of "adequate." EPA is working to implement improvements within current statutory limitations that address deficiencies in design and implementation, and identify and evaluate needed improvements that are beyond current statutory authority. The Air Quality Grants and Permitting Program, also PARTed in 2005, received a rating of "ineffective." The Agency has updated current grant allocation processes to ensure resources are properly targeted and developing measures of program efficiency. In 2003, OMB assessed the Acid Rain program through the PART process and gave it a rating of "moderately effective." EPA is working to

develop a measure of program efficiency that takes into consideration the full cost of the program.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Tons of sulfur dioxide emissions from electric power generation sources	Data Available 2007	7,000,000	7,500,000	8,000,000	Tons Reduced

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent change in average sulfur deposition and mean ambient sulfate concentrations reduced.	No Target Established	No Target Established	29	No Target Established	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent change in average nitrogen deposition and mean total ambient nitrate concentrations reduced.	No Target Established	No Target Established	10	No Target Established	Percentage

Reducing emissions of SO₂ remains a crucial component of EPA's strategy for cleaner air. Particulate matter can be formed from direct sources (such as diesel exhaust or smoke), but can also be formed through chemical reactions. Emissions of SO₂ can be chemically transformed into sulfates, which are very tiny particles that can be carried by winds hundred of miles. These same small particles are also a main pollutant that impairs visibility across large areas of the country, particularly national parks that are known for their scenic views.

EPA tracks the change in nitrogen and sulfur deposition and ambient nitrate and sulfate concentrations triennially with the next report date planned for FY 2010.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$1,000.4) A reduction in funding to the CASTNET will begin a phase down from "upgrade" of the network systems to operations and maintenance. The reduction also reflects expected decreased federal costs for CAIR/CAMR implementation as states gain knowledge and development of technology tool is completed and deployed.

Statutory Authority:

CAA (42 U.S.C. 7401-7661 f).

Federal Support for Air Quality Management

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$93,053.0	\$88,065.6	\$90,490.0	\$2,424.4
<i>Science & Technology</i>	<i>\$9,647.9</i>	<i>\$10,272.9</i>	<i>\$10,886.0</i>	<i>\$613.1</i>
Total Budget Authority / Obligations	\$102,700.9	\$98,338.5	\$101,376.0	\$3,037.5
Total Workyears	706.9	709.0	700.7	-8.3

Program Project Description:

This program supports state development of the clean air plans through developing modeling and other tools. EPA works with states and local governments to ensure the technical integrity of the mobile source controls in the State Implementation Plans (SIPs). Also, EPA assists states and local governments to identify the most cost-effective control options available.

FY 2008 Activities and Performance Plan:

As part of implementing the 8-hour ozone and particulate matter 2.5 (PM_{2.5}) standards, EPA will continue to provide state and local governments with substantial assistance in developing SIPs and implementing the conformity rule during this period. In FY 2008, EPA will continue to ensure national consistency in how conformity determinations are conducted across the US. EPA will continue to ensure consistency in adequacy findings for motor vehicle emissions budgets in air quality plans, which are used in conformity determinations. In addition, EPA will work with states and local governments to ensure the technical integrity of the mobile source controls in the SIPs for the 8-hour ozone and PM_{2.5} air quality standards which are due in 2007 and 2008, respectively. EPA also will assist areas in identifying the most cost-effective control options available and provide guidance, as needed, for areas that implement conformity.

EPA will partner with states, Tribes, and local governments to create a comprehensive compliance program to ensure that vehicles and engines pollute less. EPA will use advanced in-use measurement techniques and other sources of in-use data to monitor the performance of On-board Diagnostics (OBD) systems on vehicle models to make sure that OBD is a reliable check on the emissions systems. In FY 2006, basic and/or enhanced vehicle I/M testing was being performed in over 30 states with technical and programmatic guidance from EPA. In FY 2008, EPA will continue to assist states in bridging operating programs toward the future.

EPA will continue to assist state, tribal, and local agencies in implementing and assessing effectiveness of national clean air programs via a broad suite of analytical tools. (For more information visit: <http://www.epa.gov/ttn/>).

The NAAQS Federal program, PARTed in 2005, received a rating of “adequate.” EPA is working to implement improvements within current statutory limitations that address deficiencies in design and implementation and identify and evaluate needed improvements that are beyond current statutory authority. The Air Quality Grants and Permitting Program, also PARTed in 2005, received a rating of “ineffective.” EPA is working to update current grant allocation processes to ensure resources are properly targeted, and developing measures of program efficiency.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percent reduction in population-weighted ambient concentration of fine particulate matter (PM-2.5) in all monitored counties from 2003 baseline.	Data Available 2007	2	3	4	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percent reduction in population-weighted ambient concentration of ozone in monitored counties from 2003 baseline.	Data Available 2007	5	6	8	Percentage

EPA, collaborating with the states, will be implementing federal measures and assisting with the development of clean air plans to continue to improve air quality as measured by the air quality index and other measures.

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (+\$613.0) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

CAA (42 U.S.C. 7401-7661f); Motor Vehicle Information Cost Savings Act; Alternative Motor Fuels Act of 1988; National Highway System Designation Act; NEP Act, SAFETEA-LU of 2005.

Federal Support for Air Toxics Program

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$24,332.1	\$25,513.7	\$24,711.0	(\$802.7)
<i>Science & Technology</i>	<i>\$2,029.6</i>	<i>\$2,264.7</i>	<i>\$2,252.0</i>	<i>(\$12.7)</i>
Total Budget Authority / Obligations	\$26,361.7	\$27,778.4	\$26,963.0	(\$815.4)
Total Workyears	140.5	144.2	141.8	-2.4

Program Project Description:

Federal support for the air toxics program includes a variety of tools to help characterize the level of risk to the public and measure the Agency's progress in reducing this risk. The program will develop and provide information and tools to assist state, local, and Tribal agencies as well as communities to reduce air toxics emissions and risk specific to their local areas.

Reductions in emissions of mobile source air toxics, such as diesel particulate matter (PM), are achieved through innovative and voluntary approaches working with state, local, and Tribal governments as well as a variety of stakeholder groups. This program also includes activities related to the Stationary Source Residual Risk Program. (For more information visit: <http://www.epa.gov/ttn/atw/risk/residriskpg.html>)

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to work with a broad range of stakeholders to develop incentives for different economic sectors (construction, ports, freight, and agriculture) to address the emissions from existing diesel engines.

Work is being done across these sectors at the national and regional level to clean up the existing fleet. This work addresses emissions from diesel engines that both contribute to meeting the Agency's Ambient Air Quality Goals and reduce the harmful exposure to air toxics from diesel engines. EPA has also developed several emissions testing protocols that will provide potential purchasers of emission control technology a consistent, third party evaluation of emission control products. EPA has developed partnerships with state and local governments, industry, and private companies to create project teams to help fleet owners create the most cost-effective retrofit programs.

EPA also will continue to provide technical expertise and support to state, local, and Tribal air toxics programs in assessing and reducing mobile source air toxics. This support includes models and other assessment tools; guidance on the application of such tools for evaluating impacts of proposed transportation facilities; guidance on the benefits of voluntary mobile source control programs; and other education and outreach materials.

EPA will work with partners to develop improved emission factors and inventories. This effort will include gathering improved activity databases and using geographic information systems (GIS) and satellite remote sensing, where possible, for key point, area, mobile and fugitive source categories and global emission events.

The Air Toxics program, re-assessed by OMB in 2004 through the PART process, received a rating of “adequate.” EPA is working on improving monitoring systems to fill data gaps and get a better assessment of actual population exposure to toxic air pollution.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percentage reduction in tons of toxicity-weighted (for noncancer risk) emissions of air toxics from 1993 baseline.	Data Available 2009	58	58	59	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics from 1993 baseline.	Data Available 2009	34	35	35	Percentage

Performance targets for reduction of toxicity weighted emissions are also supported by work under the Federal Stationary Source Regulations program project.

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (-\$12.7) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.

Statutory Authority:

CAA (42 U.S.C. 7401-7661f).

Federal Vehicle and Fuels Standards and Certification

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$61,604.3</i>	<i>\$68,324.5</i>	<i>\$65,722.0</i>	<i>(\$2,602.5)</i>
Total Budget Authority / Obligations	\$61,604.3	\$68,324.5	\$65,722.0	(\$2,602.5)
Total Workyears	293.1	295.2	295.2	0.0

Program Project Description:

The most common mobile sources of air pollution are highway motor vehicles and their fuels. Other mobile sources, such as airplanes, ships, construction equipment and lawn mowers also produce significant amounts of pollutants. EPA regulates all of these sources to reduce the production of air pollution. The Agency also provides emissions and fuel economy information for new cars, funds grants for the development of cleaner burning fuels and alternative energy sources, and educates consumers on the ways their actions affect the environment.

Primary responsibilities include: developing national regulatory programs to reduce mobile source-related air pollution from light-duty cars and trucks, heavy-duty trucks and buses, nonroad engines and vehicles and their fuels; evaluating emission control technology; and providing state and local air quality regulators and transportation planners with access to critical information on transportation programs and incentive-based programs. Other activities include testing vehicles, engines and fuels, and establishing test procedures for and determining compliance with Federal emissions and fuel economy standards.

The Partnership for Clean Fuels and Vehicles was announced at the World Summit on Sustainable Development (WSSD) in 2002. EPA's role in this partnership will be to assist developing countries in the development and implementation of action plans for the adoption of clean fuel standards and cleaner vehicle requirements.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to support implementation of the Tier II light-duty (LD) vehicle program, the 2007-2010 Heavy-Duty (HD) Diesel standards, and the Non-Road Diesel Tier 4 standards (and earlier nonroad standards) in order to ensure the successful delivery of cleaner vehicles, equipment, and fuel. EPA will also begin implementing the Renewable Fuels Standards (RFS) rule scheduled to be promulgated in 2007, and will begin the development of several more actions required by the Energy Policy Act (EPA) of 2005. Some of these EPA actions include a study of the changes in emissions of air pollutants and air quality, and a fuel system harmonization study which is expected to be a complex study and will be completed in coordination with DOE.

In FY 2008, a number of regulatory actions will be under development or completed. EPA will promulgate new standards for locomotives and marine diesel engines, as well as new standards for large commercial ships. An EPA rule will be issued addressing exhaust and evaporative emissions from small gasoline engines (under 50 horsepower), including all recreational marine gasoline engines, non-handheld engines (such as those used in lawnmowers), and handheld engines (such as those used in trimmers and chainsaws).

In 2008, EPA will also develop proposals for on-board-diagnostic (OBD) standards and an in-use compliance program for nonroad diesel engines, certification procedures and test cycles for world harmonized motorcycle standards, designation of U.S. coastal areas as SO_x Emission Control Areas (SECA), and new aircraft NO_x standards that would align Federal rules with international standards. EPA will also continue its technology reviews for highway diesel 2007-2010 standards and nonroad diesel standards.

EPA's National Vehicle and Fuel Emissions Laboratory (NVFEL) will continue to conduct vehicle emission tests as part of the pre-production tests, certification audits, in-use assessments, and recall programs to support mobile source clean air programs. Tests are conducted on motor vehicles, heavy-duty engines, non-road engines, and fuels to: 1) certify that vehicles and engines meet Federal air emission and fuel economy standards; 2) ensure engines comply with in-use requirements; and 3) ensure fuels, fuel additives, and exhaust compounds meet Federal standards. In FY 2008, EPA will continue to conduct testing activities for fuel economy, LD vehicle and HD engine characterization, Tier II testing, reformulated gasoline, future fleets, OBD evaluations, certification audits, and recall programs.

EPA will review and approve approximately 2,600 vehicle and engine emissions certification requests, including light-duty vehicles, heavy-duty diesel engines, nonroad engines, marine engines, locomotives and others. The Agency will review the first in-use verification program data submitted by vehicle manufacturers to determine whether there are any emissions compliance issues, and continue the development of a new, web-based compliance information system to be used by manufacturers and EPA staff to house compliance data for all regulated vehicles and engines.

EPA will also test heavy-duty diesel engines to support implementation of the 2007 HD diesel requirements and non-road diesel engine rulemaking activities. In-use compliance is an important element of EPA's regulatory programs ensuring that new engine standards are actually met under real-world conditions. EPA will begin implementation of a manufacturer-run in-use compliance surveillance program for highway heavy-duty diesel engines. Additionally, EPA is planning to propose a manufacturer-run in-use testing program for nonroad diesel engines.

EPA also will continue implementing the Reformulated Gasoline (RFG) program, which is designed to substantially reduce vehicle emissions of ozone-forming and toxic pollutants. Major changes in the RFG regulations will be introduced to account for the elimination of the oxygen mandate in light of the new Energy Policy Act of 2005. Additionally, new opt-in rules covering newly eligible areas (under the Energy Policy Act) will have to be promulgated and implemented. EPA also will continue to address issues associated with the use of oxygenates (e.g., MTBE and ethanol) and will review the industry's retail station survey plan.

Through the WSSD partnerships with developing countries EPA will continue addressing the threat to human health and the environment from motor vehicles in developing countries. EPA will continue to focus its efforts on two priorities: completing the global elimination of lead from gasoline (30 countries still use this fuel); and reducing sulfur in diesel and gasoline, while concurrently introducing cleaner vehicle technologies. Fuel sulfur reductions are a precondition for using cleaner vehicle technologies. Together, these steps will enable dramatic and cost-effective reductions in emissions of particulate matter (PM) and nitrogen oxides (NO_x, a precursor to ozone), yielding tremendous health benefits in developing countries. Many of these emissions reductions (e.g., in Mexico, China, and India) will also reduce pollution that is transported across our borders and the northern hemisphere into the United States, and will thus yield important air quality, public health, and economic benefits to the United States.

The Mobile Sources program was assessed in 2004 through the PART process, and rated it as “moderately effective.” EPA is collecting data to better monitor efficiency improvements, and is systematically analyzing and evaluating regulations to ensure they effectively achieve the greatest benefits.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Tons of PM-10 Reduced since 2000 from Mobile Sources	Data Available 2007	74,594	87,026	99,458	Tons

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Limit the increase of CO emissions (in tons) from mobile sources compared to a 2000 baseline.	Data Available 2007	1.01	1.18	1.35	Million Tons

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Millions of Tons of Nitrogen Oxides (NO _x) Reduced since 2000 Reduced from Mobile Sources	Data Available 2007	2.03	2.37	2.71	Million Tons

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Millions of Tons of Volatile Organic Compounds (VOCs) Reduced since 2000 from Mobile Sources	Data Available 2007	1.03	1.20	1.37	Million Tons

Funding will allow EPA to continue achieving results in reducing pollution from mobile sources, especially NOx emissions. The Tier 2 Vehicle program, which took effect in 2004, will make new cars, SUVs, and pickup trucks 77 to 95 percent cleaner than 2003 models. Beginning in 2007, the Clean Trucks and Buses program will make new highway diesel engines as much as 95 percent cleaner than current models. Under the Non-road Diesel program, new fuel and engine requirements will reduce sulfur in off-highway diesel by more than 99 percent by 2010. Combined, these measures will prevent over 22,000 premature deaths each year, reduce millions of tons of pollution a year, and prevent hundreds of thousands of respiratory illnesses.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$104.0) This increase is associated with increased programmatic laboratory fixed costs.
- (-\$106.3) This reduction reflects savings from improvements to the Agency's small administrative IT systems.
- (+\$213.8) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$14.0) This reduction reflects an Agency wide effort to reduce international travel.
- (+\$200.0) This increase supports the World Summit on Sustainable Development (WSSD) initiative. This funding will address global elimination of lead in gasoline and the reduction of sulfur in diesel and gasoline.
- (-\$3,000.0) This reduction reflects completion of the Renewable Fuel Standard rule and a shift to implementation in FY 2008 in accordance with the Energy Policy Act of 2005.

Statutory Authority:

CAA (42 U.S.C. 7401-7661f); MVICS Act; AMF Act of 1988; NHSD Act; NEP Act; EPC Act; and EPA of 2005.

Radiation: Protection

Program Area: Air Toxics and Quality
Goal: Clean Air and Global Climate Change
Objective(s): Radiation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$11,301.6	\$10,648.6	\$10,186.0	(\$462.6)
<i>Science & Technology</i>	<i>\$2,311.9</i>	<i>\$2,054.3</i>	<i>\$2,120.0</i>	<i>\$65.7</i>
Hazardous Substance Superfund	\$1,938.3	\$2,323.3	\$2,373.0	\$49.7
Total Budget Authority / Obligations	\$15,551.8	\$15,026.2	\$14,679.0	(\$347.2)
Total Workyears	95.7	96.6	88.6	-8.0

Program Project Description:

This program supports the maintenance of an on-going radiation protection capability at the National Air and Radiation Environmental Laboratory (NAREL) located in Montgomery, Alabama and the Radiation and Indoor Environments National Laboratory (R&IE) located in Las Vegas, Nevada. These laboratories provide radioanalytical and mixed waste testing and analysis of environmental samples to support site assessment, clean-up, and response activities.

Both labs provide technical support for conducting site specific radiological characterizations and clean-ups, using the best available science to develop risk assessment tools. The labs also develop guidance for cleaning up sites that are contaminated with radioactive materials in collaboration with the public, industry, states, Tribes and other governments. EPA, in partnership with other Federal agencies, will promote the management of radiation risks in a consistent and safe manner.

FY 2008 Activities and Performance Plan:

In FY 2008 EPA, in cooperation with state and local governments and other Federal agencies will assist with site characterizations and providing analytical support for site assessment activities, remediation technologies, and measurement and information systems; and provide training and direct site assistance including laboratory, field, and risk assessment support at sites with actual or suspected radioactive contamination.

EPA's laboratories will provide radiological and technical support to EPA Superfund Remedial Project Managers and On-Scene Coordinators, the public, industry, Tribes and state and local governments. EPA will also conduct radioanalytical and mixed waste analyses in support of Regional site assessments, cleanups and response activities.

EPA is on track through its ongoing work to meet its 2011 strategic plan goal of protecting public health and the environment from unwanted releases of EPA regulated radioactive waste and to minimize impacts to public health from radiation exposure. EPA will continue to track

progress on routine program indicators such as preparedness and response capability for radiological incidents.

Performance Targets:

EPA is developing new outcome-oriented performance measures for this program in preparation for a 2007 PART assessment. The program will have new performance measures to report in FY 2009. EPA will continue to track progress on routine program indicators such as preparedness and response capability for radiological incidents.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$66.0) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$0.3) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

AEA of 1954, as amended, 42 U.S.C 2011 et seq. (1970), and Reorganization Plan #3 of 1970; CAA Amendments of 1990; CERCLA, as amended by the SARA of 1986 ; Energy Policy Act of 1992, P.L. 102-486; Executive Order 12241 of September 1980, National Contingency Plan, 3 CFR, 1980; NWPA of 1982; PHSA, as amended, 42 U.S.C 201 et seq.; SDWA; UMTRCA of 1978; Waste WIPP Land Withdrawal Act.

Radiation: Response Preparedness
Program Area: Air Toxics and Quality
Goal: Clean Air and Global Climate Change
Objective(s): Radiation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$2,374.4	\$2,688.7	\$2,928.0	\$239.3
<i>Science & Technology</i>	<i>\$3,263.4</i>	<i>\$3,585.9</i>	<i>\$3,721.0</i>	<i>\$135.1</i>
Total Budget Authority / Obligations	\$5,637.8	\$6,274.6	\$6,649.0	\$374.4
Total Workyears	41.5	42.3	42.3	0.0

Program Project Description:

The National Air and Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama and the Radiation and Indoor Environments National Laboratory (R&IE) in Las Vegas, Nevada provide field sampling and analyses, laboratory analyses, and direct scientific support to respond to radiological and nuclear incidents. This includes measuring and monitoring radioactive materials in the environment and assessing radioactive contamination in the environment. This program comprises direct scientific field and laboratory activities to support preparedness, planning, training, and procedures development. In addition, selected staffs are members of EPA's Radiological Emergency Response Team (RERT) and are trained to provide direct expert assistance in the field.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's RERT, a component of the Agency's emergency response structure, will maintain its preparedness in the laboratories for radiological incidents including those for which EPA is the Coordinating Agency under the National Response Plan. The laboratory RERT members will conduct training and exercises to enhance and demonstrate their ability to fulfill EPA responsibilities in the field, using mobile analytical systems, and in the fixed labs; and in order to provide the necessary mix of rapid and accurate radionuclide analyses in environmental matrices.¹

Also in FY 2008, the labs will continue to be ready to deploy field teams that provide scientific data, analyses and updated analytical techniques for radiation emergency response programs across the Agency; maintain readiness for radiological emergency responses, participate in mock emergency response situations; provide on-site scientific support to state radiation, solid waste, and health programs that regulate radiation remediation; participate in the Protective Action Guidance (PAG) workshops; and respond, as required, to radiological incidents.

¹ Additional information can be accessed at: <http://www.epa.gov/radiation/rert/rert> last accessed 1/8/2007.

Performance Targets:

EPA is on track through its ongoing work to meet its 2011 strategic plan goal of protecting public health and the environment from unwanted releases of EPA regulated radioactive waste and to minimize impacts to public health from radiation exposure. The Agency is developing new outcome-oriented strategic and annual performance measures for this program in preparation for a 2007 PART assessment. The program will have new performance measures to report in FY 2009. EPA will continue to track progress on routine program indicators such as preparedness and response capability for radiological incidents.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$12.7) This increase is associated with increased programmatic laboratory fixed costs.
- (+\$122.4) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

AEA of 1954, as amended, 42 U.S.C 2011 et seq. (1970), and Reorganization Plan #3 of 1970; CAA. Amendments of 1990; CERCLA, as amended by the (SARA); Executive Order 12241 of September 1980, National Contingency Plan, 3 CFR, 1980; Executive Order 12656 of November 1988, Assignment of Emergency Preparedness Responsibilities, 3 CFR, 1988; Public Health Service Act, as amended, 42 U.S.C 201 et seq.; Robert T. Stafford Disaster Relief and EAA, as amended, 42 U.S.C 5121 et seq.; SDW Act; and Title XIV of the NDA of 1997, PL 104-201 (Nunn-Lugar II).

Program Area: Climate Protection Program

Climate Protection Program

Program Area: Climate Protection Program

Goal: Clean Air and Global Climate Change

Objective(s): Reduce Greenhouse Gas Intensity

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$83,693.9	\$91,843.3	\$87,927.0	(\$3,916.3)
<i>Science & Technology</i>	<i>\$19,650.5</i>	<i>\$12,549.6</i>	<i>\$13,104.0</i>	<i>\$554.4</i>
Total Budget Authority / Obligations	\$103,344.4	\$104,392.9	\$101,031.0	(\$3,361.9)
Total Workyears	210.9	214.1	212.5	-1.6

Program Project Description:

EPA manages the Clean Automotive Technology (CAT) and the Fuel Cell and Hydrogen programs which are designed to help recognize and remove barriers in the marketplace, and to more rapidly deploy technology into the transportation sector of the economy. The Agency's Clean Automotive Technology program develops advanced clean and fuel-efficient automotive technology to better protect the environment and save energy. (For more information visit: <http://www.epa.gov/otaq/technology>).

The emphasis of Clean Automotive Technology program work will be research and collaboration with the automotive, trucking, and fleet industries. Through cooperative research and development agreements (CRADA), EPA plans to continue demonstrating its unique hydraulic hybrid technology and advanced clean-engine technologies in vehicles, such as large SUVs, pickup trucks, urban delivery trucks, school buses, shuttle buses, and refuse trucks. The intent of these real world demonstrations is to lead to the initial commercial introduction of significant elements of EPA's technologies by vehicle manufacturers. EPA's goal is to achieve initial commercialization of urban delivery trucks in 2010.

FY 2008 Activities and Performance Plan:

In FY 2008, the Clean Automotive Technology Program will:

- Evaluate the effectiveness of the Clean Automotive Technology Program's high-efficiency, clean combustion E-85/M-85 alcohol engine.
- Continue the transfer EPA's advances in hydraulic hybrid technologies (promote adoption of technology and technical assistance) of, providing continuity in EPA's commitments to the truck and fleet industry for development and deployment.
- Continue field tests currently underway and planned for 2008 for hydraulic-hybrid and clean engine technologies achieving better fuel economy than the typical baseline vehicles,

- Finish developing performance measures that demonstrate the program's greenhouse gas reduction contributions.

In FY 2008, the Fuel Cell and Hydrogen Program will:

- Continue to coordinate with key stakeholders through the public/private California Fuel Cell Partnership to facilitate the commercialization of innovative technologies.

OMB assessed the Climate Change Program in 2004 through the PART process, and gave it a rating of "adequate." There are over 20 climate change programs which work with the private sector to cost effectively reduce greenhouse gas emissions and facilitate energy efficiency improvements. Each sector (buildings, industry and transportation) has performance and efficiency measures to track the amount of greenhouse gas emissions that are reduced as a result of the program's efforts. EPA is working to complete an assessment and comparison of the potential benefits and efforts of the Clean Automotive technology program, and to develop better performance measures that more clearly link to greenhouse gas reduction potential in the near term.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the buildings sector.	Data Available 2007	26.5	29.4	32	MMTCE

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the industry sector.	Data Available 2007	58	62.6	68	MMCTE

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the transportation sector.	Data Available 2007	1.2	1.6	1.5	MMTCE

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$50.0) This increase provides funding to support program evaluation which assesses the effectiveness of the Clean Automotive Technology Program's high-efficiency, clean combustion E-85/M-85 alcohol engine.

- (+\$504.5) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$0.1) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CAA Amendments, 42 U.S.C. 7401 et seq. - Sections 102, 103, 104, and 108; Pollution Prevention Act, 42 U.S.C. 13101 et seq. - Sections 6602, 6603, 6604, and 6605; NEPA, 42 U.S.C. 4321 et seq. - Section 102; Global Climate Protection Act, 15 U.S.C. 2901 - Section 1103; Federal Technology Transfer Act, 15 U.S.C. - Section 3701a.

Program Area: Enforcement

Forensics Support

Program Area: Enforcement

Goal: Compliance and Environmental Stewardship

Objective(s): Enhance Societies Capacity for Sustainability through Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$13,044.2</i>	<i>\$13,185.2</i>	<i>\$15,075.0</i>	<i>\$1,889.8</i>
Hazardous Substance Superfund	\$3,600.9	\$4,184.2	\$2,310.0	(\$1,874.2)
Total Budget Authority / Obligations	\$16,645.1	\$17,369.4	\$17,385.0	\$15.6
Total Workyears	101.8	107.8	105.8	-2.0

Program Project Description:

The Forensics Support program provides specialized scientific and technical support for the nation's most complex civil enforcement cases and provides technical expertise for non-routine Agency compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is the only accredited environmental forensics center in the nation. NEIC's Accreditation Standard has been customized to cover the civil, criminal, and special program work conducted by the program.

NEIC collaborates with state, local and Tribal agencies to provide technical assistance, consultation, and on-site investigation and inspection activities in support of the Agency's civil program. In addition, the program coordinates with the Department of Justice and other Federal, state and local law enforcement organizations in support of criminal investigations.¹

FY 2008 Activities and Performance Plan:

Efforts to stay at the forefront of environmental enforcement in FY 2008 will include the refinement of successful multi-media inspection approaches, use of customized laboratory methods to solve unusual enforcement case problems, and applied research and development for both laboratory and field applications. In response to case needs, the NEIC will conduct applied research and development to identify and deploy new capabilities and to test and/or enhance existing methods and techniques involving environmental measurement and forensic situations. As part of this activity, NEIC also will evaluate the scientific basis and/or technical enforceability of select EPA regulations that may impact program activities.

In FY 2008, the Forensics program will continue to function under more stringent International Standards of Operation for environmental data measurements to maintain its accreditation. The program also will continue development of emerging technologies in field measurement techniques and laboratory analytical techniques, as well as identifying sources of pollution at abandoned waste sites.

¹ For more information, refer to: <http://www.epa.gov/compliance/neic/index.html>.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. (civil enf)	890	450	500	550	million pounds

One of the program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions². The Agency is exploring methodologies to strengthen the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

Although the estimated pollution reductions as a result of the enforcement actions taken by EPA have grown over the past five years, these pollutant reductions are projections based on settlement agreements entered each fiscal year. One or two cases can have a significant effect on the end-of-year results.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$352.6 / +7.5 FTE) This increase reflects a transfer to NEIC's Science and Technology budget reflecting a shift in NEIC workload from Superfund related projects to projects which support other media.
- (-\$98.5) This decrease will reduce available funding for laboratory equipment at the NEIC.
- (+\$3.5) This increase is associated with increased programmatic laboratory fixed costs.
- (+\$1,632.2) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

CERCLA; EPCRA.

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Program Area: Homeland Security

Homeland Security: Critical Infrastructure Protection

Program Area: Homeland Security

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$4,717.4	\$7,242.7	\$7,787.0	\$544.3
<i>Science & Technology</i>	<i>\$13,306.1</i>	<i>\$45,251.0</i>	<i>\$25,586.0</i>	<i>(\$19,665.0)</i>
Hazardous Substance Superfund	\$985.1	\$1,571.6	\$1,857.0	\$285.4
Total Budget Authority / Obligations	\$19,008.6	\$54,065.3	\$35,230.0	(\$18,835.3)
Total Workyears	47.1	59.0	59.0	0.0

Program Project Description:

This program provides resources to coordinate and support protection of the nation's critical water infrastructure from terrorist threats and other catastrophic events. Reducing risk in the water sector requires a multi-step approach to: determine risk through vulnerability, threat, and consequence assessments; reduce risk through security enhancements; prepare to effectively respond to and recover from incidents; and measure the water sector's progress in risk reduction. Homeland Security Presidential Directives (HSPDs) 7 and 9 direct EPA to help the water sector implement protective measures and develop comprehensive water surveillance and monitoring programs. The Public Health Security and Bioterrorism Response and Preparedness Act of 2002 (Bioterrorism Act) also provides that EPA support the water sector in such activities.

(See <http://www.epa.gov/safewater/watersecurity> for more information.)

FY 2008 Activities and Performance Plan:

EPA will continue to support the water security initiative (formerly known as WaterSentinel) pilot program and water sector-specific agency responsibilities, including the Water Alliance for Threat Reduction (WATR), to protect the nation's critical water infrastructure. In FY 2008, the Agency in collaboration with our water sector security stakeholders will continue our efforts to develop, implement and initiate tracking of national measures related to homeland security critical infrastructure protection activities. All of these efforts support the Agency's responsibilities and commitments under the National Infrastructure Protection Plan, as defined within the Water Sector Specific Plan, which includes, for example, specific milestones for work related to the water security initiative and metric development.

Water Security Initiative

HSPD-9 directs EPA to develop a "robust, comprehensive, and fully coordinated surveillance and monitoring system" for drinking water and a water laboratory network that would support water surveillance and emergency response activities. The overall goal of the initiative is to

design and demonstrate an effective system for timely detection and appropriate response to drinking water contamination threats and incidents through a pilot program that would have broad application to the nation's drinking water utilities in high threat cities.

The water security initiative consists of five general components: (1) enhanced physical security monitoring, (2) water quality monitoring, (3) routine and triggered sampling of high priority contaminants, (4) public health surveillance, and (5) consumer complaint surveillance. Recent simulation analyses underscore the importance of a contaminant warning system that integrates all five components of event detection, as different contaminants are detected by different sequences of triggers, or "alarms."

The water security initiative is intended to demonstrate the concept of an effective contamination warning system that drinking water utilities in high threat cities of all sizes and characteristics could adopt. It will provide a comprehensive protocol that would enable utilities to most effectively – in terms of budgetary resources and detection capability – deploy contamination warning systems. Through the pilots, EPA will analyze the design and implementation issues over a range of system types including: different sized water systems; different type of water delivery systems (open versus closed); and different types of treatment (chlorinated versus non-chlorinated). The pilots also involve building the analytical capability and capacity necessary to support the contaminant-specific sampling by leveraging existing laboratory infrastructure for processing high priority biological, chemical, and radiological threat agents in water.

Resources appropriated to date have enabled EPA to establish and calibrate an initial pilot for the water security initiative. Interim guidance will be issued in 2007. Requested FY 2008 funding for the program will continue to support the existing pilot, and will support the establishment of additional pilots. Thus, all planned pilots will be underway by 2008. In the out years, EPA will focus on calibrating the contaminant warning systems and conduct extensive and thorough evaluations of each pilot. The Agency also will continue to prepare and refine a series of guidance documents for water utilities, on designing, deploying, and testing contamination warning systems based on additional lessons-learned from the pilots.

Each of the system's five components will be subjected to extensive validation in the field. In the absence of an actual contamination event, much of the evaluation of the pilots will occur through reviewing, for example, the success of conducting sample analysis in response to a trigger. EPA will quickly share information learned from the pilots with other water utilities, rather than waiting for the pilots' conclusion before disseminating key results. Work will be carried out in collaboration with other Federal agencies, such as the Department of Homeland Security (DHS), Centers for Disease Control and Prevention, Department of Defense, and the U.S. Geological Survey.

Water Sector-Specific Agency Responsibilities

HSPD-7 designates EPA as the Sector-Specific Agency "responsible for infrastructure protection activities" for the water sector (drinking water and wastewater utilities). Under this directive, EPA is responsible for developing and providing tools and training on improving security to the 54,000 community water systems and 16,000 publicly-owned treatment works.

EPA will continue to provide special assistance to high-priority drinking water systems under the Water Alliance for Threat Reduction (WATR). In FY 2008, EPA will work to ensure that water sector utilities have tools and information to prevent, detect, respond to, and recover from terrorist attacks, other intentional acts, and natural disasters. The following preventive and preparedness activities will be implemented for the water sector in collaboration with DHS and states' homeland security and water sector officials:

- Continue to develop and conduct exercises to prepare utilities, emergency responders, and decision-makers to evaluate and respond to physical, cyber-, and contamination threats and events;
- Provide expert technical assistance in preparedness and response for national special security events and incidents;
- Disseminate tools and provide technical assistance to ensure that water utilities and emergency responders react rapidly and effectively to intentional contamination and other incidents. Tools include information on high priority contaminants, incident command protocols, sampling and detection protocols and methods, and treatment options;
- To support WATR, EPA will continue to conduct additional training sessions for water sector systems serving over 100,000 people; and
- Support the establishment of mutual aid agreements among utilities to improve recovery times.

Performance Targets:

Work under this program supports EPA's protect human health objective. Currently, there are no performance measures specific to this program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$20,000.0) This decrease reflects resources to maintain the existing water security initiative pilot and to complete deployment of remaining pilot systems under the initiative.
- (+\$333.9) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$1.1) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

SDWA; CWA; Public Health Security and Bioterrorism Emergency and Response Act of 2002; EPCRA.

Homeland Security: Preparedness, Response, and Recovery

Program Area: Homeland Security

Goal: Clean Air and Global Climate Change

Objective(s): Radiation

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks; Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$1,659.2	\$3,328.7	\$3,381.0	\$52.3
<i>Science & Technology</i>	<i>\$32,692.8</i>	<i>\$44,498.1</i>	<i>\$40,768.0</i>	<i>(\$3,730.1)</i>
Hazardous Substance Superfund	\$40,400.0	\$49,774.9	\$45,280.0	(\$4,494.9)
Total Budget Authority / Obligations	\$74,752.0	\$97,601.7	\$89,429.0	(\$8,172.7)
Total Workyears	148.6	165.6	167.6	2.0

Program Project Description:

Through research, development and technical support activities, this program continues to increase the Agency's preparedness, and its response and recovery capabilities for homeland security incidents involving chemical, biological or radiological threats. The Agency continues to assemble and evaluate private sector tools and capabilities so that efficacious response approaches can be identified and evaluated for future use by first responders, decision makers, and the public. EPA also continues to work with Federal institutions and other organizations through collaborative research efforts to strengthen decontamination capabilities.

FY 2008 Activities and Performance Plan:

Agency homeland security research, the radiological monitoring program, and biodefense research will continue to strengthen response capabilities, and clarify roles and responsibilities to ensure an effective response. It will also promote improved response capabilities across government and industry in areas where EPA has unique knowledge and expertise.

EPA's National Homeland Security Research Center (NHSRC):

The NHSRC oversees Agency research in preparedness, risk assessment, detection, containment, decontamination, and disposal associated with chemical, biological, and radiological attacks. The Center will continue work in support of its responsibilities as assigned in Homeland Security Presidential Directives (HSPDs) (e.g., HSPD-7, HSPD-9, and HSPD-10) and Department of Homeland Security requirements for EPA expertise in a number of key areas. Activities in FY 2008 will include the following:

- Water infrastructure protection research will focus on developing, testing, demonstrating, communicating, and implementing enhanced methods for detection, treatment, and

containment of biological and chemical warfare agents, certain radiological contaminants, and bulk industrial chemicals intentionally introduced into drinking water and wastewater systems. This is consistent with the Critical Infrastructure Protection Plan (CIPP) developed for water infrastructure and with the *Water Security Research and Technical Support Action Plan*.

- Threat and consequence assessment research will focus on conducting risk assessments of decontamination byproducts; refining toxicity databases; developing fate, transport, dispersion, and exposure parameters; and developing computer-based tools to aid decision makers in assessing the risks associated with biological and chemical attacks; as well as determination/revision of cleanup guidance goals.
- To support the homeland security requirements under HSPDs 9 and 10, EPA will expand its Standardized Analytical Methods (SAM) document for homeland security to include development, validation, and testing of non-standard methods and additional methods for chemicals, biologicals, and radiologicals in new environmental matrices. EPA also will establish an applied measurement science research program to administer the activities of a national laboratory network that will manage method development, validation, and application for contaminants resulting from terrorist attacks.
- EPA will conduct critical research to improve existing decontamination systems and to develop and test new decontamination methods and systems for buildings, large structures, and outdoor areas. In addition, field studies to validate decontamination methods specific to anthrax will be conducted, as will research to develop decontamination and disposal methods for building materials.
- Other efforts will begin evaluating toxicity, infectivity, mechanisms of action, and other risk characterization information for biological contaminants in order to develop dose/response relationships that can assist the development of cleanup goals.
- EPA's Homeland Security research program plans to have several projects and proposals reviewed by independent scientific advisory bodies during FY 2008. EPA has set up a special Science Advisory Board (SAB) committee to review research related to homeland security. In addition, EPA's Homeland Security research program has tentatively planned a Board of Scientific Counselors (BOSC) review during 2008.

Radiation Monitoring:

In the Nuclear/Radiological Incident Annex to the National Response Plan for Homeland Security, EPA's responsibilities include maintenance and enhancement of the RadNet monitoring network. The network includes deployable monitors and near real-time stationary monitors. EPA also is responsible for maintenance of both fixed and mobile monitors, and personnel and asset readiness for radiological emergency responses, which includes participating in emergency response situations and providing technical expertise and support.

- The Agency will continue to upgrade and enhance the RadNet air monitoring network. Monitors will be put into operation as they are delivered and installed at the sites by the manufacturer. These near-real-time monitors will replace the pre-existing system of 60 conventional air samplers. Fixed stations will operate in conjunction with 40 deployable monitors. From FY 2006 through FY 2008, EPA expects to install over 100 monitors providing near real-time radiation monitoring coverage for over two-thirds of the 100 most populous U.S. cities. As the RadNet air monitoring network is upgraded and enhanced, response time and data dissemination will be reduced from days to hours and will provide the Agency with greater access to near real-time data, improving officials' ability to make decisions about protecting public health during an incident. The improved system will help ensure preparedness for radiological incidents.

Improve National Radiological Lab Capacity and Capability:

In FY 2008, EPA will build upon work begun in FY 2006 to augment EPA's existing applied science radiological labs to meet emerging homeland security needs and serve as the Agency's radiological reference laboratory. Also, EPA will continue to upgrade the Agency's lab response capability to ensure a minimal level of surge capacity for radiological terrorism incidents; enhance the existing capability to conduct chemical and radiological analysis simultaneously; and coordinate the Radiological Emergency Response Team's sample handling protocols with the mobile triage units. Additionally, EPA will align and integrate related radiological activities with existing National Lab Networks. The Agency will initially assess capability and capacity of ten state, Federal, and commercial laboratories.

Biodefense:

EPA will continue work to develop and validate methods to evaluate the efficacy of products against bioterrorism agents, expanding this work to address fumigants. EPA will continue to address critical gaps in efficacy test methodology and knowledge of microbial resistance. In addition to bacteria, in FY 2008, EPA will address threatening viruses and other emerging pathogens in environmental media. Thus far, decontamination test methods for viruses have only begun to be addressed. EPA will propose the development and evaluation of efficacy test protocols for products designed to control viruses in the environment during decontamination.

In order to improve the Agency's ability to respond to events involving biothreat agents, EPA will increase the number of standardized and validated methods for evaluating the efficacy of decontamination agents. Critical efforts in FY 2007 through FY 2008 will focus on evaluating additional non-spore forming threat agents and viruses, novel antimicrobial formulations such as gases and sprays, and additional surface materials (concrete, wood etc.). EPA will continue to seek independent third-party analysis for method validation efforts through recognized standard setting organizations. As new methods are developed, statistical modeling for various biodefense scenarios will be critical to the development of science based performance standards. Microbial persistence, resistance to antimicrobial agents, and an understanding of biofilm environments are also key factors in evaluating the efficacy of decontamination tools.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no PART measures for this specific program/project. However, in FY 2008 the program plans to accomplish its goals of completing and delivering 100% of its planned outputs in support of 1) the efficient and effective clean-up and safe disposal of decontamination wastes, 2) the water security initiative, 3) the rapid assessment of risk and the determination of clean-up goals and procedures following contamination, and 4) the establishment of the National Laboratory Response Network. In achieving these targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to the health of people, communities, and ecosystems.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$229.9) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$6.3) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$4,000.0) This reflects a reduction to EPA's planned decontamination research. However, the reduction will not affect ongoing research projects.
- (+\$46.1) This increase is associated with increased programmatic laboratory fixed costs.
- (+\$0.2) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Atomic Energy Act of 1954, as amended, 42 U.S.C 2011 et seq. (1970), and Reorganization Plan #3 of 1970; CAA; CERCLA, SARA; Executive Order 12241 of September 1980, National Contingency Plan, 3 CFR, 1980; Executive Order 12656 of November 1988, Assignment of Emergency Preparedness Responsibilities, 3 CFR, 1988; Public Health Service Act, as amended, 42 U.S.C 201 et seq.; Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, 42 U.S.C 5121 et seq.; SDWA; Title X IV of the National Defense Authorization Act of 1997, PL 104-201 (Nunn-Lugar II) National Response Plan; Public Health Security and Bioterrorism Emergency and Response Act of 2002; TSCA; Oil Pollution Act; Pollution Prevention Act; RCRA; EPCRA; CWA; FIFRA; Federal Food, Drug and Cosmetic Act; FQPA; Ocean Dumping Act; Public Health Service Act, as amended; 42 U.S.C 201 et seq.; Executive Order 10831 (1970); Public Law 86-373; PRIA.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$8,845.1	\$6,268.9	\$6,345.0	\$76.1
<i>Science & Technology</i>	<i>\$3,013.8</i>	<i>\$2,079.0</i>	<i>\$594.0</i>	<i>(\$1,485.0)</i>
Building and Facilities	\$10,800.9	\$11,385.1	\$7,870.0	(\$3,515.1)
Hazardous Substance Superfund	\$534.7	\$594.2	\$594.0	(\$0.2)
Total Budget Authority / Obligations	\$23,194.5	\$20,327.2	\$15,403.0	(\$4,924.2)
Total Workyears	3.0	3.0	3.0	0.0

Program Project Description:

This program involves activities to ensure that EPA's physical structures and assets are secure and operational and that certain physical security measures are in place to help safeguard staff in the event of an emergency. These efforts also protect the capability of EPA's vital infrastructure assets.

FY 2008 Activities and Performance Plan:

In FY 2008, the Agency will continue to provide physical security at specific laboratory facilities, including homeland security support activities.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$1,485.0) This reduction reflects substantial progress in completing initial vulnerability mitigations at EPA's most vulnerable facilities, allowing a reduction in the pace of physical security upgrades and vulnerability assessments.

Statutory Authority:

Public Health Security and Bioterrorism Emergency and Response Act of 2002; Secure Embassy Construction and Counterterrorism Act (Sections 604 and 629).

Program Area: Indoor Air

Indoor Air: Radon Program

Program Area: Indoor Air

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Indoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$7,418.0	\$5,519.2	\$5,429.0	(\$90.2)
<i>Science & Technology</i>	<i>\$583.9</i>	<i>\$442.2</i>	<i>\$428.0</i>	<i>(\$14.2)</i>
Total Budget Authority / Obligations	\$8,001.9	\$5,961.4	\$5,857.0	(\$104.4)
Total Workyears	37.3	42.9	39.9	-3.0

*Resources under this program/project were formerly captured under Indoor Air: Asthma (74), Indoor Air: Environmental Tobacco Smoke (75), and Indoor Air: Schools and Workplaces Programs (77)

Program Project Description:

The Radiation and Indoor Environments National Laboratory (R&IE) in Las Vegas, NV is the only remaining Federal, National Institute of Standards and Technology (NIST)-traceable radon laboratory. The R&IE radon laboratory supports EPA's radon program by providing exposure services to local, state, and Federal radon programs and to privatized radon proficiency programs. The R&IE radon laboratory also distributes and analyzes radon test kits for community-based environmental justice partners with a focus on tribes.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's radon laboratory will continue to provide: radon exposure services to support local, state, and Federal radon programs; radon laboratory inter-comparisons and device verification exposures to support privatized radon proficiency programs; and test kits and analyses for community-based environmental justice partners. As part of its environmental justice efforts, EPA will distribute 2,000 radon kits to our network of partner organizations and community-based environmental justice partners and analyze 100% of returned radon kits.

The Indoor Air program received a rating of "moderately effective" during a 2005 PART assessment. The Indoor Air program is not regulatory; instead, EPA works toward its goal by conducting research and promoting appropriate risk reduction actions through voluntary education and outreach programs. The Agency will continue to focus on making efficiency improvements and plans to improve transparency by making all aspects of the State Indoor Radon Grant (SIRG) program performance/results data available to the public via our website or other easily accessible means.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of additional homes (new and existing) with radon reducing features	Data Available 2007	180,000	190,000	225,000	Homes

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Total Cost (public and private) per future premature cancer death prevented through lowered radon exposure.	Data Available 2007	450,000	No Target Established	No Target Established	Dollars

In FY 2008, EPA expects 225,000 additional homes to have radon reducing features bringing the cumulative number of U.S. homes with radon reducing features to over 2 million. EPA estimates that this cumulative number will result in approximately 800 future premature cancer deaths prevented (each year these radon reducing features are in place). EPA will track progress against the efficiency measure in the table above triennially with the next report date in FY 2009.

These program goals are a result of the total funding the program area receives through EPM, S&T, and SIRG funding.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$14.2) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.

Statutory Authority:

CAA Amendments of 1990; (IRAA), Section 306; Title IV of the SARA of 1986; TSCA, section 6, Titles II, and Title III (15 U.S.C. 2605 and 2641-2671), and Section 10.

Reduce Risks from Indoor Air

Program Area: Indoor Air

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Indoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$19,023.2	\$23,464.3	\$21,440.0	(\$2,024.3)
<i>Science & Technology</i>	<i>\$759.9</i>	<i>\$828.7</i>	<i>\$788.0</i>	<i>(\$40.7)</i>
Total Budget Authority / Obligations	\$19,783.1	\$24,293.0	\$22,228.0	(\$2,065.0)
Total Workyears	71.1	68.9	68.3	-0.6

*Resources under this program/project were formerly captured under Indoor Air: Asthma (74), Indoor Air: Environmental Tobacco Smoke (75), and Indoor Air: Schools and Workplaces Programs (77)

Program Project Description:

The Radiation and Indoor Environments National Laboratory (R&IE) maintains the capacity to conduct field measurements, assessments and technical support for indoor air quality remediations. R&IE also conducts training and provides technical support for development of tribal capacity for indoor air quality programs, such as mold remediation, assessment and characterization of sources of volatiles and intruding vapors, and monitoring and measurement techniques.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will conduct Indoor Air Quality (IAQ) intervention and remediation training courses which will continue to support development of tribal capacity for indoor air quality programs. EPA will continue conducting field measurements and assessments and providing technical support for indoor air quality remediations.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of public that is aware of the asthma program's media campaign.	33	>20	>20	>20	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Additional health care professionals trained annually by EPA and its partner on the environmental	Data Available 2007	2000	2000	2000	Number

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	management of asthma triggers.					

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Annual Cost to EPA per person with asthma taking all essential actions to reduce exposure to indoor environmental asthma triggers.	Data Available 2007	8.38	No Target Established	No Target Established	Dollars

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Estimated annual number of schools establishing indoor air quality programs based on EPA's Tools for Schools guidance.	Data Available 2007	1200	1100	1100	Number

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Average cost to EPA per student per year in a school that is implementing an Indoor Air Quality plan.	Data Available 2007	2	No Target Established	No Target Established	Dollars

The Indoor Air program, rated by OMB as “moderately effective” during a 2005 PART assessment will continue to focus on making efficiency improvements in response to recommendations in the PART assessment. EPA will track progress against the efficiency measures included in the tables above triennially with the next planned report date in FY 2009.

EPA will continue to work towards its long term 2012 goal to have 6.5 million people with asthma take the essential actions to reduce their exposure to their environmental triggers of asthma, including environmental tobacco smoke. EPA’s goal is to have close to 400,000 additional people with asthma to take these actions in 2008, bringing the total number to over 4.9 million people with asthma taking these actions. As part of this goal, EPA will continue to work to reduce existing disparities between disproportionately impacted populations and the overall population.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$40.7) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.

Statutory Authority:

CAA Amendments of 1990; RGIAQR Act; Title IV of the SARA of 1986.

Program Area: IT / Data Management / Security

IT / Data Management

Program Area: IT / Data Management / Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$98,871.4	\$96,807.2	\$91,019.0	(\$5,788.2)
<i>Science & Technology</i>	<i>\$4,412.9</i>	<i>\$4,268.0</i>	<i>\$3,499.0</i>	<i>(\$769.0)</i>
Leaking Underground Storage Tanks	\$130.9	\$175.9	\$177.0	\$1.1
Oil Spill Response	\$38.8	\$32.5	\$34.0	\$1.5
Hazardous Substance Superfund	\$16,646.2	\$17,120.4	\$16,338.0	(\$782.4)
Total Budget Authority / Obligations	\$120,100.2	\$118,404.0	\$111,067.0	(\$7,337.0)
Total Workyears	515.5	488.0	488.0	0.0

Program Project Description:

The IT/Data Management Science & Technology (S&T) program manages and coordinates the Agency's Science and Technology Enterprise Architecture and develops analytical tools (e.g., Environmental Indicators) to ensure sound environmental decision-making. The program implements the Agency's E-Government (E-Gov) responsibilities; designs, develops and manages the Agency's Internet and Intranet resources including the Integrated Portal. The program 1) supports the development, collection, management, and analysis of environmental data (to include both point source and ambient data) to manage statutory programs and to support the Agency in strategic planning at the national, program, and regional levels, 2) provides a secure, reliable, and capable information infrastructure based on a sound enterprise architecture which includes data standardization, integration, and public access, 3) manages the Agency's Quality System ensuring EPA's processes and data are of quality and adhere to Federal guidelines, and 4) supports regional information technology infrastructure, administrative and environmental programs, and telecommunications. These functions are integral to the implementation of Agency information technology programs and systems like the Exchange Network, the Central Data Exchange (CDX) and Permit Compliance System (PCS). Agency offices rely on the IT/Data Management program and its capabilities to develop and implement tools for ready access to accurate and timely data. Recent partnerships include portals projects with the Offices of Research and Development and Air and Radiation to access scientific and program data.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's Science and Information Technology community will continue focusing on

the Agency's Technology Initiative¹ and fulfilling the Agency's E-Gov commitments. The Agency's IT/Data Management program forms the core of this effort with its focus on building and implementing the Agency's Integrated Portal and Enterprise Content Management System (ECMS), developing Environmental Indicators, and continuing to deploy enterprise-wide IT infrastructure solutions.

Integral to the successful achievement of the Technology Initiative and the broader IT/Data Management efforts is the quality of the data and services. In FY 2008, EPA's IT/Data Management program will continue to provide methods to manage the quality of environmental data collection, generation, and use. The primary goal of the EPA Quality System is to ensure that its S&T environmental data are of sufficient quantity and quality to support the data's intended use. As part of the Agency's Quality System, policies and procedures have been developed to assist individual data collectors, data users, and decision makers in defining their needs for data and assessing data against these needs, and to provide EPA management with methods for overseeing the quality-related activities of their programs. Like the larger IT/Data Management efforts, the Quality System is closely coordinated with the Exchange Network and Information Security programs. This relationship ensures quality data are available and accessible to promote sound environmental decision-making.

In FY 2008, EPA expects savings from the first phase of the Network Optimization Project effort of key IT services and solutions. The services included in this effort include email services, access to data files, telephone communications, and Enterprise Content Management System (ECMS). The end result will be changes to the Agency's IT environment including the ability to manage key IT services, use the power of competition to control costs in a highly competitive environment, and hold vendors and contractors accountable for providing consistently excellent services.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$81.1) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$850.1) This change reflects the Agency working to streamline IT consolidation. This reduction is an aggregate estimate. The final distribution by program will be determined when the Network Optimization Project is completed.

¹ Office of Environmental Information's (OEI) FY 2006 Technology Initiative has three major components: 1) Building on its Analytical Capacity and Indicators work, OEI will uncover and fill data gaps, and develop response capacity; 2) Using the portal and Exchange Network, OEI will increase the integration of quality data, streamline transactions to foster collaboration, reduce the data entry burden, and improve decision making; and 3) OEI's Readiness to Serve initiative will build capacity and infrastructure to allow more EPA employees to telecommute or work safely and securely in the field.

Statutory Authority:

FACA; GISRA; CERCLA; CAAA; CWA and amendments; ERD and DAA; TSCA; FIFRA; FQPA; SDWA and amendments; FFDCA; EPCRA; RCRA; SARA; GPRA; GMRA; CCA; PRA; FOIA; CSA; PR; EFOIA.

Program Area: Operations and Administration

Facilities Infrastructure and Operations
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$336,980.6	\$294,760.1	\$303,728.0	\$8,967.9
<i>Science & Technology</i>	<i>\$8,841.7</i>	<i>\$70,239.5</i>	<i>\$73,859.0</i>	<i>\$3,619.5</i>
Building and Facilities	\$30,871.3	\$28,430.9	\$26,931.0	(\$1,499.9)
Leaking Underground Storage Tanks	\$769.6	\$916.8	\$901.0	(\$15.8)
Oil Spill Response	\$366.1	\$499.3	\$490.0	(\$9.3)
Hazardous Substance Superfund	\$66,365.6	\$73,944.7	\$74,956.0	\$1,011.3
Total Budget Authority / Obligations	\$444,194.9	\$468,791.3	\$480,865.0	\$12,073.7
Total Workyears	375.1	438.6	415.9	-22.7

Program Project Description:

S&T resources in the Facilities Infrastructure and Operations Program Project are used to fund rent, utilities, and security, and also to manage activities and support services in many centralized administrative areas such as health and safety, environmental compliance, occupational health, medical monitoring, fitness/wellness and safety, and environmental management functions at EPA. Resources for this program also support a full range of ongoing facilities management services including: facilities maintenance and operations, Headquarters security, space planning, shipping and receiving, property management, printing and reproduction, mail management, and transportation services.

FY 2008 Activities and Performance Plan:

The Agency will continue to manage its lease agreements with GSA and other private landlords by conducting rent reviews and verifying that monthly billing statements are correct. The Agency also reviews space needs on a regular basis.

These resources also help to improve operating efficiency and encourage the use of new, advanced technologies and energy sources. EPA will continue to direct resources towards acquiring alternative fuel vehicles and more fuel-efficient passenger cars and light trucks to meet the goals set by Executive Orders (EO) 13149¹, *Greening the Government through Federal Fleet*

¹ Information available at <http://www.epa.gov/fedsite/eo13149.htm>

and Transportation Efficiency and EO 13123², Greening the Government through Efficient Energy Management.

Lastly, EPA will provide transit subsidy to eligible applicants as directed by Executive Order (EO) 13150³ *Federal Workforce Transportation*. EPA will continue the implementation of the Safety and Health Management Systems to ensure a safe working environment.

Performance Targets:

Work under this program supports multiple strategic objectives. Performance information is included in the Program Performance and Assessment section.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,577.0) Provides additional resources for increases in rent costs.
- (+\$2,159.4) Provides additional resources for increases in utility costs.
- (+\$362.5) Provides additional resources for increases in security costs.
- (+\$25.2) Provides additional resources for increases in Transit Subsidy.
- (-\$504.6) This reduction reflects efficiencies gained in Agency administrative or contract management services.

Statutory Authority:

FPASA; PBA; Annual Appropriations Act; CWA; CAA; D.C. Recycling Act of 1988; Executive Orders 10577 and 12598; United States Marshals Service, Vulnerability Assessment of Federal Facilities Report; Presidential Decision Directive 63 (Critical Infrastructure Protection).

² Information available at <http://www.epa.gov/fedsite/eo13123.htm>

³ Additional information available at <http://ceq.eh.doe.gov/nepa/regs/eos/eo13150.html>

Program Area: Pesticides Licensing

Pesticides: Registration of New Pesticides

Program Area: Pesticides Licensing

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$39,406.5	\$39,767.6	\$0.0	(\$39,767.6)
<i>Science & Technology</i>	<i>\$2,631.7</i>	<i>\$2,766.1</i>	<i>\$0.0</i>	<i>(\$2,766.1)</i>
Total Budget Authority / Obligations	\$42,038.2	\$42,533.7	\$0.0	(\$42,533.7)
Total Workyears	380.3	327.8	0.0	-327.8

Program Project Description:

The Agency has three laboratories supporting registration activities including an analytical chemistry laboratory and a microbiology laboratory at the Environmental Science Center (ESC) at Fort Meade, MD and an environmental chemistry laboratory (ECL) at Stennis Space Center, Bay St. Louis, MS. The Analytical Chemistry and Environmental Chemistry laboratories validate environmental and analytical chemistry methods to ensure that the Food and Drug Administration (FDA), United States Department of Agriculture (USDA), EPA offices and states have reliable methods to measure and monitor pesticide residues in food and in the environment.

Beginning in FY 2008, these resources will be presented according to descriptions that better reflect the Agency's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) mandate and aligned with the Agency Strategic Plan. These description titles are: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability.

FY 2008 Activities and Performance Plan:

Resources previously presented in this program project are now presented within three new program projects and are distributed as outlined in the Explanation of Change section below. Please see the descriptions for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

Performance Targets:

Please see the narratives for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

FY 2008 Change from FY 2007 Presidents Budget (Dollars in Thousands):

- (-\$1,549.0 /-8.6 FTE) This represents a transfer of resources to the Pesticides: Protect Human Health from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Registration of New Pesticides program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.
- (-\$995.8 /-5.5 FTE) This represents a transfer of resources to the Pesticides: Protect the Environment from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Registration of New Pesticides program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.
- (-\$221.3 /-1.2 FTE) This represents a transfer of resources to the Pesticides: Realize the Value of Pesticide Availability program. This is the outgoing transfer from the Pesticides: Registration of New Pesticides program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.

Statutory Authority:

PRIA; FIFRA; FFDCA; and FQPA.

Pesticides: Review / Reregistration of Existing Pesticides

Program Area: Pesticides Licensing

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$54,507.5	\$51,814.6	\$0.0	(\$51,814.6)
<i>Science & Technology</i>	<i>\$2,347.0</i>	<i>\$2,820.4</i>	<i>\$0.0</i>	<i>(\$2,820.4)</i>
Total Budget Authority / Obligations	\$56,854.5	\$54,635.0	\$0.0	(\$54,635.0)
Total Workyears	460.5	458.7	0.0	-458.7

Program Project Description:

The Pesticide Reregistration and Registration Review programs are supported by an analytical chemistry laboratory and a microbiology laboratory at the Environmental Science Center (ESC) at Fort Meade, MD, and an environmental chemistry laboratory (ECL) at Stennis Space Center, Bay St. Louis, MS. These laboratories support program activities by validating environmental and analytical chemistry methods to ensure that the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), EPA offices, and states have reliable methods to measure and monitor pesticide residues in food and in the environment. The laboratories, in cooperation with industry, state and other EPA laboratories, develop multi-residue analytical methods to allow enforcement agencies to test for several different chemicals using one test.

Beginning in FY 2008, these resources will be presented according to descriptions that better reflect the Agency's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) mandate and align with the Agency Strategic Plan. These description titles are: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability.

FY 2008 Activities and Performance Plan:

Resources previously presented in this program project are now presented within three new program projects and are distributed as outlined in the Explanation of Change section below. Please see the descriptions for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

Performance Targets:

Please see the narratives for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

FY 2008 Change from FY 2007 Presidents Budget (Dollars in Thousands):

- (-\$1,579.4 /-9.5 FTE) This represents a transfer of resources to the Pesticides: Protect Human Health from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Review/Reregistration program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.
- (-\$1,015.4 /-6.1 FTE) This represents a transfer of resources to the Pesticides: Protect the Environment from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Review/Reregistration program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.
- (-\$225.6 /-1.4 FTE) This represents a transfer of resources to the Pesticides: Realize the Value of Pesticide Availability program. This is the outgoing transfer from the Pesticides: Review/Reregistration program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.

Statutory Authority:

PRIA; FIFRA; FFDCA; FQPA.

Pesticides: Protect Human Health from Pesticide Risk

Program Area: Pesticides Licensing

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$0.0	\$0.0	\$62,514.0	\$62,514.0
<i>Science & Technology</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$3,294.0</i>	<i>\$3,294.0</i>
Total Budget Authority / Obligations	\$0.0	\$0.0	\$65,808.0	\$65,808.0
Total Workyears	0.0	0.0	488.5	488.5

Program Project Description:

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), section 3(c)(5), states that the Administrator shall register a pesticide if it is determined that, when used in accordance with labeling and common practices the product “will not generally cause unreasonable adverse effects on the environment.” Further, FIFRA defines “unreasonable adverse effects on the environment” as “any unreasonable risk to man or the environment. EPA has restructured its program projects in order to align resource requests and resource presentation with the program’s mandate. This program project 1) links resources with FIFRA’s mandate to protect human health from unreasonable pesticide risks, 2) aligns with EPA’s 2006-2011 Agency Strategic Plan, and 3) comprises the human health activities formerly described in the Pesticides: Pesticides: Review/Reregistration of Existing Pesticides and the Pesticides: Registration of New Pesticides program projects.

EPA’s Pesticides program screens new pesticides before they reach the market and ensures that pesticides already in commerce are safe. As directed by FIFRA, the Federal Food, Drug, and Cosmetic Act (FFDCA), and the Food Quality Act of 1996 that amended FIFRA and FFDCA, EPA is responsible for registering and reregistering pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations. To make regulatory decisions and establish tolerances or maximum allowable pesticide residues on food and feed, EPA must balance the risks and benefits of using the pesticide, consider cumulative and aggregate risks, and ensure extra protection for children.

Research for the Pesticide program supports the goal of protecting human health through three pesticide laboratories: an analytical chemistry laboratory and a microbiology laboratory at the Environmental Science Center (ESC) at Fort Meade, MD, and an environmental chemistry laboratory (ECL) at Stennis Space Center, Bay St. Louis, MS. These laboratories develop and validate environmental and analytical chemistry methods to ensure the United States Department of Agriculture (USDA), USGS, EPA offices, and states have reliable methods to measure and monitor pesticide residues in food and in the environment. The laboratories, in cooperation with industry, state and other EPA laboratories, develop multi-residue analytical methods to allow enforcement agencies to test for several different chemicals using one test.

FY 2008 Activities and Performance Plan:

In 2008, the Agency will continue to protect human health by evaluating residue analytical methods for detecting pesticide residues in food and feed, ensuring suitability for monitoring pesticide residues and enforcement of tolerances. This will be accomplished by developing and validating multi-residue pesticide analytical methods for food, feed and water for use by other Federal (USDA Pesticide Data Program and FDA) and state laboratories, and subsequently the program office. The methods will help estimate human health risks by operating the National Pesticide Standard Repository and conducting chemistry and efficacy testing for antimicrobials.

EPA's laboratories will continue to provide quality assurance and technical support and training to EPA regions, state laboratories, and other Federal agencies that implement the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). The laboratories will evaluate registered products that are most crucial to infection control (sterilants, tuberculocides, and hospital-level disinfectants). Under the Plant-Incorporated Protectant (PIP) method validation program, work will continue on evaluating several novel molecular-based methods.

Performance Targets:

Work under this program supports multiple performance objectives. Some of this program's performance measures are program outputs which represent statutory requirements to ensure that pesticides entering the marketplace are safe for human health and the environment and when used in accordance with the packaging label present a reasonable certainty of no harm. While program outputs are not the best measures of risk reduction, they do provide a means for realizing benefits in that the program's safety review prevents dangerous pesticides from entering the marketplace.

FY 2008 Change from FY 2007 Presidents Budget (Dollars in Thousands):

- (+\$1,579.4 \ +9.5 FTE) This increase is the incoming transfer of the Pesticides: Review/Reregistration of Existing Pesticides program's base resources, including payroll and FTE, and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$1,549.0 \ +8.6 FTE) This increase is the incoming transfer of the Pesticides: Registration of New Pesticides program's base resources and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$163.3) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$2.3) This increase reflects minor shifts in workforce support.

Statutory Authority:

PRIA; FIFRA; FFDCA; FQPA.

Pesticides: Protect the Environment from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Healthy Communities and Ecosystems
Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$0.0	\$0.0	\$41,750.0	\$41,750.0
<i>Science & Technology</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$2,115.0</i>	<i>\$2,115.0</i>
Total Budget Authority / Obligations	\$0.0	\$0.0	\$43,865.0	\$43,865.0
Total Workyears	0.0	0.0	320.5	320.5

Program Project Description:

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), section 3(c)(5), states that the Administrator shall register a pesticide if it is determined that, when used in accordance with labeling and common practices the product “will not generally cause unreasonable adverse effects on the environment.” Further, FIFRA defines “unreasonable adverse effects on the environment” as “any unreasonable risk to man or the environment.” EPA has restructured its program projects in order to align resource requests and resource presentation with the program’s mandate. This program project 1) links resources with FIFRA’s mandate to protect the environment from unreasonable pesticide risks, 2) aligns with EPA’s 2006-2011 Agency Strategic Plan, and 3) comprises the environmental protection activities formerly described in the Pesticides: Pesticides: Review/Reregistration of Existing Pesticides and the Pesticides: Registration of New Pesticides program projects.

Along with assessing the risks that pesticides pose to human health, EPA conducts ecological risk assessments to determine potential effects on plants, animals, and ecosystems. EPA works to protect ecosystems, particularly the plants and animals that are not targets of the pesticide, as well as satisfy additional responsibilities under the Endangered Species Act (ESA).¹ As directed by FIFRA, EPA must determine that a pesticide is not likely to harm the environment, and may impose risk mitigation measures such as restricting uses, denying uses, or requiring monitoring of environmental conditions, such as effects on water sources.² In making its regulatory decisions, the Agency considers both the risks and the benefits derived from the use of the pesticide.

Research for the Pesticide program supports the goal of protecting the environment from pesticides use through three pesticides laboratories: an analytical chemistry laboratory and a

¹ The Endangered Species Act of 1973 sections 7(a)1 and 7 (a)2; Federal Agency Actions and Consultations, as amended (16 U.S.C. 1536(a)). Available at U.S. Fish and Wildlife Service, Endangered Species Act of 1973 internet site: <http://www.fws.gov/endangered/esa.htm#Lnk07>.

² Federal Insecticide, Fungicide, and Rodenticide Act, as amended. January 23, 2004. Section 3(a), Requirement of Registration (7U.S.C. 136a). Available online at: www.epa.gov/opp00001/regulating/fifra.pdf.

microbiology laboratory at the Environmental Science Center (ESC) at Fort Meade, MD, and an environmental chemistry laboratory (ECL) at Stennis Space Center, Bay St. Louis, MS. These laboratories develop and validate environmental and analytical chemistry methods to ensure the United States Department of Agriculture (USDA), USGS, EPA offices, and states have reliable methods to measure and monitor pesticide residues in food and in the environment. The laboratories, in cooperation with industry, state and other EPA laboratories, develop multi-residue analytical methods to allow enforcement agencies to test for several different chemicals using one test.

FY 2008 Activities and Performance Plan:

In 2008, the Agency will support the protection of the environment by developing methods and conducting analyses to make more informed decisions regarding pesticide exposures and risk to the environment and by operating the National Pesticide Standard Repository to support Federal and State labs involved in enforcement activities. Under the Plant-Incorporated Protectant (PIP) method validation program, work will continue on evaluating several novel molecular-based methods.

The laboratories will also support the protection of the environment by evaluating residue analytical methods used for detecting pesticide residues in environmental matrices, such as water, soil and sediment. Evaluating residue analytical methods will give the program confidence in assessing the results generated by the registrant and submitted to the Agency, which is required by the pesticide registration guidelines of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Evaluating residue analytical methods will also assist the Agency in developing and validating multi-residue pesticide analytical methods for environmental matrices for use by other Federal and state laboratories to estimate environmental risks.

The laboratories also respond to urgent pesticide program needs for analytical chemistry support to address specific short-term, rapid turnaround issues of high priority. The labs cooperate with regional activities related to analysis of environmental samples for select pesticides or other environmental contaminants related to pesticide production or disposition and develop exposure data for dioxins, polychlorinated biphenyls (PCBs) and other persistent contaminants of environmental concern, to support Agency environmental risk assessments.

Additionally, the labs conduct product performance evaluations of antimicrobials to remove inefficacious products and eliminate unnecessary source effluent affecting the environment as well as provide data to support use of effective tools for remediation efforts and testing capacity for environmental monitoring of microbial populations (due to overt or unintentional contamination). Another activity involves conducting validation services on methods used to detect DNA and/or proteins for PIPs in major agricultural commodities such as corn, soybeans, potatoes, cotton, etc.

EPA's laboratories will continue to provide quality assurance and technical support and training to EPA regional offices, state laboratories, and other Federal agencies that implement FIFRA. Additionally, the laboratories provide EPA's enforcement programs with highly specialized

pesticide chemistry services to support enforcement cases, including the more difficult to analyze older pesticides.

Performance Targets:

Work under this program supports multiple performance measures. Some of the pesticide program's performance measures are program outputs which represent statutory requirements to ensure that pesticides entering the marketplace are safe for human health and the environment and when used in accordance with the packaging label present a reasonable certainty of no harm.

FY 2008 Change from FY 2007 Presidents Budget (Dollars in Thousands):

- (+\$1,015.4 \ +6.1 FTE) This increase is the incoming transfer of the Pesticides: Review/Reregistration of Existing Pesticides program's base resources, including payroll and FTE, and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$995.8 \ +5.5 FTE) This increase is the incoming transfer of the Pesticides: Registration of New Pesticides program's base resources and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$105.5) This reflects an increase for payroll and cost of living for existing FTE.
- (- \$1.7) This decrease reflects minor shifts in workforce support.

Statutory Authority:

PRIA; FIFRA; FFDCA; FQPA.

Pesticides: Realize the Value of Pesticide Availability

Program Area: Pesticides Licensing
Goal: Healthy Communities and Ecosystems
Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$0.0	\$0.0	\$12,114.0	\$12,114.0
<i>Science & Technology</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$472.0</i>	<i>\$472.0</i>
Total Budget Authority / Obligations	\$0.0	\$0.0	\$12,586.0	\$12,586.0
Total Workyears	0.0	0.0	90.4	90.4

Program Project Description:

Within the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the definition of “unreasonable adverse effects on the environments” expands upon the concept of protecting against unreasonable risks to man or the environment, by adding “taking into account the economic, social and environmental costs and benefits of the use of any pesticide...” An example of actions that lead to these societal benefits are exemptions granted under FIFRA Section 18. In the event of an emergency, FIFRA Section 18 provides EPA the authority to temporarily exempt certain pesticides uses from registration requirements. This program project, which aligns with the 2006-2011 Agency Strategic Plan, is restructured for FY 2008 and now comprises the activities formerly described in the Pesticides: Pesticides: Review/Reregistration of Existing Pesticides and the Pesticides: Registration of New Pesticides program projects, as they relate to the value of pesticide availability.

EPA must ensure that such emergency uses will not present an unreasonable risk to the environment. EPA’s timely review of emergency exemptions has avoided an estimated \$1.5 billion in crop losses per year, resulting from new pests on crops when exemptions are necessary while progress is made towards full registration. In such cases, EPA’s goal is to complete the more detailed and comprehensive unreasonable risk review conducted for pesticide registration within three years.

The statute clearly recognizes that there will be societal benefits beyond protection of human health and the environment from the pesticide registration process that it establishes. Section 3 of FIFRA also authorizes EPA to register “me-too” products; that is products that are identical or substantially similar to already-registered products. The entry of these new products, also known as “generics,” into the market can cause price reductions resulting from new competition and broader access to products. These price declines generate competition that provides benefits to farmers and consumers. For example, an estimated \$900 million in termite damage is avoided each year through the availability of effective termiticides. While some effective termiticides have been removed from the market due to safety concerns, EPA continues to work with industry to register safe alternatives that meet or exceed all current safety standards and offer a high level of protection. The program project is in alignment with the 2006-2011 Agency Strategic Plan.

The Pesticides program supports the goal of realizing the value of pesticides through three pesticide laboratories: an analytical chemistry laboratory and a microbiology laboratory at the Environmental Science Center (ESC) at Fort Meade, MD, and an environmental chemistry laboratory (ECL) at Stennis Space Center, Bay St. Louis, MS. These laboratories support program activities by validating environmental and analytical chemistry methods to ensure that the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), EPA offices, and states have reliable methods to measure and monitor pesticide residues in food and in the environment. Additionally, the laboratories provide support to ensure that certain pesticide products are efficacious. The laboratories, in cooperation with industry, state and other EPA laboratories, develop multi-residue analytical methods to allow enforcement agencies to test for several different chemicals using one test.

FY 2008 Activities and Performance Plan:

In 2008, the Agency will continue to realize the benefits of pesticides by operating the National Pesticide Standard Repository and conducting chemistry and efficacy testing for antimicrobials. EPA's laboratories will continue to provide quality assurance and technical support and training to EPA regions, state laboratories, and other Federal agencies that implement the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). The laboratories will evaluate registered products that are most crucial to infection control (sterilants, tuberculocides, and hospital-level disinfectants). Under the PIP method validation program, work will continue on evaluating several novel molecular-based methods.

The laboratories support the program by evaluating residue analytical methods for detecting pesticide residues in food and feed ensuring suitability for monitoring pesticide residues and enforcement of tolerances and by operating the National Pesticide Standard Repository which distributes analytical standards to Federal and state laboratories involved in enforcement activities. The labs develop and validate multi-residue pesticide analytical methods for food, feed and water for use by other Federal (USDA Pesticide Data Program and FDA) and state laboratories. These laboratories generate residue data that is then used by the program office to estimate human health risks. The labs are prepared to respond to urgent program needs for analytical chemistry support and special studies to address specific short-term, rapid turnaround, priority issues.

In addition to residue methods, the labs provide method validation services for genetically modified organism (GMO) products (plant-incorporated protectants). They also develop data to support FIFRA section 18 uses for new chemicals where efficacy data is non-existent (particularly biothreat agents, including *B. anthracis*, or emerging hospital pathogens), as well as evaluate the product performance of antimicrobials used to control infectious pathogens in hospital environments. The labs develop new test methods for novel uses or emerging pathogens, including biothreat agents, in order to provide guidelines for efficacy data for public health claims and guidance for registration and to provide technical support and training on testing methods and procedures.

Performance Targets:

Work under this program supports multiple performance objectives. Some of this program's performance measures are program outputs which represent statutory requirements to ensure that pesticides entering the marketplace are safe for human health and the environment and when used in accordance with the packaging label present a reasonable certainty of no harm. While program outputs are not the best measures of risk reduction, they do provide a means for realizing benefits in that the program's safety review prevents dangerous pesticides from entering the marketplace.

FY 2008 Change from FY 2007 Presidents Budget (Dollars in Thousands):

- (+\$225.6 \ +1.4 FTE) This increase is the incoming transfer of the Pesticides: Review/Reregistration of Existing Pesticides program's base resources, including payroll and FTE, and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$221.3 \ +1.2 FTE) This increase is the incoming transfer of the Pesticides: Registration of New Pesticides program's base resources and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$23.3) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$1.8) This increase reflects minor shifts in workforce support.

Statutory Authority:

PRIA; FIFRA; FFDCA; FQPA.

Program Area: Research: Clean Air

Research: Air Toxics

Program Area: Research: Clean Air
 Goal: Clean Air and Global Climate Change
 Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$18,535.1</i>	<i>\$12,274.2</i>	<i>\$0.0</i>	<i>(\$12,274.2)</i>
Total Budget Authority / Obligations	\$18,535.1	\$12,274.2	\$0.0	(\$12,274.2)
Total Workyears	55.2	52.6	0.0	-52.6

Program Project Description:

Air Toxics (AT) research provides the scientific foundation that enables the Agency to fulfill responsibilities mandated by the Clean Air Act. This research seeks to increase understanding of the exposure and health risks posed by hazardous air pollutants (HAPs) and reduce uncertainty in both national- and community-scale assessments as well as residual risk. Research also provides tools (*i.e.*, methods, models, and health hazard, exposure, and emission data) needed to identify and implement cost-effective approaches to reduce AT risks. This program addresses both indoor and outdoor environments and source categories regulated by the Agency's AT rules.

FY 2008 Activities and Performance Plan:

EPA is integrating the Research: NAAQS and Research: Air Toxics programs in FY 2008 to take advantage of research synergies and better enable multi-pollutant considerations. The activities are described within the Research: Clean Air program.

Performance Targets:

EPA is integrating the Research: NAAQS and Research: Air Toxics programs in FY 2008. The activities are described within the Research: Clean Air program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (–\$12,274.2 / –52.6 FTE) EPA is integrating the Research: NAAQS and Research: Air Toxics programs in FY 2008 under a new program heading titled Research: Clean Air. This change reflects the transfer of the Research: Air Toxics program's base resources to the new heading and does not reflect a reduction in resources for the Agency's air research.

Statutory Authority:

CAA.

Research: Clean Air

Program Area: Research: Clean Air

Goal: Clean Air and Global Climate Change

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$81,054.0</i>	<i>\$81,054.0</i>
Total Budget Authority / Obligations	\$0.0	\$0.0	\$81,054.0	\$81,054.0
Total Workyears	0.0	0.0	236.2	236.2

Program Project Description:

EPA's air research provides the scientific foundation for the Agency's actions to protect the air all Americans breathe. The program supports the Agency's implementation of the Clean Air Act (CAA), especially the National Ambient Air Quality Standards (NAAQS),¹ which set limits on how much tropospheric ozone, particulate matter, carbon monoxide, sulfur dioxide, nitrogen oxides, and lead are allowed in the atmosphere. The program also conducts research to reduce risks from hazardous air pollutants, also known as air toxics. The program is guided by a series of National Academy of Sciences reports² and Agency research plans,³ which outline research needs, the program's strategy to meet those needs, and measures for evaluating the program's performance.

The scientific findings from this program inform Air Quality Science Assessments (AQSA), formerly Air Quality Criteria Documents (AQCDs), which are periodic reports that synthesize the science relevant to setting and implementing NAAQS. Preparation of AQSA is funded by the Human Health Risk Assessment program.

A subcommittee of EPA's Board of Scientific Counselors (BOSC)—a Federal advisory committee comprised of qualified, independent scientists and engineers—conducted an external review of the particulate matter and tropospheric ozone research programs in 2005. The subcommittee reported that the program “has resulted in significant reductions in scientific uncertainty in critical areas...the outputs produced by research to support these reductions in uncertainty have provided a sound basis for subsequent improvements in public health.”⁴ The BOSC recommended the continued reshaping of the air research programs into one program based on a multi-pollutant concept that will consider the source-to-health-impact paradigm to achieve more effective and efficient control and mitigation strategies. The Agency is

¹ For more information, see <http://www.epa.gov/ttn/naaqs/>.

² The most recent report is: NRC, *Research Priorities for Airborne Particulate Matter: IV. Continuing Research Progress*. Washington, D.C.: National Academies Press (2004). See <http://books.nap.edu/catalog/10957.html>.

³ EPA, *Particulate Matter Research Program Multi-Year Plan*. Washington, D.C.: EPA (2003). See <http://epa.gov/osp/myrp/pm.pdf>. EPA, *Air Toxics Research Multi-Year Plan*. Washington, D.C.: EPA (2003). See <http://epa.gov/osp/myrp/airtox.pdf>.

⁴ EPA, Board of Scientific Counselors, *Particulate Matter and Ozone Research Program*. Washington, D.C.: EPA (2005), 4. See <http://www.epa.gov/osp/bosc/pdf/pm0508rpt.pdf>.

implementing this recommendation in FY 2008 by integrating the Research: Air Toxics and Research: NAAQS programs to form the Research: Clean Air program.

FY 2008 Activities and Performance Plan:

Several external scientific reviews have recommended that EPA manage its air research in an integrated multi-pollutant or “one atmosphere” manner. To address these recommendations, EPA is integrating the research plans and budget structures of its particulate matter, tropospheric ozone, and air toxics research. The Agency is merging the Research: NAAQS and Research: Air Toxics programs to form the Research: Clean Air program in FY 2008.

The program will continue research to understand the sources of air pollution and methods for controlling emissions.⁵ It will investigate methods for measuring and characterizing emissions from human-made and biogenic sources. The Agency, states, and Tribes use this work to improve emission inventories, which estimate air pollutant emissions by source in specific areas of the country. States must periodically revise their inventories to comply with the CAA. These methods also support source apportionment, which traces pollutants measured in ambient air to specific sources based on chemical or structural markers unique to those sources. EPA will also research, develop, and assess the cost and performance of technologies capable of reducing emissions of multiple pollutants from single sources.

FY 2008 research also will continue to study Americans’ exposure to air pollution. The program will continue an interagency agreement with the National Oceanic and Atmospheric Administration (NOAA) to develop the Community Multiscale Air Quality (CMAQ) modeling system, which forecasts air quality in the U.S. at local and national scales.⁶ States use CMAQ’s modeling capabilities to evaluate their State Implementation Plans (SIPs), which specify how they will meet the requirements of the CAA. The program also will study atmospheric chemistry, such as the formation of secondary pollutants through in-atmosphere reactions, and conduct field research to correlate ambient measurements of air pollution with actual human exposure to those pollutants.

This program also will continue epidemiological, clinical, and toxicological studies of air pollution’s health effects.⁷ Research will focus on determining the relative toxicity of particles’ different sizes and chemical components; understanding how emissions from different particle sources affect health; the degree to which lifestyle, age, and diseases like diabetes and asthma affect susceptibility to air pollution; and the mechanisms inside the human body by which air pollution causes harm. EPA also will investigate air pollution’s effects on cardiopulmonary, nervous, reproductive, and immune systems and on development during pregnancy and infancy.

The program makes extensive use of the Science to Achieve Results (STAR) program’s competitive, peer-reviewed grants. In FY 2008, STAR will continue funding five-year grants to particulate matter research centers at five universities.⁸ STAR also will continue to fund a ten-

⁵ For more information, see <http://www.epa.gov/appcdwww/>.

⁶ For more information, see <http://www.epa.gov/asmdnerl/>.

⁷ For more information, see <http://www.epa.gov/nheerl/research/cleanair.html>.

⁸ For more information, see http://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/outlinks.centers/centerGroup/19/.

year grant to the Multi-Ethnic Study of Atherosclerosis–Air Pollution Study,⁹ which is examining how long-term exposure to particulate matter influences heart disease in 8,700 volunteers, and a five-year grant to the Health Effects Institute,¹⁰ a nonprofit chartered in 1980 to conduct independent research on the health effects of air pollution. Other grants will fund efforts to link atmospheric model data with epidemiological data of air pollution’s health effects.

In FY 2008, the program will emphasize research on air pollution near roads. Research will focus on topics such as measuring and characterizing emissions near roads; the extent of human exposure to and the health effects from those pollutants; and the effectiveness of potential controls, such as barriers.

The BOSC recommended the maintenance of a periodic, formalized process for assessing EPA’s research and development programs’ primary stakeholders’ perceptions of and satisfaction with its role in the source-to-health outcome process. The program is in the process of developing a survey instrument to help assess client satisfaction and attitudes regarding its support.

OMB rated the Research: NAAQS program as “adequate” in the program’s second PART review, which was conducted in calendar year 2005 under the program title “National Ambient Air Quality Standards Research.”¹¹ OMB rated the program “results not demonstrated” in its first review, conducted in calendar year 2003. The improvement is attributable primarily to the development of two new long-term goals: assessing the links between sources of air pollution and human health and reducing uncertainty in the science that supports standard-setting and air quality management decisions. The program is currently determining methods for demonstrating long-term and annual progress toward these goals. OMB identified developing a means to measure the program’s efficiency, improving budget–performance integration, and convening annual review meetings as follow-up actions. To this end, the program is reviewing how other Federal research programs measure annual progress toward reduction in scientific uncertainty, is engaging the National Academy of Sciences (NAS) for assistance in identifying an outcome-oriented efficiency measure, and formed a workgroup with EPA’s BOSC to discuss long-term measurement of the program’s research.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent progress toward completion of a hierarchy of air pollutant sources based on the risk they pose to human health.	10	10	30	50	Percent

⁹ For more information, see <http://depts.washington.edu/mesaair/>.

¹⁰ For more information, see <http://www.healtheffects.org/>.

¹¹ For more information, see <http://www.whitehouse.gov/omb/expectmore/summary.10001137.2005.html>.

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent planned actions accomplished toward the long-term goal of reducing uncertainty in the science that support standard setting and air quality management decisions.	94	100	100	100	Percent

In 2008, the program plans to meet its goal of completing 50% of a hierarchy of air pollutant sources based on the risk they pose to human health. Additionally, the program plans to accomplish its goal of completing 100% of its planned actions related to the program long-term goal of reducing uncertainty in the science that supports standard-setting and air quality management decisions. In achieving these targets, the program will contribute to EPA's goal of developing a better understanding and characterization of human health and environmental outcomes related to clean air.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$65,455.6 \ +191.9 FTE) EPA is integrating the Research: NAAQS and Research: Air Toxics programs in FY 2008. This increase is the incoming transfer of the Research: NAAQS program's base resources and does not reflect new resources.
- (+\$12,274.2 \ +52.6 FTE) EPA is integrating the Research: NAAQS and Research: Air Toxics programs in FY 2008. This increase is the incoming transfer of the Research: Air Toxics program's base resources and does not reflect new resources.
- (+\$4,485.3) This increase supports research in three areas: 1) aiding the development of emission inventories, which estimate air pollutant emissions by source in specific areas of the country. States must periodically revise their inventories to comply with the CAA. 2) Supporting an interagency agreement with NOAA that develops the Community Multiscale Air Quality (CMAQ) modeling system, which forecasts air quality in the U.S. at local and national scales. States use CMAQ's modeling capabilities to evaluate their State Implementation Plans (SIPs), which specify how they will meet the requirements of the CAA. The third (3) area is research on air pollution near roads, including measurement and characterization of emissions near roads, study of the extent of human exposure to and the health effects from emissions near roads, and research on the effectiveness of potential controls, such as barriers.
- (+\$254.1) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$75.0) This increase provides funds for program evaluations in EPA's air research.

- (+\$15.3) This increase is associated with increased programmatic laboratory fixed costs.
- (−8.3 FTE) This change reflects EPA’s workforce management strategy that will help the Agency better align resources, skills and Agency priorities. 1.9 FTE of this reduction reflects efficiencies gained in EPA’s research and development IT and administrative activities. 6.4 FTE of this reduction is in lower priority air toxics research. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (−\$576.8) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (−\$740.7) This reduction reflects savings from improvements to the Agency’s small administrative IT Systems.
- (−\$171.3) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (−\$16.7) This is part of an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

CAA.

Research: Global Change

Program Area: Research: Clean Air

Goal: Healthy Communities and Ecosystems

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$17,495.2</i>	<i>\$17,456.4</i>	<i>\$16,908.0</i>	<i>(\$548.4)</i>
Total Budget Authority / Obligations	\$17,495.2	\$17,456.4	\$16,908.0	(\$548.4)
Total Workyears	40.5	35.3	32.6	-2.7

Program Project Description:

EPA's global change research focuses on understanding the effects of global change (particularly climate change and variability) on air and water quality, ecosystems, and human health in the United States. The goal of the program is to produce timely and useful information and tools that enable resource managers and policymakers to more effectively consider global change issues in decision-making.

The program's activities are coordinated with other Federal agencies' climate change research through the U.S. Climate Change Science Program (CCSP).¹ The Agency plans the program's research to support EPA's mission and CCSP's strategic plan.² The program is also guided by a research strategy³ and multi-year plan, which is currently being revised.⁴ These documents outline research needs, the strategy to meet those needs, and measures for evaluating performance.

A subcommittee of EPA's research oversight body, the Board of Scientific Counselors (BOSC), conducted a review of the entire program in calendar year 2005. The subcommittee reported that the program "has provided substantial benefits to the nation and that it is on course to make significant further contributions."⁵ For more findings, see <http://www.epa.gov/osp/bosc/pdf/glob0603rpt.pdf>.

¹ For more information, see <http://www.climatescience.gov/>.

² U.S. Climate Change Science Program, *Strategic Plan for the U.S. Climate Change Science Program*. Washington, D.C.: CCSP (2003).

³ U.S. EPA, *Research Strategy of the Global Change Research Program*. Washington, D.C.: EPA (2000). See <http://www.epa.gov/ncea/pdfs/glblstrtg.pdf>.

⁴ The Global Change Research Program's Multi-Year Plan is currently being revised. The prior Plan (2003 version) is available on the web at: <http://www.epa.gov/osp/mypl/global.pdf>.

⁵ U.S. EPA, Board of Scientific Counselors, Subcommittee on Global Change Research, *Review of the Office of Research and Development's Global Change Research Program at the U.S. Environmental Protection Agency, Final Report*. Washington, D.C.: EPA (2006), 6. See <http://www.epa.gov/osp/bosc/pdf/glob0603rpt.pdf>.

FY 2008 Activities and Performance Plan:

The U.S. Global Change Research Act of 1990 mandates periodic scientific assessments of climate change.⁶ In FY 2008, EPA will continue its participation in the interagency CCSP and complete two CCSP Synthesis and Assessment Products⁷ for which EPA is the lead Federal agency: product 4.4, “Preliminary review of adaptation options for climate-sensitive ecosystems and resources,” and product 4.6, “Analyses of the effects of global change on human health and welfare and human systems.” EPA is coordinating product 4.4 with the Department of Energy (DOE), National Aeronautics and Space Administration (NASA), National Oceanic and Atmospheric Administration (NOAA), and the United States Geological Survey (USGS) and product 4.6 with DOE, NASA, NOAA, and the National Institutes of Health (NIH).

In FY 2008, the program will also contribute to eight products led by other Federal agencies: product 3.2, “Climate projections based on emissions scenarios for long-lived radiatively active trace gases and future climate impacts of short-lived radiatively active gases and aerosols;” product 3.4, “Abrupt climate change;” product 4.2, “State-of-knowledge of thresholds of change that could lead to discontinuities (sudden changes) in some ecosystems and climate-sensitive resources;” product 4.3, “The effects of global change on agriculture, biodiversity, land, and water resources;” product 4.5, “Effects of climate change on energy production and use in the United States;” product 5.1, “Uses and limitations of observations, data, forecasts, and other projections in decision support for selected sectors and regions;” product 5.2, “Best practice approaches for characterizing, communicating, and incorporating scientific uncertainty in decisionmaking;” and product 5.3, “Decision support experiments and evaluations using seasonal to interannual forecasts and observational data.”

The program will enhance computer models that can simulate how global change may affect U.S. air quality.⁸ This work is supported by modeling of potential changes in energy and transportation technologies in various regions and sectors of the U.S.⁹ Together, these efforts will help air quality resource managers make informed decisions about how to respond to global change’s effects on air quality.

The global change research program makes extensive use of the Science to Achieve Results (STAR) program’s competitive, peer-reviewed grants. In FY 2008, STAR’s global change component will focus on global change’s potential effects on U.S. air quality.¹⁰ The program also will partner with the Department of Agriculture and NASA to fund studies on how climate change, climate variability, and changing land use may affect invasive species. STAR will fund studies of global change’s potential effects on aeroallergens such as pollen and spores.

Another priority for the program is the study of the effects of global change on corals.¹¹ It will evaluate South Florida reefs to develop quantitative tools for characterizing coral health and to

⁶ See 15 USC §2936.

⁷ For more information, see <http://www.climatescience.gov/Library/sap/>.

⁸ For more information, see <http://www.epa.gov/nerl/goals/global/>.

⁹ For more information, see <http://www.epa.gov/appcdwww/apb/greengas.htm>.

¹⁰ For more information, see http://es.epa.gov/ncer/rfa/2006/2006_star_gcaq.html.

¹¹ For more information, see http://www.epa.gov/ged/resprog_dw.htm.

study the relationship between global change and coral condition. The program will study how changes in water temperature and ultraviolet radiation affect corals and their symbionts.

Additionally, the program will continue work in FY 2008 on developing an inventory of climate-sensitive decisions in specific regions of the U.S. in an effort to help support the creation of more effective decision support strategies. EPA also plans to cosponsor with NOAA a National Research Council study titled “Strategies and Methods for Climate-Related Decision Support” to develop a framework for organizing and evaluating decision support activities related to climate change.

OMB rated the Research: Global Change program as “adequate” in the program’s first PART review, which was conducted in calendar year 2006 under the program title “Global Change Research.” OMB identified strengthening performance measures and definition of the program’s framework and mission, developing a means to measure the program’s efficiency, and improving budget–performance integration as follow-up actions. To this end, the program is reviewing how other Federal research programs measure annual progress toward reduction in scientific uncertainty, is engaging the National Academy of Sciences (NAS) for assistance in identifying an outcome-oriented efficiency measure, and formed a workgroup with EPA’s BOSC to discuss long-term measurement of the program’s research. The Administration has identified climate change science—particularly support for CCSP’s strategic goals and CCSP Synthesis and Assessment Products—as a FY 2008 research and development budget priority.¹²

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered.				100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent progress toward completion of a framework linking global change to air quality.	65	60	75	85	Percent

In 2008, the program plans to accomplish its goal of completing and delivering 100% of its planned outputs. In achieving these targets, the program will contribute to EPA’s goal of providing scientifically sound guidance and policy decisions related to the health of people, communities, and ecosystems, with regard to global change.

¹² Executive Office of the President, Office of Management and Budget and Office of Science and Technology Policy, *FY 2008 Administration Research and Development Budget Priorities*. Washington, D.C.: OMB (2006), 6. See <http://www.whitehouse.gov/omb/memoranda/fy2006/m06-17.pdf>.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1.4) This increase is associated with increased programmatic laboratory fixed costs.
- (−\$420.5) As a result of this adjustment, in FY 2008 the Science to Achieve Results (STAR) program will award approximately two instead of three grants to universities and nonprofits to study how global change may influence aeroallergens such as pollen and mold. EPA will continue to fund its critical research needs in global change, including production of CCSP Synthesis and Assessment Products, and will meet critical performance commitments.
- (−2.7 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. 0.2 FTE of this reduction reflects efficiencies gained in EPA's research and development IT and administrative activities and will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (−\$47.4) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (−\$39.5) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (−\$25.1) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (−\$14.9) This reduction reflects savings from improvements to the Agency's small administrative IT Systems.
- (−\$2.4) This is part of an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

USGCRA; NCPA.

Research: NAAQS

Program Area: Research: Clean Air
 Goal: Clean Air and Global Climate Change
 Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$65,242.5</i>	<i>\$65,455.6</i>	<i>\$0.0</i>	<i>(\$65,455.6)</i>
Total Budget Authority / Obligations	\$65,242.5	\$65,455.6	\$0.0	(\$65,455.6)
Total Workyears	186.3	191.9	0.0	-191.9

*In FY 2006, Program/Project Research: Particulate Matter (B4) and Program/Project Research: Tropospheric Ozone (B9) were eliminated and Program/Project Research: NAAQS (H6) established.

Program Project Description:

This research provides the scientific foundation for implementation and review of the National Ambient Air Quality Standards (NAAQS) for particulate matter (PM), tropospheric ozone, carbon monoxide, sulfur dioxide, nitrogen oxides, and lead. Research focuses on PM in particular, but also considers ozone (O₃) and other important co-pollutants.

The NAAQS research program develops and transfers to clients new data in atmospheric, exposure, biological, engineering, and environmental sciences, including research on speciation. This research informs the setting of standards to protect air quality by providing insights into human susceptibility to air pollution and into specific sources and attributes of PM associated with a growing number of potential health outcomes. In addition, the program develops products that can help inform environmental decision-making, such as tools to predict, measure, and model concentrations and emissions of air pollutants, which are directly used by states to develop and successfully implement the most cost-effective control strategies to comply with existing NAAQS. The program includes research that addresses scientific uncertainties and refines knowledge of the health risks associated with sources of PM exposure.

FY 2008 Activities and Performance Plan:

EPA is integrating the Research: NAAQS and Research: Air Toxics programs in FY 2008 to take advantage of research synergies and better enable multi-pollutant considerations. The activities are described within the Research: Clean Air program.

Performance Targets:

EPA is integrating the Research: NAAQS and Research: Air Toxics programs in FY 2008. The activities are described within the Research: Clean Air program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (–\$65,455.6 / –191.9 FTE) EPA is integrating the Research: NAAQS and Research: Air Toxics programs under a new program heading titled Research: Clean Air. This change reflects the transfer of the Research: NAAQS program's base resources to that new heading and does not reflect a reduction in resources for the Agency's air research.

Statutory Authority:

CAA.

Program Area: Research: Clean Water

Research: Drinking Water

Program Area: Research: Clean Water

Goal: Clean and Safe Water

Objective(s): Enhance Research to Support Clean and Safe Water

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$52,015.9</i>	<i>\$49,242.5</i>	<i>\$48,548.0</i>	<i>(\$694.5)</i>
Total Budget Authority / Obligations	\$52,015.9	\$49,242.5	\$48,548.0	(\$694.5)
Total Workyears	195.1	208.6	207.2	-1.4

Program Project Description:

The goal of EPA's Drinking Water research program is to develop leading-edge research products that other EPA programs and clients use in implementing the 1996 Safe Drinking Water Act (SDWA) Amendments.¹ In pursuit of this goal, the research program directly supports developing or revising standards for contaminants of concern, effectively implementing these standards, and protecting drinking water sources.

To meet the requirements of SDWA, EPA conducts an integrated, multi-disciplinary research program that is closely linked to the Agency's regulatory activities and timelines. Research in the Drinking Water program provides new scientific data and analytical methods for identifying and evaluating the health effects of waterborne pathogens (*e.g.*, *Cryptosporidium*, Norwalk virus) and chemicals (*e.g.*, arsenic, disinfection byproducts) that may contaminate drinking water (assessments and methods for estimating risk to waterborne pathogens and chemicals are conducted under the Human Health Risk Assessment Program); and develops improved technologies for cost-effective control of these risks. The program also investigates the impact of distribution systems, including aging infrastructure, on drinking water quality, and develops tools to protect source waters.

Research is directed by several peer-reviewed research strategies^{2,3} and guidance from external experts.^{4,5,6,7} The Agency also maintains a Drinking Water Research Program Multi-Year Plan⁸

¹ Safe Drinking Water Act Amendments of 1996, Public Law 104-182. Available at: <http://www.epa.gov/safewater/sdwa/sdwa.html>.

² U.S. EPA, Office of Research and Development. *Research Plan for Microbial Pathogens and Disinfection By-Products in Drinking Water*. EPA 600-R-97-122, Washington, D.C.: U.S. Government Printing Office (1997).

³ U.S. EPA, Office of Research and Development. *Research Plan for Arsenic in Drinking Water*. EPA 600-R-98-042, Washington, D.C.: U.S. Government Printing Office (1998).

⁴ National Research Council. *Classifying Drinking Water Contaminants for Regulatory Consideration*. Washington, D.C.: The National Academies Press (2001).

⁵ National Academies of Science. *From Source Water to Drinking Water: Workshop Summary*. Washington, D.C.: The National Academies Press (2004).

⁶ National Research Council. *Indicators for Waterborne Pathogens*. Washington, D.C.: The National Academies Press (2004).

⁷ National Research Council. *Public Water Supply Distribution Systems: Assessing and Reducing Risks--First Report*. Washington, D.C.: The National Academies Press (2005).

(MYP) that outlines steps for meeting these needs and annual performance goals and measures for evaluating progress. The Agency is currently revising the drinking water MYP to reflect anticipated science and regulatory needs in FY 2008 and beyond. These plans are subjected to rigorous peer review⁹ and address those problems deemed most pressing in the area of drinking water quality (R&D Criteria: Quality, Relevance, Performance).

In 2005, the Drinking Water research program underwent a program-wide review by the Board of Scientific Counselors (BOSC), a Federal advisory committee comprised of qualified, independent scientists and engineers,¹⁰ which concluded that the program is “quite relevant and is focused on high quality research of national importance” and that the program’s “research outputs are leading to important outcomes with respect to EPA’s Water program and other clients” (R&D Criteria: Quality, Relevance, Performance). The Drinking Water research program is adopting specific BOSC recommendations, including researching newly identified, unregulated disinfection by-products and continuing to plan anticipatory drinking water research.

FY 2008 Activities and Performance Plan:

In FY 2008, the Drinking Water research program will focus on the science needed to implement SDWA’s requirements for the Contaminant Candidate List (CCL), safety of drinking water quality in distribution systems including developing tools to manage the nation’s aging drinking water infrastructure, and the protection of drinking water sources, while continuing to support the SDWA-mandated 6-year review of regulated contaminants. The research conducted reflects a progressive shift in the program from addressing single contaminants toward development of treatment strategies, exposure and analytical methods, and effects information that can be applied to classes of contaminants in the context of the complete drinking water hydrological cycle from source to tap. Research started in FY 2007 under the "Water Infrastructure for the 21st Century" initiative, will continue in 2008 to develop the science and engineering to improve and evaluate promising innovative technologies and techniques to increase the effectiveness and reduce the cost of operation, maintenance, and replacement of aging and failing drinking water distribution systems.

Key FY 2008 activities planned include:

- Report on advanced condition assessment for drinking water mains;
- Report on molecular microarrays for detection of non-pathogenic bacteria and bacterial pathogens in drinking water source waters;
- Epidemiology studies on alternative disinfection processes and their byproducts;

⁸ U.S. EPA, Office of Research and Development, Drinking Water Research Program Multi-Year Plan. Washington, D.C. Available at: <http://www.epa.gov/osp/myp.htm>.

⁹ Science Advisory Board. *Review of EPA’s 2003 Draft Drinking Water Research Program Multi-Year Plan* (2005). Available at: <http://www.epa.gov/sab/pdf/sab-05-008.pdf>.

¹⁰ Board of Scientific Counselors. *Review Of The Office Of Research And Development’s Drinking Water Research Program At The U.S. Environmental Protection Agency*. (2005). Available at: <http://www.epa.gov/osp/bosc/pdf/dw1027rpt.pdf>.

- State-of-the-science report on real time early warning systems for source water protection;
- Synthesis of information on arsenic removal technologies;
- Improved method(s) for CCL-related chemicals for use in Unregulated Contaminant Monitoring Regulations;
- Epidemiology study on the illness rate for untreated groundwater and distribution systems;
- Immunotoxicity assessment of priority CCL toxicants; and
- Evaluation of the usefulness of virulence factor activity relationships (VFARs) for characterizing CCL pathogens.

In 2005, the Drinking Water research program received an “adequate” in its first PART review. This rating was supported by OMB findings that the program developed sufficient annual and long-term performance measures, though the measures lacked targets and results. As a follow-up to the PART, the program is developing baselines and targets for its measures, establishing an outcome-oriented efficiency measure, and improving oversight of non-grant partners, requiring them to work toward program goals. The program has formed a workgroup comprised of OMB, EPA, and BOSC members to discuss long-term measurement of EPA’s Research and Development programs and set appropriate baselines and targets.

By conducting research in support of SDWA, this research program will assist the Agency in pursuing its strategic objective of providing, by 2011, drinking water that meets all applicable health-based drinking water standards to 91 percent of the population served by community water systems.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered in support of Six Year Review decisions.	94	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered in support of Contaminate Candidate List Decisions.	100	100	100	100	Percent

In 2008, the program plans to accomplish its goals of completing and delivering 100% of its planned outputs in support of Six Year Review Decisions and Contaminant Candidate List Decisions. In achieving these targets, the program will contribute to EPA’s goal of supporting the protection of human health through the reduction of human exposure to contaminants in drinking water.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,461.2) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$45.5) This increase includes increased fixed costs and a technical adjustment to realign workforce support costs across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (-\$1,900.5) This reduction reflects a shift to higher priorities within the Clean Air and Human Health Risk Assessment research programs. While some lower priority research will be delayed, the program will remain on target to meet its annual and long-term performance measures. In addition, the Agency will continue to support a robust drinking water research program that directly supports key elements of the Agency's strategic clean and safe water goals.
- (-\$295.8) This reduction reflects savings and efficiencies gained from the Agency's small administrative IT systems and administrative and contract management services as well as technical adjustments to realign travel resources across the research program to better reflect FY 2008 programmatic priorities.
- (-1.4 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction reflects efficiencies gained in EPA's Research and Development IT and administrative activities and will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$4.9) This is part of an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

SDWA; CWA; MPRSA.

Research: Water Quality

Program Area: Research: Clean Water

Goal: Clean and Safe Water

Objective(s): Enhance Research to Support Clean and Safe Water

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Science & Technology	\$48,233.9	\$56,988.2	\$56,454.0	(\$534.2)
Total Budget Authority / Obligations	\$48,233.9	\$56,988.2	\$56,454.0	(\$534.2)
Total Workyears	249.5	245.4	239.4	-6.0

Program Project Description:

Although the quality of the nation's waters has shown improvement, threats to water quality remain and new threats continue to be identified. The adoption and implementation of watershed management approaches by states and Tribes require strong standards, monitoring, Total Maximum Daily Load (TMDL) determinations, and implementation programs, including best-management practices, restoration, and TMDL watershed plans. Water quality research provides the sound science needed to implement effective watershed management approaches by developing methods to: apply criteria that support designated uses of water bodies; monitor and assess water body conditions; diagnose causes and sources of water body impairments; protect water bodies; and forecast the effectiveness of protection/restoration alternatives.

Research is guided by several research strategy documents (*e.g.*, landscape ecology¹ and aquatic stressors²) which were developed with participation from major clients. The strategies outline the research needs and priorities. The Agency also maintains a Water Quality Research Program Multi-Year Plan³ (MYP) that outlines steps and provides a timeline for meeting these needs along with related annual performance goals and measures for evaluating progress (R&D Criteria: Relevance, Performance).

EPA's Board of Scientific Counselors (BOSC), a Federal advisory committee comprised of qualified, independent scientists and engineers, reviewed the Water Quality research program in January 2006. The BOSC review found "the Water Quality research program appropriately addresses EPA's Goal 2 by creating the tools necessary for the Office of Water to establish water quality criteria and respond when those criteria are not being met. The program is responsive to EPA's Office of Water, which the program has correctly identified as its primary client, in developing their research priorities."⁴

¹ U.S. EPA, Office of Research and Development, *A National Assessment of Landscape Change and Impacts to Aquatic Resources: A 10-year Research Strategy for the Landscape Sciences Program*. EPA/600/R-00/001, Washington, D.C.: EPA. (2000). Available at: <http://www.epa.gov/nerlesd1/land-sci/pdf/157leb00.pdf>.

² U.S. EPA, Office of Research and Development, *Aquatic Stressors: A Framework and Implementation Plan for Effects Research*. EPA 600/R-02-074 (2002).

³ U.S. EPA, Office of Research and Development, *Water Quality Research Program Multi-Year Plan*. Washington, D.C.: EPA. Available at: <http://www.epa.gov/osp/myp.htm>.

⁴ Available at: <http://www.epa.gov/osp/bosc/pdf/wq0605rpt.pdf>.

FY 2008 Activities and Performance Plan:

Research efforts within the water quality research program are aligned with the Agency's strategic objectives of: promulgation of protective standards; identification of contaminant contributions to impaired waters; and the utilization of tools needed to restore and protect the nation's waters with due consideration to point and non-point sources of contamination. The Water Quality research program has close links to the research conducted under EPA's Healthy Communities and Ecosystems goal that focuses on the optimization of ecosystem services.

In FY 2008, the Water Quality program will continue to use the watershed management approach to identify and reduce waterbody impairments nationwide. Research on diagnostic methods will enable EPA to continue its focus on the causes and sources of aquatic system impairment. Specifically, this research will provide the scientific foundation and information management scheme for an integrated process for assessing, listing, and reporting water quality conditions that meet statutory requirements, including a classification framework for surface waters, watersheds, and regions. As EPA directs and informs the efforts of the states to adopt nutrient criteria for individual waterbodies, research is required to identify nutrient responses based on geographic region, waterbody type, and designated use. Research will continue to provide technical guidance for the development of nutrient water quality criteria for coastal wetlands and estuaries and Great Lakes.

Research on river reference conditions for non-wadeable rivers, which will identify best attainable reference conditions for a variety of impairments, will be used to interpret the results of EPA's 2008-2009 National Rivers Survey and for Clean Water Act (CWA) reporting. Efforts will continue to advance the development of new methods for deriving water quality criteria to protect human and ecological health from harmful exposures to toxic chemicals. These methods incorporate new and improved scientific techniques to address highly bioaccumulative chemicals, dietary exposure pathways, chemical mixtures, fluctuating exposures, extrapolation of toxicity data across species, and effects at the population level. The methods will address risks to special status taxa (endangered) and aquatic-dependent wildlife not traditionally taken into consideration under water quality criteria. Research will continue to develop bioindicator and bioassessment methods for states to use, particularly for assessing and determining the function of poorly-studied waterbodies, such as headwaters and wetlands. Research to improve pathogen indicators for protection of recreational waters and beaches will continue as well.

To provide more efficient monitoring and diagnostic tools, EPA will continue to develop methods of using landscape assessments for monitoring and assessing watershed condition. Models to determine the likelihood of impairment will be integrated with monitoring in order to assess condition and develop optimal monitoring strategies that support integrated assessments and reporting, as required by statute. Research on the integration of economic data and ecosystem services will lead to better understanding of both the costs and benefits of alternative ways to achieve water quality.

The integrated watershed management work will supply tools for watershed-based management designed to connect management actions with outcomes. Work will be carried out in six areas including: (1) optimizing selection and placement of restoration options; (2) molecular source

tracking; (3) evaluating water quality benefits of best management practices (BMPs) in watersheds; (4) science supporting integrated watershed management; (5) role of wetlands in water quality trading; and (6) improved control of effluents from publicly owned treatment works (POTWs) during wet weather flow conditions. Developing improved fate and transport models for priority stressors (nutrients, sediments, and pathogens) will continue, along with technical support, to assist states with TMDL determinations.

In FY 2008, research will continue the development of innovative solutions to manage the nation's aging wastewater infrastructure. Through research started in FY 2007 under the "Water Infrastructure for the 21st Century" initiative, we will continue to develop the science and engineering to improve and evaluate promising innovative technologies and techniques to increase the effectiveness and reduce the cost of operation, maintenance, and replacement of aging and failing wastewater conveyance systems. Research efforts will include state of technology reports on innovative condition assessments and rehabilitation methods for sewer collection systems.

Research on the management of manure to ensure that environmentally responsible practices are available will continue in support of EPA's Wastewater Management program. Field studies of Concentrated Animal Feeding Operations (CAFOs) will determine the magnitude of releases to ground waters and surface waters and evaluate control options with emphasis on nutrient and pathogen contaminants, along with emerging chemicals such as endocrine disruptors.

Research on wetlands will continue to develop a hierarchical assessment approach to address the objectives of the President's initiative to preserve and restore wetlands by incorporating wetlands functions and impacts on water quality. In addition, research will continue on the use of wetlands as a source of pollution reduction credits in water quality trading, a priority for EPA's Water program. Comparison of natural and constructed wetlands to determine how seasonal changes in hydrologic regime, stressor load, and upland land use affect the functioning of these systems will inform the protection and restoration of wetlands.

In FY 2008, new research will be conducted to assess and improve the control of microbial releases from POTWs during periods of significant wet weather events. During these events wastewater flow may exceed POTW treatment capacity, resulting in diversion of wastewater around secondary treatment units followed by recombination with flows from the secondary treatment units or discharging it directly into waterways from the treatment plant. Studies will be conducted on the efficacy of disinfection treatment options under such conditions to determine how to optimize them. Current POTW practices for handling significant wet weather events, such as blending, will be assessed to identify "best practices" during such events. In out years, this work will lead to reports that POTW managers can use to more cost-effectively operate their systems in wet weather conditions while still protecting water quality.

In 2006, the water quality research program received an "adequate" rating in its first PART review. This rating was supported by findings that the program has long-term and annual output performance measures that reflect the purpose of the program, as well as a preliminary output efficiency measure. However, the program is continuing to develop more ambitious long-term outcome measures, develop an outcome-oriented efficiency measure, and improve its budget

performance integration through better use of financial and performance tracking data. To this end, EPA has formed and convened a BOSC/OMB/EPA workgroup to discuss long-term measurement of research and development programs. As part of this workgroup, the program has developed water quality-specific questions to be used in future BOSC reviews, and has begun to identify specific data sources that will be provided to the BOSC.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs (in support of WQRP long-term goal #1) delivered	100	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs (in support of WQRP long-term goal #2) delivered	100	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs (in support of WQRP long-term goal #3) delivered	92	100	100	100	Percent

In 2008, the program plans to accomplish its goals of completing and delivering 100% of its planned outputs. In achieving these targets, the program will contribute to EPA's goal of supporting the protection of human health through the reduction of human exposure to contaminants in fish, shellfish, and recreational waters, and to support the protection of aquatic ecosystems.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$953.4) This reflects an increase in payroll and cost of living for existing FTE.
- (+\$541.0) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (+/- \$505.6 / +/- 2.0 FTE) This reflects an internal redirection of resources within the Water Quality research program to fund efforts to assess and improve the control of microbial releases from POTWs during periods of significant wet weather events when wastewater flow may exceed POTW treatment capacity. Current POTW practices for handling significant wet weather events, such as blending, will be assessed to identify

“best practices” during such events. Resources will be redirected from research on water quality trading.

- (+\$15.8) This increase is associated with increased programmatic laboratory fixed costs.
- (-\$1,246.0) This reflects reductions to lower priority research in the extramural component of the Water Quality Program, including discontinuation of EPA’s participation in the Ecology and Oceanography of Harmful Algal Blooms (EcoHab) research program.
- (-6.0 FTE) This change reflects EPA’s workforce management strategy that will help the Agency better align resources, skills and Agency priorities. 1.4 FTE of this reduction reflects efficiencies gained in EPA’s Research and Development IT and administrative activities. 4.6 FTE of this reduction will delay new toxics stressor research and reflects a greater emphasis being placed on the development of watershed based information and tools. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$396.2) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$400.2) This reduction reflects savings from improvements to the Agency’s small administrative IT Systems.
- (-\$2.0) This is part of an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

CWA; ODBA; SPA; CVA; WRDA; WWWQA; MPPRCA; NISA; CZARA; CWPPRA; ESA; NAWCA; FIFRA; TSCA.

Program Area: Research: Human Health And Ecosystems

Human Health Risk Assessment

Program Area: Research: Human Health and Ecosystems

Goal: Healthy Communities and Ecosystems

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	\$33,663.5	\$34,488.5	\$38,856.0	\$4,367.5
Hazardous Substance Superfund	\$3,604.4	\$3,847.2	\$3,972.0	\$124.8
Total Budget Authority / Obligations	\$37,267.9	\$38,335.7	\$42,828.0	\$4,492.3
Total Workyears	181.5	183.9	182.1	-1.8

Program Project Description:

Human health risk assessment is a process where information is analyzed to determine if an environmental hazard might cause harm to exposed persons (National Research Council, 1983). Risk assessment is used extensively by EPA programs, Regional Offices, and other parties to determine the potential risk to public health from exposure to environmental contaminants, to develop regulatory standards, and to manage environmental cleanups.

This research program is guided by the Human Health Risk Assessment Multi-Year Plan¹ (MYP), which provides detail on the assessment and methods development products planned under this program. The MYP also outlines research needs and priorities. Performance outputs and outcomes are documented in the MYP through the annual performance goals and measures structure. The MYP also coordinates with a number of EPA research strategies and plans² (e.g., Human Health Research Plan, Asthma Research Strategy, Particulate Matter and Ozone MYPs) to obtain the information necessary to inform risk assessment outputs and programmatic decision-making needs.

In FY 2003, a Board of Scientific Counselors (BOSC)—a Federal advisory committee comprised of qualified, independent scientists and engineers—subcommittee review found that the National Center for Environmental Assessment (NCEA) has made several key advancements including completion of a strategic plan, targeting cutting-edge risk assessments, improving the proportionate representation of ecological assessments to human health assessments, enhancing communication, and improving capabilities to provide environmental assessment resources in response to September 11th. A subsequent BOSC subcommittee program review is scheduled for September 2007.

Three complementary areas comprise the risk assessment program:

Integrated Risk Information System (IRIS) and other health hazard assessments: Peer reviewed, qualitative and quantitative health hazard assessments are prepared on

¹ Available at: <http://www.epa.gov/osp/myr/HHRA.pdf>.

² Available at: <http://www.epa.gov/ord/htm/researchstrategies.htm#rs01>.

environmental pollutants of major relevance to EPA's regulatory mandates. These assessments are used by EPA's program and Regional Offices to support their decision-making, and they are also disseminated to the public, principally on the IRIS internet database.³ IRIS is widely used throughout EPA and the risk assessment/risk management community as the premier source of hazard and dose-response information for environmental pollutants. At the end of 2006, there were over 540 health hazard assessments available through IRIS (R&D Criteria: Quality, Relevance).

Risk assessment guidance, methods and model development: Improved risk assessment guidance, methods, and models are developed to enhance the quality and objectivity of assessments through the incorporation of contemporary scientific advances for use in decision-making by EPA programs and Regional Offices. These scientific products are externally peer reviewed and disseminated through the published literature, EPA web sites, and incorporation in IRIS assessments (R&D Criteria: Quality, Relevance).

Air Quality Science Assessments: Congress requires that EPA regularly summarize the state-of-the-science on the criteria air pollutants – ozone, particulate matter, sulfur and nitrous oxides, carbon monoxide, and lead – to assist EPA's air and radiation programs in determining the National Ambient Air Quality Standards (NAAQS). These Science Assessment summaries (formerly Air Quality Criteria Documents) are major risk assessments that undergo rigorous external peer review by the Clean Air Scientific Advisory Committee (CASAC) (R&D Criteria: Quality, Relevance).

FY 2008 Activities and Performance Plan:

In FY 2008, the Agency will continue to support the Integrated Risk Information System (IRIS) and other health hazard assessments by:

- Completing 16 health hazard assessments of high priority chemicals for interagency review or external peer review and posting 8 finalized assessments on the internet (R&D Criteria: Quality, Relevance, Performance);
- Expanding opportunities for interagency review and public comment (R&D Criteria: Quality); and
- Consulting with the National Academy of Sciences (NAS) on critical risk assessment method developments and assessment approaches (R&D Criteria: Quality, Relevance).

In the area of risk assessment guidance, methods and models, the Agency will support improvements by:

- Continuing to provide analysis of uncertainty in physiologically-based pharmacokinetic (PBPK) models and application to risk assessment (R&D Criteria: Relevance, Performance);
- Providing improved quantitative risk assessment procedures (R&D Criteria: Relevance, Performance);

³ Available at: <http://www.epa.gov/iris>.

- Preparing a summary of issues and criteria for improved use of mode-of-action information in risk assessments (R&D Criteria: Relevance, Quality);
- Providing a revision of the reference concentration methodology for use in IRIS assessments (R&D Criteria: Relevance, Performance); and
- Providing an external review draft update of the Exposure Factors Handbook, collating exposure information for use in Agency risk assessments (also supported by HHRA SF; R&D Criteria: Relevance, Performance).

In FY 2008, the Agency will support the National Ambient Air Quality Standards (NAAQS) process by:

- Developing and implementing a process to identify, compile, characterize, and prioritize new scientific studies for “Science Assessments” of criteria air pollutants, as a mandated prerequisite to EPA’s review of the NAAQS and to effectively meet court ordered deadlines to provide these assessments (R&D Criteria: Relevance, Performance); and
- Delivering revised Science Assessments for Sulfur Dioxide and Nitrogen Oxides to contribute to EPA’s Air and Radiation program’s review of the NAAQS and creation of state-of-the-science methods for continuous evaluation of assessments of new scientific information on criteria air pollutants (R&D Criteria: Relevance, Performance).

In calendar year 2006, the Human Health Risk Assessment Program (HHRA) received a “moderately effective” rating in its first PART review. This rating was supported by findings that the program has long-term and annual performance measures with ambitious targets, as well as a set of results indicating that the program is on track to meet its goals. As a follow-up to the PART, the program must: (1) expand its efficiency measure to include all major work products; (2) implement a new IRIS review process; (3) engage in regular, independent evaluations that assess the program’s effectiveness; and (4) investigate alternative approaches for measuring progress related to providing timely, high quality scientific assessments. It also will be reviewed by a BOSC subcommittee every three to four years, with mid-cycle reviews occurring midway between the comprehensive reviews.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered in support of Air Quality Criteria/Science Assessment documents.	100	-	90	90	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered in support of HHRA	100	-	90	90	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	health assessments.					

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered in support of HHRA Technical Support Documents.	81	-	90	90	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Average cost to produce Air Quality Criteria/Science Assessment documents.	7,282K	-	5,386K	3,796K	\$ Average Cost

In 2008, the program plans to accomplish its goals of completing and delivering 100% of its planned outputs in support of: (1) Air Quality Criteria/ Science Assessment documents, (2) human health risk assessments, and (3) HHRA technical support documents. Additionally, the program plans to meet its efficiency goal of reducing the average cost to produce Air Quality Criteria/ Science Assessment documents. In achieving these targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to the health of people, communities, and ecosystems.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$3,168.4) This reflects an increase to support: 1) the development of quantitative risk assessment methods to allow improved analysis of uncertainty in human health risk assessment so that risk managers and the public better understand the range of potential risk values and 2) the development and implementation of a process to identify, compile, characterize, and prioritize new scientific studies for "Science Assessments" of criteria air pollutants (formerly Air Quality Criteria Documents), as a mandated prerequisite to EPA's review of the NAAQS, and to meet court ordered deadlines to provide these assessments. The scientific findings from the Clean Air Program inform "Science Assessments" funded under the Human Health Risk Assessment Program.
- (+\$974.0) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$402.4) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (+\$10.6) This increase is associated with increased programmatic laboratory fixed costs.

- (–\$143.6) This reduction reflects savings from improvements to the Agency’s small administrative IT Systems.
- (–\$42.4) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (–\$1.1) This is part of an Agencywide effort to reduce travel, including international travel.
- (–\$0.8) This is a technical adjustment to realign travel resources across the research program to better reflect FY 2008 programmatic priorities. There will be no programmatic impact.
- (–1.7 FTE) This change reflects EPA’s workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction reflects efficiencies gained in EPA’s Research and Development IT and administrative activities and will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CAA; SDWA; CWA; TSCA; FIFRA; CERCLA; SARA; FQPA.

Research: Computational Toxicology

Program Area: Research: Human Health and Ecosystems

Goal: Healthy Communities and Ecosystems

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$13,264.5</i>	<i>\$14,983.1</i>	<i>\$15,103.0</i>	<i>\$119.9</i>
Total Budget Authority / Obligations	\$13,264.5	\$14,983.1	\$15,103.0	\$119.9
Total Workyears	29.4	34.3	34.3	0.0

Program Project Description:

Computational Toxicology is the application of mathematical and computer models to assess the risk chemicals pose to human health and the environment. Computational biology offers the possibility that, with advances in computational biology's sub-disciplines (e.g., genomics, proteomics, and metabonomics), scientists may have the ability to develop a more detailed understanding of the risks posed by a much larger number of chemicals.

EPA's Computational Toxicology Research Program (CTRP) has three objectives: 1) improving the linkages in the source-outcome paradigm; 2) providing tools for screening and prioritization of chemicals under regulatory review; and 3) enhancing quantitative risk assessment. The National Center for Computational Toxicology (NCCT) was specifically created to play a critical coordination and implementation role in these activities across the Agency.

The Agency has developed a peer-reviewed Framework for a Computational Toxicology Research Program,¹ which identifies the research needs and unique capabilities of EPA and provides the basis for a more focused and integrated research program in the future. This research effort also supports *Understanding Complex Biological Systems*, one of the Administration's FY 2008 R&D priorities.

A subcommittee of EPA's Board of Scientific Counselors (BOSC)—a Federal advisory committee comprised of qualified, independent scientists and engineers— has been established to provide guidance to the newly formed NCCT. In April 2005, this subcommittee met to review the proposed directions for the NCCT. Their report is available on the BOSC web site at <http://www.epa.gov/osp/bosc/subcomm-ctox.htm>.

The report praised the early efforts of the NCCT and encouraged its further development. A formal response was prepared and submitted to EPA and the BOSC. In FY 2006, the NCCT drafted an implementation plan for its research program, which was submitted to the BOSC for

¹ U.S. EPA, Office of Research and Development. *A Framework for a Computational Toxicology Research Program*. Washington, DC: EPA. Accessed August 4, 2005. Available at: http://www.epa.gov/comptox/publications/comptoxframework06_02_04.pdf.

review and comment in June 2006. This implementation plan details the outputs and outcomes expected of the program over FYs 2006–2008 (R&D Criteria: Quality).

FY 2008 Activities and Performance Plan:

The CTRP will focus on four areas in FY 2008: 1) information technology; 2) chemical prioritization and categorization tools; 3) systems biology models; and 4) cumulative risk assessment. (R&D Criteria: Relevance)

Information Technology: New technologies are needed to mine existing data for patterns to appropriately place new chemicals of unknown hazard in the context of existing data. In addition, new technologies will allow the integration of data from different domains of toxicology and newer “omics” experiments to look beyond traditional means for classifying chemicals (R&D Criteria: Relevance). As a result, more chemically annotated, publicly available datasets will be posted on the Internet through the Distributed Structure-Searchable Toxicity Database project (DSSTox), and these will be linked to the broader chemical information database in PubChem. Working in conjunction with EPA’s Pesticide Program, a database is being created that will contain the outcomes of the developmental, reproductive and chronic bioassay data for registered pesticides (R&D Criteria: Performance).

Chemical Prioritization and Categorization Tools: Having the capability to predict which chemicals are in greatest need of toxicology testing and which endpoints would be the most important to examine is a pressing problem for multiple regulatory offices in EPA. Knowledge of the key steps in a chemical’s potential mechanisms of action provides a template for developing models for these predictions. The ToxCast program, which was initiated in FY 2006, will obtain high-throughput screening data on 200–400 chemicals of known toxicological profiles. Fingerprints of biological activity associated with differing toxicological profiles will be developed from this database, which is being developed in conjunction with the National Institutes of Health (NIH) Molecular Libraries Initiative (R&D Criteria: Relevance). In FY 2008, plans are to expand beyond the proof of concept phase of ToxCast and begin to examine the activities of target groups of chemicals such as anti-microbials, pesticidal inerts and high-production volume chemicals. Examples of outputs in this area include:

- Construction of *in silico* models for identifying chemicals that can interact with nuclear hormones (e.g., estrogen, androgen, peroxisome proliferation) receptors (R&D Criteria: Performance);
- Sample procurement, preparation and distribution to contractors providing high-throughput bioassay data using genomic, proteomic or metabonomic tools;
- Construction of a relational database of high-throughput bioassay results, physical chemical properties and interpretive toxicological information for 200–400 active pesticides; and
- Establishment of common bioassay-derived fingerprints for key toxicological outcomes to support the needs of the EPA program offices (R&D Criteria: Performance).

Systems Biology Models: Modeling now plays a crucial role in practically all areas of biological research. Systems models integrate information at all levels of organization and aid in bridging

the source-to-outcome gap and in conducting quantitative risk assessments (R&D Criteria: Relevance). In FY 2008 the CTRP will:

- Provide standards for developing, documenting, archiving, and accessing quantitative mathematical models that will foster both the development and linkages of these models and their regulatory acceptance (R&D Criteria: Performance);
- Utilize systems-modeling approaches for the latest biological, chemical, and exposure data for quantitative risk assessment (R&D Criteria: Performance);
- Develop guidance on best practices for the construction, analysis and reporting of toxicological models that link pharmacokinetic information with the dynamic responses of target organs; and
- Begin developing a computational model of the liver by integrating biological information across multiple levels of organization in order to achieve an improved understanding of how susceptibility to toxicant exposure depends on environmental, behavioral and genetic factors, and on age and health status. The first phase will describe normal biological processes.

Cumulative Risk Assessment: Computational tools offer the potential to reduce uncertainties in cumulative risk by focusing on aspects of data compilation, integration, and analysis (R&D Criteria: Relevance).

The CTRP will explore mathematical approaches for analyzing the effects of dietary exposure throughout the day to pesticides that act via the same mechanism (e.g., the methyl carbamates and pyrethroids) (R&D Criteria: Performance). Research will also build conceptual frameworks that consider how biomonitoring data can be used to characterize cumulative risk and how psycho-social factors can be incorporated into cumulative risk assessments using tools of the new field of visual analytics. These new tools offer the promise of integrating different types of data representing physical, chemical, and psycho-social aspects (R&D Criteria: Performance). The CTRP will also work with the Centers for Environmental Bioinformatics, established through the Agency's Science to Achieve Results (STAR) program, to enhance predictive linkages between the components of the source-outcome paradigm and to better understand the relationships between genetic and environmental influences on adverse outcomes. In FY 2008, the Agency will perform a demonstration of the application of visual analytics to children's cohort data.

EPA is continually working to develop appropriate annual and long-term output and outcome measures for this program that meet the standards of the OMB PART. Additionally, EPA is working to develop useful efficiency measures to guide program management decisions and improvement strategies.

Performance Targets:

Work under this program supports EPA's Science and Research objective. Currently, there are no PART performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$51.5) This reflects an increase for payroll and cost of living for existing FTE.
- (+127.8) This reflects technical adjustments that will have no programmatic impacts. Adjustments include realignment of IT, telecommunications, travel, and workforce support resources.
- (+\$1.3) This increase is associated with increased programmatic laboratory fixed costs.
- (-\$30.5) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$30.0) This represents a reduction to research support focused on predictive tools. There will be no programmatic or performance impacts as a result of the reduction.
- (-\$0.2) This is part of an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

TSCA; FIFRA; FQPA; SDWA.

Research: Endocrine Disruptor

Program Area: Research: Human Health and Ecosystems

Goal: Healthy Communities and Ecosystems

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$11,234.3</i>	<i>\$9,081.2</i>	<i>\$10,131.0</i>	<i>\$1,049.8</i>
Total Budget Authority / Obligations	\$11,234.3	\$9,081.2	\$10,131.0	\$1,049.8
Total Workyears	54.0	54.8	54.4	-0.4

Program Project Description:

Research in direct support of EPA's screening and testing programs (mandated under the Food Quality Protection Act (FQPA) of 1996 and the Safe Drinking Water Act Amendments¹ (SDWAA) of 1996) evaluates current testing protocols and develops new protocols to evaluate potential endocrine effects of environmental agents. Other research develops and applies methods, models, and measures to evaluate real-world exposures to endocrine disruptors and characterize related effects resulting from these exposures for humans and wildlife; and develops risk management tools to prevent or mitigate exposures. Research assists decision makers in working toward reducing and preventing exposure of humans and ecosystems to endocrine disruptors that pose an unreasonable risk.

Research is guided by the Research Plan for Endocrine Disruptors, which was developed with participation from major clients and outlines research needs and priorities.² The Agency also maintains a multi-year plan (MYP)³ for Endocrine Disruptors that outlines steps for meeting these needs, as well as annual performance goals and measures for evaluating progress (R&D Criteria: Quality, Performance).

In December 2004, the Endocrine Disruptors research program was reviewed by a subcommittee of EPA's research oversight body, the Board of Scientific Counselors (BOSC), which commended the progress and direction of the research and provided recommendations for further partnerships.⁴ Consistent with BOSC recommendations, EPA will take a leadership role in the application of "omics" technologies, focusing research on understanding mechanisms of action and extrapolation across species by applying "omics" approaches.

¹ SDWA Section 1457.

² U.S. EPA, Office of Research and Development, *Research Plan for Endocrine Disruptors*. Washington, D.C.: EPA (1998). Available at: <http://www.epa.gov/ord/htm/documents/ORD-EDR-Feb1998.pdf>.

³ U.S. EPA, Office of Research and Development, *Multi-Year Plan for Endocrine Disruptors*. Washington, D.C.: EPA (2003). Available at: www.epa.gov/osp/myp/edc.pdf.

⁴ U.S. EPA, Office of Research and Development, EDC Research Program Review. Washington, D.C. (2004). Available at: <http://www.epa.gov/osp/bosc/pdf/edc0504rpt.pdf>.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to develop, evaluate, and apply innovative DNA microarray and other state-of-the-art analytical methods for endocrine disrupting chemicals (EDCs). EPA's Endocrine Disruptors research program has developed and refined assays, and improved other screening tools using genomics and high-speed computing capabilities so that the Agency has the necessary protocols to validate for use in the Endocrine Disruptors Screening Program. Using genomics and related approaches in the continued development of improved molecular and computational tools that can be used to prioritize chemicals for screening and testing will lead to a reduction of animal testing, and is within the "Understanding Complex Biological Systems" category highlighted as a priority for Federal investment by the Office of Management and Budget (OMB) and Office of Science and Technology Policy (OSTP)⁵. Other important areas of research to be continued in FY 2008 include:

- Developing/improving *in vivo* and *in vitro* assays to provide the Agency the methods it needs to implement the Congressionally mandated Endocrine Disruptor Screening Program – a high priority for the Agency;
- Developing the next generation of assays by applying newer computational and molecular approaches to develop models that predict a chemical's ability to cause endocrine disruption;
- Determining classes of chemicals that act as endocrine disruptors and their potencies; characterizing modes of action and the shape of the dose-response curve; developing approaches for assessing cumulative risk and extrapolating results across species which would lead to reduced animal testing;
- Developing molecular indicators of exposure and analytical methods for detecting certain EDCs; identifying the key factors that influence human exposures to EDCs; identifying sources of EDCs entering the environment, focusing on: wastewater treatment plants, concentrated animal feeding operations (CAFOs), and drinking water treatment plants; developing tools for risk reduction and mitigation strategies; and
- Applying methods, models, and tools developed by EPA and other research organizations to characterize the impact of environmental mixtures of EDCs on environmental media and aquatic organisms. Sources of EDCs to be examined include wastewater treatment plants, CAFOs, and drinking water plants. Field studies will be conducted to document the spatial and temporal variability of EDC exposures in the environment and characterize their magnitude.

In 2004, the Endocrine Disruptors research program and EPA's Prevention, Pesticides and Toxic Substance's Endocrine Disruptors Screening Program were assessed and jointly received an "adequate" rating. The assessment found the program was free of major design flaws, had a clear purpose, and was reasonably well-managed.

The program's long-term performance measures are shared with EPA's Prevention, Pesticides and Toxic Substances program: (1) to determine the extent of the impact of endocrine disruptors on humans, wildlife, and the environment to better inform the Federal and scientific

⁵ FY 2007 Administration Research and Development Budget Priorities memo by J.Marburger and J. Bolten; July 8, 2005.

communities; and (2) to reduce the uncertainty regarding the effects, exposure, assessment, and management of endocrine disruptors so that EPA has a sound scientific foundation for environmental decision-making. The research program also has developed performance indicators that monitor research activities and outputs. Targets for these include screening and testing protocols that the Prevention, Pesticides and Toxic Substances program will validate for use in evaluating the potential for chemicals to cause endocrine-mediated effects. To improve performance, the programs are currently working to develop baseline data for efficiency measures that compare dollars and labor hours for validating chemical assays.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Improved protocols for screening and testing	1	1	6	1	Reports

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Effects and exposure milestones met	9	9	4	3	Reports

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Risk management milestones met	3	3	3	2	Reports

In 2008, the program plans to accomplish its goals of completing: (1) one report relating to improved protocols for screening and testing; (2) three reports related to effects and exposure; and (3) two reports related to risk management. In achieving these targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to the health of people, communities, and ecosystems, with regard to chemical toxicology.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$796.1) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$292.3) This realignment of resources will support IT, data quality assurance and science review, operation of mission critical facilities, and technical support for scientists evaluating current testing protocols.
- (+\$37.4) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (+\$3.2) This increase is associated with increased programmatic laboratory fixed costs.

- (-\$77.2) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$2.0) This is part of an Agencywide effort to reduce travel, including international travel.
- (-0.4 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction reflects efficiencies gained in EPA's Research and Development IT and administrative activities and will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CAA; ERDDA; FIFRA; TSCA; FQPA; SDWA; CWA; RCRA; CERCLA; PPA.

Research: Fellowships

Program Area: Research: Human Health and Ecosystems

Goal: Healthy Communities and Ecosystems

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Science & Technology	\$15,609.9	\$8,383.0	\$8,438.0	\$55.0
Total Budget Authority / Obligations	\$15,609.9	\$8,383.0	\$8,438.0	\$55.0
Total Workyears	4.4	2.8	2.7	-0.1

Program Project Description:

To help ensure an educated and trained scientific workforce for the future, EPA offers five programs that encourage promising students to obtain advanced degrees and pursue careers in environmentally related fields.

*Science to Achieve Results (STAR) Fellowship Program:*¹ EPA provides stipends, tuition assistance, and research support to graduate students in environmentally related fields for up to three years. In addition to conducting quality environmental research, fellows agree to maintain contact with the Agency for at least five years after graduation.

*Greater Research Opportunities (GRO) Fellowship Program:*² EPA provides stipends, tuition assistance, and research support to undergraduate and graduate students in environmentally related fields for up to two (undergraduate) or three (graduate) years. The GRO program serves higher education institutions that receive less than \$35 million annually in Federal science and engineering funds. In addition to conducting quality environmental research, fellows agree to maintain contact with the Agency for at least five years after graduation.

*Environmental Science and Technology Policy Fellowship Program:*³ In conjunction with the American Association for the Advancement of Science, EPA hosts scientific and technical professionals who have completed a Ph.D. or equivalent degree for up to two years at EPA's Headquarters. Recipients work independently with support from Agency mentors on self-designed projects that enable them to work at the interface of science and environmental public policy.

*Environmental Public Health Fellowship Program:*⁴ In conjunction with the Association of Schools of Public Health, EPA hosts individuals who have attained master's degrees from accredited U.S. schools of public health for up to two years. Recipients work on issues with environmental public health implications.

¹ For more information, see <http://es.epa.gov/ncer/fellow>.

² For more information, see <http://es.epa.gov/ncer/fellow>.

³ For more information, see http://fellowships.aaas.org/01_About/01_Partners.shtml#EPA.

⁴ For more information, see http://www.asph.org/document.cfm?page=751&JobProg_ID=1.

*EPA Marshall Scholarship Program:*⁵ In conjunction with the British Marshall Scholarships, EPA offers scholarships for U.S. students for environmentally related graduate study. The program gives priority to students whose work is global or international in nature. Funded by the British government, scholars spend two years at a British university. EPA may support eligible scholars for up to three additional years as they work toward a doctoral degree in either the United Kingdom or U.S.

The fellowship programs coordinate their activities with other Federal and nonprofit organizations through the National Academies' Fellowships Roundtable, which meets biannually.⁶ EPA is the only Federal agency that focuses on higher education assistance and career development in the environmental sciences. The program is also participating in the review of Federal science, technology, engineering, and mathematics education programs led by the Academic Competitiveness Council, which was established by Congress in the Deficit Reduction Act of 2005.

A subcommittee of EPA's Board of Scientific Counselors (BOSC)—a Federal advisory committee comprised of qualified, independent scientists and engineers—conducted a review of the STAR and GRO fellowship programs in March, 2006. The subcommittee reported that “the fellows funded by the STAR and GRO programs have made excellent contributions in environmental science and engineering, and a number of them continue to be employed in the environmental field ... the EPA programs clearly are of value to the Agency and the nation in helping to educate the next generation of environmental scientists and engineers.”⁷ EPA is working to develop appropriate annual and long-term output and outcome measures for this program that meet the standards of OMB's PART. Additionally, EPA is working to develop useful efficiency measures to guide program management decisions and improvement strategies.

FY 2008 Activities and Performance Plan:

EPA will review and award new STAR and GRO fellowships and support fellows who received awards in earlier fiscal years. Fellowship recipients will complete progress and exit reports, and the Agency will maintain contact information and follow-up data on former fellows. The STAR and GRO fellowship programs will host a biennial conference in Washington, D.C., for fellows to meet and exchange research results. The program will also select and arrange hosting for AAAS and ASPH recipients and support eligible Marshall Scholarship recipients.

Performance Targets:

Work under this program supports EPA's Enhance Science and Research objective. Currently, there are no PART performance measures for this specific program.

⁵ For more information, see <http://www.marshallscholarship.org/applicationepa.html>.

⁶ For more information, see <http://www7.nationalacademies.org/fellowships/roundtable.html>.

⁷ EPA, Board of Scientific Counselors, *Review of the Office of Research and Development's Science To Achieve Results (STAR) and Greater Research Opportunities (GRO) Fellowship Programs at the U.S. Environmental Protection Agency*. Washington, D.C.: EPA (2006), 1–2. See <http://epa.gov/osp/bosc/pdf/star0609rpt.pdf>.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$36.7) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$18.5) This reflects technical adjustments that will have no programmatic impacts. Adjustments include realignment of IT, telecommunications, travel, and workforce support resources.
- (−0.1 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction reflects efficiencies gained in EPA's research and development IT and administrative activities and will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (−\$0.2) This reduction reflects efficiencies gained in Agency administrative or contract management services.

Statutory Authority:

CAA; CWA; FIFRA; NCA; RCRA; SDWA; TSCA.

Research: Human Health and Ecosystems

Program Area: Research: Human Health and Ecosystems

Goal: Healthy Communities and Ecosystems

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$169,126.0</i>	<i>\$161,312.7</i>	<i>\$145,046.0</i>	<i>(\$16,266.7)</i>
Total Budget Authority / Obligations	\$169,126.0	\$161,312.7	\$145,046.0	(\$16,266.7)
Total Workyears	512.0	509.3	497.0	-12.3

Program Project Description:

The Agency conducts human health and ecosystems research to: 1) identify and characterize environment-related human health problems and determine exposures to and sources of agents responsible for these health concerns; and 2) understand the condition of ecosystems, the stressors changing that condition, the consequences of those changes, and how to prevent, mitigate, or adapt to those changes. The Human Health and Ecosystems program also supports mercury research, advanced monitoring research, nanotechnology research, exploratory research, and the Agency's Report on the Environment.

Research is guided by the "Human Health Research Strategy"¹ and the "Ecological Research Strategy,"² which were developed in collaboration with major clients (*e.g.*, program offices and Regional Offices). These strategies outline the program's research needs and priorities. Under this program, several multi-year plans (MYPs)³ (*e.g.*, human health, ecological research, and mercury) convey research priorities and approaches for achieving goals and objectives. MYPs outline the steps for meeting client research needs, as well as annual performance goals and measures for evaluating progress.

The Human Health research program and the Ecological research program both underwent successful reviews by EPA's research oversight body, the Board of Scientific Counselors (BOSC) in March of 2005. The BOSC stated, "The research of the human health research program is of high quality and appropriately focused, it is multidisciplinary, yet coherent and coordinated, and the research benefits from managerial excellence across all aspects of the program."⁴ The BOSC review of the ecosystem protection program found "the ecosystem research program to be a high-quality scientific program that is providing essential technical information to the regulatory offices within EPA as well as to state, local, and Tribal

¹ U.S. EPA, Office of Research and Development. *Human Health Research Strategy*. Washington, DC: EPA. Available at: http://www.epa.gov/nheerl/humanhealth/HHRS_final_web.pdf.

² For more information, see <http://www.epa.gov/ord/htm/documents/eco.pdf>.

³ For more information, see <http://www.epa.gov/osp/myp>.

⁴ *Report of the Subcommittee on Health*, revised July 27, 2005, Board of Scientific Counselors, pg 9. For more information, see <http://www.epa.gov/osp/bosc/pdf/hh0507rpt.pdf>.

governments to assist these entities in addressing novel problems of environmental management.”⁵ The BOSC conducted a mid-cycle review of the program in January 2007.

FY 2008 Activities and Performance Plan:

Human Health Research

In FY 2008, EPA will continue to support research to develop a commonly accepted set of principles defining how mode of action information can be used in chemical risk assessments, particularly as it relates to extrapolation from animals to humans and from high to low dose. Such research will inform the re-evaluation of acceptable levels of arsenic in drinking water, as well as the risk assessments of cancer and non-cancer effects of conazole fungicides. Additional research efforts will develop emerging molecular methods and approaches and identify critical toxicity pathways, *e.g.*, oxidative stress, for characterizing the effects of chemicals (such as particulate matter, metals, pesticides, and chemical contaminants in drinking water) on human health (R&D Criteria: Performance).

Research will develop tools for identifying communities (*e.g.*, localities, populations, groups) at greatest risk, identifying and quantifying the factors influencing these exposures, and developing and implementing appropriate risk reduction strategies. Research on intervention and prevention strategies will ultimately reduce human risk associated with exposures to single and multiple environmental stressors. Cumulative risk research will develop approaches for restructuring exposures from biomarker data generated in large-scale exposure and epidemiological studies and linking these exposures to their primary sources, and for using exposure, biomarker, and pharmacokinetic data in cumulative risk assessments (R&D Criteria: Performance).

Other human health research will continue to focus on exposures to environmental contaminants during critical lifestages, such as early development, childhood, or aging. Efforts related to children’s health include identification of the key factors influencing children’s exposures to environmental toxicants (including chemical exposure in schools) and the production of high quality children’s exposure data to reduce current uncertainties in risk assessment. Exposure research will also determine if older individuals are differentially exposed to environmental stressors. Human health research focused on physiological and biochemical changes during critical lifestages will be used as a basis for understanding susceptibility and the role of environmental stressors in the exacerbation or pathogenesis of disease (R&D Criteria: Performance).

EPA also will continue to support and collaborate with the EPA-sponsored Centers for Children’s Environmental Health and Disease Prevention Research, which study whether and how environmental factors play a role in children’s health. These unique Children’s Centers perform targeted research in children’s environmental health and translate their scientific findings into intervention and prevention strategies by working with communities. The Children’s Centers have established long-term birth and school age cohorts that follow participants over many years to consider the full range of health effects resulting from exposure to environmental chemicals. Additionally, the Children’s Centers are tracking a wide range of

⁵ Available at: <http://www.epa.gov/osp/bosc/reports.htm>.

environmental exposures at multiple stages of development to evaluate relationships between these exposures and observed health effects.

Research on public health outcomes in FY 2008 will include a study on assessing the cumulative impact of a suite of air pollution reduction programs on environmental public health indicators for children and older populations in New Haven, Connecticut. This research will provide guidance on models useful in assessing public health impacts in response to provisions of the Clean Air Act (R&D Criteria: Performance).

In 2005, the Human Health Research program received an “adequate” rating on its first PART assessment. This rating was supported by findings that the program’s research results were being used to reduce uncertainty in risk assessment. However, reviewers also noted that the program needed more data and clearer long-term targets to demonstrate continued progress. To this end, the program continues to address its PART follow-up actions and improve program performance. For instance, in order to improve the linkage between budget resources and long-term performance targets in FY 2008, the Agency created financial tracking codes in its accounting system to allow for better distinction between the ecosystems and human health programs. Additionally, OMB, EPA, and members of the BOSC formed a workgroup to discuss long-term measurement of research and development programs. The workgroup is tasked with developing a system by which an independent panel can measure programs' progress toward long-term goals. The Human Health Research program is currently developing program-specific questions to be used to assess the program on a long-term basis. Finally, the program developed and submitted for peer review a multi-year implementation plan incorporating action items from its BOSC review.

Ecological Research

The Ecological Research Program is a multi-media program consistent with the integrated, multi-endpoint perspectives of the Healthy Communities and Ecosystems goal. As such, it provides essential information which complements research conducted under other Agency Goals, such as those focused on air, land and water. The Ecological Research Program is comprised of three elements: (1) assessment of the condition of aquatic ecological resources; (2) the development of methods and tools for causal diagnostics and environmental forecasting, and (3) ecological services and restoration research.

Historically, EPA has monitored and assessed the condition of aquatic ecological resources through the Environmental Monitoring and Assessment Program (EMAP). The goal of EMAP is to develop the scientific understanding for translating environmental monitoring data from multiple spatial and temporal scales into assessments of ecological condition and forecasts of the future risks to the sustainability of our natural resources. Initially, EMAP was focused on developing a systematic framework for data collection methods in order to accurately assess the state of the nation’s waters. In FY 2008, EMAP will transition to become a data analysis program that focuses on analyzing cumulative data generated by EMAP’s coastal and freshwater monitoring programs. These analyses will generate new hypotheses to be tested, create new statistical models for investigating relationships among EMAP variables (e.g., landcover and biological integrity), and suggest new opportunities to improve Agency-wide monitoring using a

common, EMAP-like, framework. The Ecological Research Program also will continue to support EPA's Water program as it implements a probabilistic survey approach in various waterbody types (*i.e.*, streams, lakes, wetlands, estuaries and rivers) in support of EPA's Clean and Safe Water goal.

The second element of ecosystems research is based on improving scientific understanding of causal linkages between stressors and changes in ecosystem processes. In FY 2008, research in this area will continue to focus on developing tools and methods to diagnose causes of ecological impairment, including forecasting models. In FY 2008, the research program will apply the Community Multi-scale Air Quality Model (CMAQ) to support studies of the ecological effects related to changes in ecosystem exposures to air pollutants, as a result of the Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR).

The Agency is developing DNA identification methods to more rapidly and cost-effectively identify benthic organisms contained in ballast water, the primary transport route for aquatic invasive species, which are a significant stressor on aquatic ecosystems. EPA will continue this work in FY 2008, applying these techniques to the monitoring of invasives in the Great Lakes and on the Pacific coast. In addition, EPA will investigate the efficacy of using this same technology to identify benthic organisms in streams and rapidly assess stream conditions based on previously-determined indices of biotic integrity.

In its 2005 review of the Ecological Research Program, the BOSC identified ecosystem services as a key area for further development, stating “...*provision of ecosystem services and the communication of these to decision-makers...is a highly relevant activity that is central to EPA's mandate of improving environmental quality and protecting and restoring the health of the nation's ecosystems.*” EPA's FY 2008 plan includes some initial steps towards addressing this third element of the ecological research program.

In FY 2008, the Ecological Research Program will emphasize development of methods to optimize the services provided by the ecosystem as a whole. This approach has several interrelated objectives: quantification of ecosystem services in space and time; determining how management strategies affect the type, quality, and amount of services available to society; developing tools to analyze trade-offs among services received; and predicting ecological thresholds. The program will continue development of a decision-support tool that enables managers to balance ecosystem requirements with human needs, using optimization theory coupled to existing GIS models. In FY 2008, work also will continue to develop methods to restore large floodplain rivers. This research is quantifying how natural river features can be used to cool industrial thermal discharges, provide non-structural flood control, enhance riparian and riverine habitat, and provide recreational opportunities, all while working within biophysical and economic constraints.

Multiple natural and human stressors have already degraded some ecosystem functions and their related services to the point that restoration is difficult and costly. In FY 2008, ecosystem restoration research will continue to evaluate the cost-effectiveness of restoring streams and their associated ecosystem services. In order to proactively avoid loss of ecosystem functions and services, research will continue on methods for predicting ecological thresholds in rivers, lakes,

wetlands, and estuaries that are subjected to or impacted by multiple human stressors. This research will also create decision-support tools for managing resources in ways that improve their resilience to disturbance, thus reducing the need for future costly restoration efforts.

The Ecosystem Protection Research program received an “ineffective” rating in its most recent PART review in 2005, and received a “results not demonstrated” rating in its initial PART review in 2003. EPA continues to make progress toward meeting its PART follow-up actions and improving program weaknesses identified in these reviews. First, OMB, EPA, and members of the BOSC have formed a workgroup to develop a system by which an independent panel can measure a program’s utility and performance in relation to research outcomes. This workgroup will refine the questions used in the Agency’s independent scientific review of the program in order to better relate research elements to environmental outcomes. Second, the Agency has begun to develop a program-specific customer survey to improve the program’s utility to the Agency. EPA met with OMB in May 2006 to present its survey methodology and is currently working to revise and refine the survey specifically for application to ecological research. Finally, in order to improve the linkage between budget resources and long-term performance targets, the Agency created sub-program-projects in the FY 2008 budget to allow for better distinction between the ecosystems and human health research programs. EPA will continue to make progress in these areas, as it prepares for its re-PART, scheduled for the spring of calendar year 2007.

Additionally, EPA recognizes that, while the Ecosystem Protection Program is a vital and integral part of its mission, critiques received during the review process were largely focused on deficiencies in strategic planning and performance measures. In response, the Ecological Research Program is completing a draft of its fourth revision of its Multi-Year Plan (MYP) to ensure the strategic vision of the program is current and outcome-oriented. This request will support the implementation of the revised MYP.

Nanotechnology Research and Exploratory Grants

EPA is increasingly focused on both nanotechnology’s potential applications for protecting the environment and its implications for environmental health and safety. The Agency’s efforts are coordinated with other Federal agencies through the National Nanotechnology Initiative (NNI),⁶ which the Administration has identified as a FY 2008 research and development budget priority.⁷ EPA’s nanotechnology research also is guided by a nanotechnology white paper⁸ prepared by the Agency and a draft research needs document being prepared by the Nanotechnology Environmental and Health Implications Working Group⁹ of the National Science and Technology Committee’s (NSTC) Subcommittee on Nanoscale Science, Engineering and Technology.

⁶ For more information, see <http://www.nano.gov/>.

⁷ Executive Office of the President, Office of Management and Budget and Office of Science and Technology Policy, *FY 2008 Administration Research and Development Budget Priorities*. Washington, D.C.: OMB (2006), 5. See <http://www.whitehouse.gov/omb/memoranda/fy2006/m06-17.pdf>.

⁸ For more information, see <http://www.epa.gov/osa/nanotech.htm>.

⁹ For more information, see <http://www.nano.gov/html/society/NEHI.htm>.

In FY 2008, the Agency's Science to Achieve Results (STAR) program will continue to fund exploratory grants on the implications of manufactured nanomaterials on the environment and human health, in collaboration with other Federal agencies.¹⁰ The Agency also will continue in-house nanotechnology research initiated in FY 2007. The integrated programs will focus on assessing the potential ecological and human health exposures and effects from nanomaterials likely to be released into the environment; studying the lifecycles of nanomaterials to better understand how environmental releases may occur; developing methods to detect releases of nanomaterials; and using nanotechnology to detect, control, and remediate traditional pollutants. Other facets of nanotechnology research will also be supported by the Research: Land Protection and Restoration program and, to a lesser extent, other programs.

Indicators Research to support the Report on the Environment (ROE)

In 2007, the Agency plans to release EPA's ROE following the external review by the Science Advisory Board. The ROE is considered in strategic planning activities as EPA works to develop and implement more transparent and outcome-oriented measures and indicators. In FY 2008, EPA will continue mission-based research that will help support this triennial report.

Advanced Monitoring Initiative

In FY 2008, the Advanced Monitoring Initiative (AMI) will continue to bring together information technology advancements with advances in remote sensing and *in-situ* monitoring to improve the interface between research products and environmental and health decision-making. EPA and its partners will continue to integrate socioeconomic, human health, and ecosystem databases and models, to monitor the health of humans and the environment over greater expanses, in less time, and more cost-effectively than ever before, supporting decision-making processes that provide clear societal benefits in the near term. In addition to improving collaborative capabilities focused on decision-making, EPA will begin building a knowledge base of the accumulated AMI learning experience. This effort is linked with the interagency U.S. Global Earth Observations (USGEO) initiative and with the international community through the Global Earth Observation System of Systems (GEOSS) 10-Year Implementation Plan. Each year since 2003, the annual OMB/Office of Science and Technology Policy (OSTP) Memorandum on Research and Development Budget Priorities¹¹ has encouraged agency efforts align with USGEO and GEOSS.

Mercury Research

EPA has developed a multi-year plan for studying mercury, including its sources, control and treatment, environmental fate and behavior, impacts on ecological resources, and potential

¹⁰ For more information, see <http://es.epa.gov/ncer/nano/>.

¹¹ OMB/OSTP FY 2008 Administration Research and Development Budget Priorities Memorandum for the Heads of Executive Departments and Agencies, June 2006.

effects on human health.¹² In FY 2008, the program will continue to support the Agency's recent CAMR.¹³

To better understand the implications of CAMR, the program will continue to collect and analyze mercury deposition data to study whether mercury "hot spots" exist. In coordination with the United States Geological Survey (USGS), EPA will also study the aquatic fate and transport of mercury in order to better understand the relationship between emissions and mercury concentrations in fish tissue, an important pathway to human exposure.

In collaboration with the Department of Energy and others, research will focus on source emissions monitors, which power plants use to report emissions for CAMR's trading program. The program also will provide information on the cost and performance of mercury control technologies, with an emphasis on technologies that can control multiple pollutants.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of states using a common monitoring design and appropriate indicators to determine the status and trends of ecological resources and the effectiveness of national programs and policies.	25	25	30	35	States

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of planned outputs delivered in support of public health outcomes long-term goal.	100%	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of planned outputs delivered in support of mechanistic data long-term goal.	92%	100	100	100	Percent

¹² EPA, Office of Research and Development, *Mercury Research Multi-Year Plan*. Washington, D.C.: EPA (2003). See <http://www.epa.gov/osp/myp/mercury.pdf>.

¹³ For more information, see <http://www.epa.gov/air/mercuryrule/>.

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered in support of aggregate and cumulative risk long-term goal.	100%	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered in support of the susceptible subpopulations long-term goal.	100%	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Average time (in days) to process research grant proposals from RFA closure to submittal to EPA's GAD, while maintaining a credible and efficient competitive merit review system	Data Lag	307	292	277	Average Days

In 2008, the Human Health research program plans to accomplish its goals of completing and delivering 100% of its planned outputs. Additionally, the program plans to meet its efficiency goal of reducing the average time for processing research grants to 277 days. In achieving these targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to the human health.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$126.5) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (+\$114.8) This reflects an increase in funding for mercury research to support the Agency's recent Clean Air Mercury Rule (CAMR) through efforts such as investigation of mercury deposition, transport, and fate.
- (+\$75.0) This increase provides funds for program evaluations in the Ecosystem Protection Research program.

- (+\$57.2) This increase is associated with increased programmatic laboratory fixed costs.
- (+\$47.5) This is a technical adjustment to realign travel resources across the research program to better reflect FY 2008 programmatic priorities. There will be no programmatic impact.
- (-\$8,800.0) This reflects reductions to lower priority extramural components of the human health and ecosystems research program. Specific details are as follows:
 - (-\$5,750.8) This reflects a reduction to the extramural component of the EMAP program, inhouse research associated with major areas of EMAP, such as Coastal and Central Basin, will continue in FY 2008.
 - (-\$2,549.2) This reflects a reduction of funding for web-based systems to deliver research products (e.g., ECOTOX). While the extramural resources supporting these efforts are being reduced or eliminated, inhouse research related to these programs will continue in FY 2008.
 - (-\$500.0) This reflects a reduction of support for human health exposure models and research related to interpretation of exposure paths/routes.
- (-\$5,886.5) This redirection from human health and ecosystems research reflects a shift to support high priority research in several areas, including Clean Air, Human Health Risk Assessment (HHRA), and Sustainability, as described below:
 - (-\$3,206.6) A redirection out of human health research will reduce lower priority projects to allow greater emphasis in related problem-driven efforts in HHRA and Clean Air. In addition, EPA will continue to fund critical core research to address health risks of susceptible subpopulations, (such as mechanistic work, aggregate and cumulative risk assessments, and the Children's Environmental Health Centers) and will meet critical performance commitments.
 - (-\$2,679.9) A redirection out of ecosystem protection research will reduce efforts to evaluate the effectiveness of stream riparian restoration actions, assistance for the development of watershed management plans, and support for the use of probability designs to evaluate ecological improvements. However, this shift will allow greater emphasis in related problem-driven efforts in water quality, clean air, and sustainability research. In addition, EPA will continue to fund its critical core research needs to provide the scientific underpinning for assessing the chemical, physical and biological threats to ecosystems and will meet critical performance commitments.
- (-\$878.3) This reflects a decrease for payroll and cost of living for existing FTE.
- (-\$424.0) This reflects a reduced investment in information technology (IT), which will be made possible through standardization, consolidation, and centralization of some IT

services, and replacing some local administrative support systems with Agency or organization-wide solutions.

- (-\$690.4) This reflects efficiencies in administrative processes resulting from consolidation of Headquarters administrative functions (*e.g.*, processing of training, travel, personnel action, procurement, etc.) and staff.
- (-\$8.5) This is part of an Agencywide effort to reduce travel, including international travel.
- (-12.3 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This includes realignment of 5.5 total workyears from core research in the human health and ecosystems program to support related problem-driven efforts in pesticides and toxics focused on developing and evaluating a metabolic simulator, exposure methods and models, and potential low cost lead test kit methods. 4.8 FTE of this reduction reflects efficiencies gained in EPA's Research and Development's IT and administrative activities. 2.0 FTE of this reduction is a realignment of support for the development of watershed management plans, including TMDLs and the prioritization of watershed restoration activities, and wildlife vulnerability assessments of the stresses associated with habitat loss and alteration. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CAA; SDWA; ERDDA; CWA; FIFRA; FFDCA; RCRA; FQPA; TSCA.

Program Area: Research: Land Protection

Research: Land Protection and Restoration

Program Area: Research: Land Protection

Goal: Land Preservation and Restoration

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$12,101.5</i>	<i>\$10,552.8</i>	<i>\$10,737.0</i>	<i>\$184.2</i>
Leaking Underground Storage Tanks	\$617.2	\$651.3	\$660.0	\$8.7
Oil Spill Response	\$828.4	\$903.1	\$901.0	(\$2.1)
Hazardous Substance Superfund	\$22,210.2	\$21,963.9	\$20,081.0	(\$1,882.9)
Total Budget Authority / Obligations	\$35,757.3	\$34,071.1	\$32,379.0	(\$1,692.1)
Total Workyears	141.6	142.8	141.3	-1.5

Program Project Description:

Research performed under this program supports scientifically defensible and consistent decision-making for Resource Conservation and Recovery Act (RCRA) waste management and corrective action by providing a tested multimedia modeling system and technical support to those who use the model to make environmental decisions. Research and support within this program address resource conservation, corrective action, hazardous waste treatment, multimedia modeling, alternative landfills, leaching, modeling, landfill bioreactors, and nanomaterial fate, transport, and life cycle assessment.

Research is guided by the long term *Waste Research Strategy*¹, which was developed with participation from major clients and outlines research needs and priorities. These research efforts are guided by the Land Multi-Year Plan (MYP)², developed with input from across the Agency, which outlines steps for meeting the needs of the Research and Development program's clients and for evaluating progress through annual performance goals and measures. Specific human health risk and exposure assessments and methods are discussed and conducted under the Human Health Risk Assessment Program.

The Land Protection and Restoration research program was reviewed by EPA's Board of Scientific Counselors (BOSC)—a Federal advisory committee comprised of qualified, independent scientists and engineers—in FY 2006 (December 2005). The BOSC found that the program generates high quality products and conducts appropriately focused multi-disciplinary research.

¹ EPA, Office of Research and Development, *Waste Research Strategy*. Washington, D.C.: EPA. For more information, see <http://www.epa.gov/ord/htm/documents/wastepub.pdf>.

² For more information, see <http://www.epa.gov/osp/myp>.

The *Waste Research Strategy* outlines the research needs and priorities at the time it was prepared. To guide these research efforts as progress is made and new needs emerge, EPA develops multi-year research plans that are revised periodically. EPA merged the Contaminated Sites and RCRA Multi-Year Plans (MYPs) into one cohesive Land Research MYP, with input from across the Agency, to ensure research conducted continues to support the Agency's mission to protect human health and the environment. The new plan will be posted when peer review comments are addressed in the second quarter of FY 2007.

In addition, EPA's Science Advisory Board (SAB) conducted an independent review of the Contaminated Sites and RCRA multi-year plans in 2004 and released its final report in May 2005. The report is available on the EPA website at http://www.epa.gov/science1/pdf/contaminated_sites_rcra_sab-05-009.pdf. The review panel found the plans to be programmatically and scientifically sound (R&D Criteria: Quality) and commended the research and development program's close coordination with the program office (R&D Criteria: Relevance) and use of leveraging opportunities. The panel endorsed EPA's proposal to merge the two plans, which in part address closely related research needs.

FY 2008 Activities and Performance Plan:

In response to a BOSC recommendation to shift part of the research program to emerging issues and the strategic priority of nanomaterial environmental and human health issues, a shift in the research program to address nanotechnology fate and transport research issues will be made for FY 2008. Additional suggestions from both the SAB review and the BOSC review also are being incorporated into the research program.

For nanotechnology fate and transport research, the primary objective will be to determine the physicochemical properties controlling the movement of nanomaterials through soil and aquatic ecosystems. Research questions include the identification of system parameters that alter the surface characteristics of nanomaterials through aggregation (*e.g.*, pH effects), complexation (*e.g.*, surface complexation by dissolved organic carbon) or changes in oxidation state (*e.g.*, chemical- or biological-mediated electron transfer). Lifecycle issues also will be addressed. This work will provide the basis for prioritizing potential ecological exposure pathways that warrant further exploration and complement funded Science to Achieve Results (STAR) grants in the Human Health and Ecosystems program.

The Agency's efforts are coordinated with other Federal agencies through the National Nanotechnology Initiative (NNI),³ which the Administration has identified as a FY 2008 research and development budget priority.⁴ EPA's nanotechnology research is also guided by a draft research needs document being prepared by the Nanotechnology Environmental and Health Implications Working Group.⁵ EPA will move to become a Federal leader for environmental fate and transport research as outlined in the NNI draft research needs document.

EPA also will continue to collaborate with the private sector to conduct field sampling. In addition, EPA will work with states to optimize operations and monitoring of several landfill bioreactors and determine their potential to provide alternative energy in the form of landfill gas while increasing the nation's landfill capacity (R&D Criteria: Relevance, Performance). Recovering landfill space by accelerating waste degradation is an alternative approach to meeting EPA's Solid Waste and Emergency Response program's draft strategic target of

³ For more information, see <http://www.nano.gov/>.

⁴ Executive Office of the President, Office of Management and Budget and Office of Science and Technology Policy, *FY 2008 Administration Research and Development Budget Priorities*. Washington, D.C.: OMB (2006), 5. See <http://www.whitehouse.gov/omb/memoranda/fy2006/m06-17.pdf>.

⁵ For more information, see <http://www.nano.gov/html/society/NEHI.htm>.

decreasing landfill disposal and incineration by 11 million tons (R&D Criteria: Relevance, Performance). The Association of State and Tribal Solid Waste Management Officials (ASTSWMO) helps transfer research results on landfill bioreactors to the states (R&D Criteria: Relevance), who issue the permits under the recent Research, Development, and Demonstration (RD&D) rule. FY 2008 products will include a leach testing methodology to improve predictions of chemical mobilization due to various disposal and use scenarios.

In 2006, the Land Protection and Restoration Research Program received an “adequate” rating in its first PART review. EPA and OMB continue to work to finalize appropriate ambitious performance measures, develop and implement a protocol for improved budget-performance integration, and develop a new efficiency measure that captures the cost effectiveness of research activities. To this end, OMB, EPA, and members of the Board of Scientific Counselors formed a workgroup to discuss long-term measurement of EPA’s research and development programs. As part of the workgroup, EPA has devised program-specific questions to be addressed by the BOSC and used in support of long-term measurement. To identify appropriate outcome-oriented efficiency measures for research programs, EPA is soliciting input from the National Academy of Sciences.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Avg. time (in days) for technical support centers to process and respond to requests for technical document review, statistical analysis and evaluation of characterization and treatability study plans		32.5	30.5	29	Days

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered in support of the manage material streams, conserve resources and appropriately manage waste long-term goal.	100	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of planned outputs delivered in support of the mitigation, management and long-	96	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	term stewardship of contaminated sites long-term goal.					

Work under this program supports EPA's Enhance Science and Research objective. Performance measures for this specific program project are included under the Superfund Land Protection and Restoration program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$685.5) This realignment will support research in nanotechnology fate and transport and research to develop a leach testing methodology to improve predictions of chemical mobilization.
- (+\$131.9) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$4.1) This increase is associated with increased programmatic laboratory fixed costs.
- (+\$0.9) This is a technical adjustment to realign travel resources across the research program to better reflect FY 2008 programmatic priorities. There will be no programmatic impact.
- (-\$466.1) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (-\$117.3) This reduction reflects savings from improvements to the Agency's small administrative IT Systems.
- (-\$54.4) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$0.4) This is part of an Agencywide effort to reduce travel, including international travel.
- (-0.4 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction reflects efficiencies gained in EPA's Research and Development IT and administrative activities and will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

SWDA; HSWA; SARA; CERCLA; RCRA; OPA; BRERA.

Program Area: Research: Sustainability

Research: Economics and Decision Science(EDS)

Program Area: Research: Sustainability

Goal: Compliance and Environmental Stewardship

Objective(s): Enhance Societies Capacity for Sustainability through Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$2,487.6</i>	<i>\$2,494.6</i>	<i>\$0.0</i>	<i>(\$2,494.6)</i>
Total Budget Authority / Obligations	\$2,487.6	\$2,494.6	\$0.0	(\$2,494.6)
Total Workyears	3.3	3.0	0.0	-3.0

*In FY 2006, Program/Project Research: Pollution Prevention (B6) was eliminated and Program/Projects Research: Economics and Decision Science (EDS) (H7) and Research: Sustainability (H8) established.

Program Project Description:

Economics and Decision Science (EDS) research is designed to improve EPA's decision making, cost-benefit analyses, and implementation strategies.¹ EDS research focuses on areas such as:

- How people value their health and the environment;
- Corporate and consumer environmental behavior; and
- Market mechanisms and incentives.

Since its inception, the EDS program has produced dozens of published, peer-reviewed articles that have contributed to the field of environmental decision making and have been used in crafting state and Federal environmental policies. For example, EPA's Agencywide guidelines for cost-benefit analyses cite 10 peer-reviewed, academic articles sponsored by the EDS program² (R&D Criteria: Quality).

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's resources for Economics and Decision Science will move to the Office of Policy, Economics, and Innovation under the Regulatory and Economic Analysis program. Refer to the Regulatory and Economic Analysis program for a discussion of activities in FY 2008.

Performance Targets:

Work under this program supports EPA's Enhance Science and Research objective. Currently, there are no PART performance measures for this specific program.

¹ For more information, see <http://es.epa.gov/ncer/science/economics>.

² EPA, Office of the Administrator, *Guidelines for Preparing Economic Analyses*. Washington, D.C.: EPA (2000). Available at: [http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/Guidelines.html/\\$file/Guidelines.pdf](http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/Guidelines.html/$file/Guidelines.pdf).

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$1,070.8) This reduction represents a redirection from the Office of Research and Development's (ORD's) Science to Achieve Results (STAR) program for Economics and Decision Science research to the Office of Policy, Economics, and Innovation's Regulatory and Economic Analysis program. Beginning in FY 2008, EDS activities will be directed at critical applied research needs of EPA. The selection of research areas to be funded will draw on EPA's Environmental Economics Research Strategy.
- (-\$994.6) This reduction represents a discontinuation of the Economics and Decision Science research program in FY 2008.
- (-\$429.2/-3.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This represents the transfer of this program's personnel and related payroll resources to the Office of Policy, Economics, and Innovation. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CAA; CWA; PPA; RCRA; SDWA; SARA; TSCA.

Research: Sustainability

Program Area: Research: Sustainability

Goal: Compliance and Environmental Stewardship

Objective(s): Enhance Societies Capacity for Sustainability through Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$27,042.4</i>	<i>\$21,404.9</i>	<i>\$22,478.0</i>	<i>\$1,073.1</i>
Hazardous Substance Superfund	\$292.0	\$0.0	\$0.0	\$0.0
Total Budget Authority / Obligations	\$27,334.4	\$21,404.9	\$22,478.0	\$1,073.1
Total Workyears	86.8	77.3	76.2	-1.1

*In FY 2006, Program/Project Research: Pollution Prevention (B6) was eliminated and Program/Projects Research: Economics and Decision Science (EDS) (H7) and Research: Sustainability (H8) established.

Program Project Description:

EPA's Science and Technology for Sustainability (STS) program is designed to advance sustainability goals. Specifically, this program is linked to supporting Agency-identified sustainability goals in the areas of air, ecosystems, energy, land, materials, and water.

Sustainable and preventive approaches to health and environmental problems have increasingly become the Agency's focus since the Pollution Prevention Act of 1990. Sustainable approaches require innovative design and production techniques that minimize or eliminate environmental liabilities; integrated management of air, water, and land resources; and changes in the traditional methods of creating and distributing goods and services. In addition to conducting research related to human health and environmental threats, EPA is committed to promoting sustainability—achieving economic prosperity while protecting natural systems and quality of life.

The Science Advisory Board's (SAB) Environmental Engineering Committee reviewed EPA's Sustainability Research Strategy and Science for Technology Multi-Year Plan in June 2006. While the STS research program contains several new elements as a result of this review, such as the development of metrics and systems-based environmental management practices, it also draws upon ongoing efforts that include: 1) a multi-disciplinary Sustainable Environmental Systems program; 2) a decision support tools program which has championed the use of life cycle assessment methods and developed the Tool for Reduction and Assessment of Chemical and Other Environmental Impacts (TRACI), an environmental impact tool; and 3) a successful grant program: the People, Prosperity, and the Planet (P3) Student Design Competition for Sustainability.

Specific sustainability research areas include:

- *Sustainability Metrics:* As sustainable solutions to environmental problems are developed and implemented, there is a need to measure the progress and impact of these

efforts. The research in this area is focused on developing scientifically-based sustainability metrics and indices that will provide policy makers and citizens with a suite of measurement tools that are both readily accessible and easily understood. The long-term objective is to develop sustainability metrics that are suitable for use in the Agency's Report on the Environment. The initial suite of metrics is scheduled to be available in FY 2011.

- *Decision Support Tools*:¹ This research creates tools and methods for use by public and private sector decision makers to support the achievement of sustainable outcomes. This effort is built on the foundation of Life Cycle Analysis (LCA) techniques that address the sustainability of alternative policy options, production pathways, and product usage by describing the full environmental impact of each alternative.
- *Small Business Innovation Research (SBIR) Program*:² As required by the Small Business Act as amended,³ EPA sets aside 2.5% of its extramural research budget for contracts to small businesses to develop and commercialize new environmental technologies. Funds for this program are allocated to specific programs based on final resource levels in the appropriated budget. Examples of completed programs include development of a membrane technology for reducing NOx emissions from diesel engines, a novel hybrid sorbent to remove arsenic from drinking water systems, and a safe, effective new technology for detecting and removing lead paint.
- *National Environmental Technology Competition (NETC)*:⁴ The People, Prosperity, and the Planet (P3) Award⁵ is a student competition to develop solutions to sustainability challenges. For example, a joint student team from Oberlin College and Brown University created a low-cost system that students can use to monitor energy and water consumption at various scales, from individual dormitory floors to their entire college campus.
- *Sustainable Environmental Systems (SES)*:⁶ The SES program develops methodologies for understanding and managing large, complex environmental systems such as metropolitan areas and watersheds. For example, one of the projects uses an auction-based market incentive approach to harness the deliberative decision process of local property owners to address water quality problems stemming from urban stormwater runoff.

It is the long term goal of the STS Program to promote and support national and regional sustainability policies and initiatives by ensuring that decision-makers within the EPA and at the

¹ For more information, see <http://www.epa.gov/ord/NRMRL/std/sab>.

² For more information, see <http://es.epa.gov/ncer/sbir>.

³ U.S. Public Law 219. 79th Congress, 2nd session, 22 July 1982. *Small Business Innovation Development Act of 1982*. More information is available at: <http://thomas.loc.gov/cgi-bin/bdquery/z?d097:s.881>.

⁴ For more information, see <http://www.epa.gov/etop/netc>.

⁵ For more information, see <http://es.epa.gov/ncer/p3>.

⁶ For more information, see <http://www.epa.gov/ord/NRMRL/std/seb>.

local, regional and national levels have a scientifically sound set of management tools that promote stewardship and sustainability outcomes.

FY 2008 Activities and Performance Plan:

FY 2008 will mark the first year of a new research effort that is aimed at creating a suite of science-based sustainability metrics that are readily understood by the public. This work will address both large and small systems. Research on large scale systems will be aimed at the sustainable management of a regional ecosystem that includes a National Park. Small system research will focus on the development of sustainability metrics for use in the design and creation of new chemicals of commerce. Ultimately, this body of work will be extended to include the validation of these measures in real world settings with outside collaborators.

In FY 2008, the People, Prosperity, and Planet (P3) Award will support up to 50 student design projects from around the country, focusing on challenges in areas such as materials and chemicals, energy, resources, and water. In addition, EPA will issue a new solicitation to support this effort, as well as a solicitation under the SBIR program that will be directed toward the support of environmental technology needs identified by EPA program and regional offices.

In FY 2008, the *Environmental Technology Verification (ETV)*⁷ program will operate using funding from external sources such as vendors, other Federal programs, states and local government, and trade organizations. Expected products in FY 2008 include additional test protocols and verifications in several technology areas: biomass co-fired boilers; remote optical imaging technology for chemical leak detection; pesticide spray drift reduction; and microbial resistant wallboard.

In 2003, EPA's sustainability research program, under the program title "Pollution Prevention and New Technologies Research" received a "results not demonstrated" in its PART review. The program was rated "results not demonstrated" due to its lack of adequate strategic planning and performance measures. However, EPA has taken steps to address these deficiencies through the development of a new Multi-Year Plan as well as annual and long term performance and efficiency measures that will be finalized in consultation with OMB.

Performance Targets:

Work under this program supports EPA's Enhance Science and Research objective. Currently, there are no PART performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$677.2) This increase will support the P3 Student Design Competition for Sustainability program. This annual program supports over 500 college students in 50 to 70 teams and will issue its next solicitation in FY 2008. The additional funding for the P3 program will be used to support additional P3 awardees (currently 42 awards at \$10 thousand each or less) and Phase II grant recipients (currently 6 awards up to \$75

⁷ For more information, see <http://www.epa.gov/etv>.

thousand each). The program also will benefit from increased activities to enhance the efforts of the P3 Award recipients to commercialize and implement their projects realizing environmental and human health benefits. Building upon the successful designs of past P3 awardees, the STS Multi-Year Plan expects to foster/facilitate the commercialization of several innovative technologies to address sustainability issues beginning in FY 2010.

- (+\$480.2) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$125.0) This increase provides funds for program evaluations in the Sustainability research program.
- (+\$11.1) This increase is associated with increased programmatic laboratory fixed costs.
- (−\$90.2) This reduction reflects savings from improvements to the Agency’s small administrative IT Systems.
- (−\$44.1) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (−\$31.2) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (−\$54.9) This is part of an Agencywide effort to reduce travel, including international travel.
- (−1.1 FTE) This change reflects EPA’s workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction reflects efficiencies gained in EPA’s Research and Development IT and administrative activities and will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CAA; CWA; FIFRA; PPA; RCRA; SDWA; SBA; SARA; TSCA.

Program Area: Toxic Research and Prevention

Research: Pesticides and Toxics

Program Area: Toxic Research and Prevention

Goal: Healthy Communities and Ecosystems

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	\$28,343.3	\$26,223.7	\$24,795.0	(\$1,428.7)
Total Budget Authority / Obligations	\$28,343.3	\$26,223.7	\$24,795.0	(\$1,428.7)
Total Workyears	131.1	122.2	126.3	4.1

Program Project Description:

The Pesticides and Toxics research program is a multidisciplinary program that examines risks resulting from exposure to pesticides and toxic chemicals. The research is designed to support the Agency's efforts to reduce current and future risks to the environment and to humans by preventing and/or controlling the production of new chemicals and products of biotechnology that pose unreasonable risk, as well as assessing and reducing the risks of chemicals and products of biotechnology already in commerce. This research complements work conducted under the Human Health and Ecosystem Research, the Human Health Risk Assessment, and the Endocrine Disruptors Research programs. The development and validation of methods and assessments for predicting risks from pesticides, toxic substances, and products of biotechnology to human health and ecosystems are conducted under the Pesticides and Toxics research program (R&D Criteria: Relevance).

Research is guided by the Biotechnology Research Strategy¹ and the Wildlife Research Strategy,² both of which were developed with participation from major clients (e.g. EPA's Prevention, Pesticides and Toxic Substances program and the Regional Offices). The strategies outline the research needs and priorities. The Agency also maintains a Safe Pesticides/Safe Products (SP2) multi-year plan (MYP)³ that outlines steps for meeting these needs, as well as annual performance goals and measures for evaluating progress.

The Pesticides and Toxics research program is scheduled to undergo an external peer review by EPA's research oversight body, the Board of Scientific Counselors (BOSC), in February 2007.

¹ U.S. EPA, Office of Research and Development. *Biotechnology Research Strategy*. Washington, DC: EPA. Available at: http://www.epa.gov/nheerl/publications/files/biotechnology_research_program_4_8_05.pdf.

² U.S. EPA, Office of Research and Development, *Wildlife Research Strategy*. Washington, D.C.: EPA. Available at: http://www.epa.gov/nheerl/publications/files/wildlife_research_strategy_2_2_05.pdf.

³ U.S. EPA, Office of Research and Development, Safe Pesticides/Safe Products Multi-Year Plan. Washington, D.C.: EPA (2003). Available at: <http://www.epa.gov/osp/myp/safecomm.pdf>.

FY 2008 Activities and Performance Plan:

In FY 2008, research will continue to provide the scientific foundation for three major areas of the Pesticides and Toxics research program.

- 1) EPA will provide research on methods, models, and data to support prioritization of testing requirements, enhanced interpretation of data to improve human health and ecological risk assessments, and decision-making regarding specific individual or classes of pesticides and toxic substances that are of high priority. This research will develop/validate: 1) predictive biomarkers of neurotoxic effects for major classes of pesticides; 2) alternative test methods for the hazard identification of developmental neurotoxicants; 3) virtual chemical screening methods for risk-based prioritization and ranking needs for chronic non-cancer effects; and 4) quantitative structure activity relationships (QSARs) to relate various structural descriptions of molecules to toxicity endpoints. EPA will use the results of this research to make decisions about which chemicals should undergo more definitive toxicological testing by industry and, subsequently, to help interpret the industry-submitted data for use in risk assessments. EPA scientists will work collaboratively with scientists from the two Environmental Bioinformatic Research Centers that were awarded under the Computational Toxicology Research program in FY 2006 to develop and apply novel computational approaches to integrate data from genomics, proteomics, and metabonomics studies. Integrating data from genomics and related approaches is consistent with the “Understanding Complex Biological Systems” category highlighted as a priority for Federal investment by the Administration⁴. Research in response to EPA’s more immediate needs for decision-making includes: 1) characterizing toxicity and pharmacokinetic profiles of perfluoroalkyl chemicals; 2) examining the potential for selected perfluorinated telomers to degrade to perfluorooctanoic acid or its precursors; and 3) developing methods and models to forecast the fate of pesticides and byproducts from source waters through drinking water treatment systems and ultimately to the U.S. population (R&D Criteria: Relevance, Quality, Performance).
- 2) Research conducted in FY 2008 will support the development of probabilistic risk assessments to protect natural populations of birds, fish, other wildlife, and non-target plants. This research directly supports Agency efforts to assure that endangered species are protected from pesticides while making sure farmers and communities have the pest control tools they need. Four key components of this research are: 1) extrapolation among wildlife species and exposure scenarios of concern; 2) population biology to improve population dynamics in spatially-explicit habitats; 3) models for assessing the relative risk of chemical and non-chemical stressors; and 4) models to define geographical regional/spatial scales for risk assessment. Methods for characterization of population-level risks of toxic substances to aquatic life and wildlife also will be developed. Results of this research will help the Agency meet the long-term goal of developing scientifically valid approaches for assessing spatially-explicit, population-

⁴ FY 2007 Administration Research and Development Budget Priorities memo by J. Marburger and J. Bolten: July 8, 2005.

level risks to wildlife populations from multiple stressors (R&D Criteria: Relevance, Quality, Performance).

- 3) Additionally, EPA will provide biotechnology research to support decision-making related to products of biotechnology. In FY 2008, the Agency is initiating a limited cross-laboratory effort to implement a cost-effective monitoring program designed to assess changes in pesticide exposure and associated environmental effects accompanying genetically engineered crop adoptions. In addition, within EPA's research laboratories and through its Science to Achieve Results (STAR) program, methods are being developed to assess the potential allergenicity of genetically engineered plants (R&D Criteria: Relevance, Quality, and Performance).

The Safe Pesticides/Safe Products research program is scheduled to be assessed in the spring of calendar year 2007. EPA is continually working to develop appropriate annual and long-term output and outcome measures for this program. Additionally, EPA is working to develop useful efficiency measures to guide program management decisions and improvement strategies.

Performance Targets:

Work under this program supports EPA's Enhance Science and Research objective. Currently, there are no approved performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$763.8) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$5.6) This increase is associated with increased programmatic laboratory fixed costs.
- (+4.1 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This includes a 5.5 FTE realignment of total workyears from core research in the human health and ecosystems program to support related problem-driven efforts in pesticides and toxics focused on developing and evaluating a metabolic simulator, exposure methods and models, and potential low cost lead test kit methods. This total also includes a 1.4 FTE reduction that reflects efficiencies gained in EPA's Office of Research and Development's IT and administrative activities. These changes will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$1,101.6) Resources are being redirected to support priorities in the Clean Air and Human Health Risk Assessment research programs. While this shift will affect progress in some areas, such as the development of a High Throughput approach to screening compounds, FY 2008 resources will continue to support the most critical pesticides and toxics research needs.

- (-\$796.0) This reduces funding for research to assess the impacts of genetically modified plants and to provide data on degradation products and treatment studies of pesticides in drinking water.
- (-\$179.8) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$91.7) This reduction reflects savings from improvements to the Agency's small administrative IT Systems.
- (-\$27.4) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (-\$1.6) This is part of an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

FQPA; FIFRA; TSCA; CWA; CAA.

Program Area: Water: Human Health Protection

Drinking Water Programs

Program Area: Water: Human Health Protection

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$90,252.9	\$99,121.0	\$96,967.0	(\$2,154.0)
<i>Science & Technology</i>	<i>\$3,101.9</i>	<i>\$3,243.1</i>	<i>\$3,416.0</i>	<i>\$172.9</i>
Total Budget Authority / Obligations	\$93,354.8	\$102,364.1	\$100,383.0	(\$1,981.1)
Total Workyears	581.5	583.9	584.1	0.2

Program Project Description:

These resources provide technical support to drinking water programs through the Technical Support Center (TSC), which evaluates engineering and scientific data, collects and evaluates contaminant occurrence data, evaluates treatment technologies, develops and evaluates monitoring approaches and analytical methods, and develops and disseminates treatment plant performance improvement mechanisms to affect development and implementation of National Primary Drinking Water Regulations (NPDWRs) that ensure the safety of drinking water. The Center also provides external technical assistance in support of EPA Regional and state drinking water programs. (See <http://www.epa.gov/safewater/> for more information.)

FY 2008 Activities and Performance Plan:

In FY 2008, the drinking water technical support program will:

- Provide technical and scientific support for the development and implementation of drinking water regulations. This includes the development of methods for updating rules and responding to technical implementation questions regarding the entire range of NPDWRs, including the Surface Water Treatment Rule; Long Term 1 and 2 Enhanced Surface Water Treatment Rules (“LT1” and “LT2,” respectively); Stage 1 and 2 Disinfectants and Disinfection Byproducts Rules (“Stage 1” and “Stage 2,” respectively); Total Coliform Rule; Lead and Copper Rule; and Arsenic Rule. TSC also manages the Quality Assurance and Laboratory Approval programs that support implementation of the LT2 Rule.
- Continue to implement EPA’s Drinking Water Laboratory Certification Program. This program sets standards and establishes methods for EPA, state, and privately-owned labs that are analyzing drinking water samples. Through this program, EPA will also conduct three Regional program reviews during FY 2008. TSC visits each regional office on a triennial basis and evaluates their oversight of the state labs and the state laboratory certification programs within their purview.

- Support small drinking water systems' efforts to optimize their treatment technology under the drinking water treatment Area Wide Optimization Program (AWOP). AWOP is a highly successful technical assistance and training program that enhances the ability of small systems to meet existing and future microbial, disinfectant, and disinfection byproducts standards. By the end of 2008, EPA expects that 30 states and 6 regional office will be working with the Agency to establish, strengthen, and enhance AWOPs. By 2008, EPA will develop and pilot a performance-based training approach to facilitate systems treating groundwater sources to obtain key skills specific to groundwater systems. The performance-based training brings together a group of public water supply operators from different localities for a series of sessions where they learn key operational and problem solving skills. Each skill is needed to enable operators to address the factors limiting optimized performance of their plant.
- Manage the implementation of Unregulated Contaminant Monitoring Rules (UCMR2). This involves the coordination and review of sampling plans, certification of laboratories, and review and validation of data.
- Support the Partnership for Safe Water, a national voluntary collaborative effort between the water industry and EPA to pursue optimization of the drinking water treatment infrastructure to maximize public health protection.
- Provide analytical method development/validation to enable implementation of the Nation's drinking water compliance-monitoring and occurrence data gathering.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent population served by CWS that receive drinking water that meets all applicable health-based DW standards through approaches including effective treatment and source water protection.	89	93	94	90	Percent Population

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent community water systems that provide drinking water that meets all applicable health-based drinking water standards.	89.4	93	94	89.5	Percent Systems

The two performance measures displayed above are representative of the work carried out under this program. These measures were developed in related Program Assessment Rating Tools (PART): the Drinking Water State Revolving Fund, Public Water System Supervision Grant program and Underground Injection Control Grant program. There are no current PART measures specifically for this program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$85.0) This request redirects funds from the Drinking Water program in the EPM appropriation to the same program within the S&T appropriation. This change is an administrative correction for fixed costs associated with the Cincinnati Technical Support Center.
- (+\$87.0) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$0.9) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

SDWA.

**Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification**

Table of Contents - Environmental Program and Management

Resource Summary Table	1
Program Projects in EPM	1
Program Area: Air Toxics And Quality	7
Clean Air Allowance Trading Programs	8
Federal Stationary Source Regulations	11
Federal Support for Air Quality Management	13
Federal Support for Air Toxics Program	18
Radiation: Protection	21
Radiation: Response Preparedness	23
Stratospheric Ozone: Domestic Programs	25
Stratospheric Ozone: Multilateral Fund	28
Program Area: Brownfields	31
Brownfields	32
Program Area: Climate Protection Program	34
Climate Protection Program	35
Program Area: Compliance	40
Compliance Assistance and Centers	41
Compliance Incentives	44
Compliance Monitoring	47
Program Area: Enforcement	51
Civil Enforcement	52
Criminal Enforcement	56
Enforcement Training	59
Environmental Justice	61
NEPA Implementation	64
Program Area: Geographic Programs	66
Geographic Program: Chesapeake Bay	67
Geographic Program: Great Lakes	72
Geographic Program: Gulf of Mexico	77
Geographic Program: Lake Champlain	80
Geographic Program: Long Island Sound	82
Geographic Program: Other	85
Regional Geographic Initiatives	91
Program Area: Homeland Security	93
Homeland Security: Communication and Information	94
Homeland Security: Critical Infrastructure Protection	96
Homeland Security: Preparedness, Response, and Recovery	99
Homeland Security: Protection of EPA Personnel and Infrastructure	101
Program Area: Indoor Air	103
Indoor Air: Radon Program	104
Reduce Risks from Indoor Air	106

Program Area: Information Exchange / Outreach.....	110
Children and Other Sensitive Populations: Agency Coordination	111
Congressional, Intergovernmental, External Relations	114
Exchange Network.....	118
Small Business Ombudsman.....	121
Small Minority Business Assistance.....	123
State and Local Prevention and Preparedness	126
TRI / Right to Know	129
Tribal - Capacity Building	131
Program Area: International Programs.....	134
Commission for Environmental Cooperation	135
Environment and Trade.....	138
International Capacity Building.....	141
POPs Implementation	144
US Mexico Border	146
Program Area: IT / Data Management / Security	149
Information Security	150
IT / Data Management	152
Program Area: Legal / Science / Regulatory / Economic Review	156
Administrative Law	157
Alternative Dispute Resolution.....	159
Civil Rights / Title VI Compliance	161
Legal Advice: Environmental Program	164
Legal Advice: Support Program	166
Regional Science and Technology.....	168
Regulatory Innovation	170
Regulatory/Economic-Management and Analysis	175
Science Advisory Board	178
Program Area: Operations and Administration.....	180
Acquisition Management.....	181
Central Planning, Budgeting, and Finance	183
Facilities Infrastructure and Operations.....	186
Financial Assistance Grants / IAG Management.....	189
Human Resources Management	191
Program Area: Pesticides Licensing	195
Pesticides: Field Programs	196
Pesticides: Registration of New Pesticides.....	198
Pesticides: Review / Reregistration of Existing Pesticides.....	200
Pesticides: Protect Human Health from Pesticide Risk	202
Pesticides: Protect the Environment from Pesticide Risk.....	207
Pesticides: Realize the Value of Pesticide Availability	212
Science Policy and Biotechnology.....	216
Program Area: Resource Conservation and Recovery Act (RCRA)	218
RCRA: Corrective Action.....	219
RCRA: Waste Management.....	222
RCRA: Waste Minimization & Recycling	227

Program Area: Toxics Risk Review and Prevention	233
Toxic Substances: Chemical Risk Management.....	234
Toxic Substances: Chemical Risk Review and Reduction	237
Endocrine Disruptors	242
Toxic Substances: Lead Risk Reduction Program.....	244
Pollution Prevention Program.....	248
Program Area: Underground Storage Tanks (LUST / UST)	252
LUST / UST.....	253
Program Area: Water: Ecosystems.....	257
Great Lakes Legacy Act.....	258
National Estuary Program / Coastal Waterways.....	261
Wetlands	265
Program Area: Water: Human Health Protection.....	268
Beach / Fish Programs	269
Drinking Water Programs	273
Program Area: Water Quality Protection.....	280
Marine Pollution	281
Surface Water Protection	286

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

APPROPRIATION: Environmental Program & Management
Resource Summary Table
(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management				
Budget Authority	\$2,331,934.7	\$2,306,617.0	\$2,298,188.0	(\$8,429.0)
Total Workyears	10,765.1	11,007.5	10,867.0	-140.5

Program Projects in EPM
(Dollars in Thousands)

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Air Toxics and Quality				
Clean Air Allowance Trading Programs	\$17,710.5	\$19,126.4	\$19,388.0	\$261.6
Federal Stationary Source Regulations	\$23,221.1	\$25,678.3	\$26,504.0	\$825.7
Federal Support for Air Quality Management				
Energy Policy Act Implementation	\$0.0	\$2,800.0	\$2,800.0	\$0.0
Clean Diesel Initiative	\$3,119.4	\$0.0	\$0.0	\$0.0
Federal Support for Air Quality Management (other activities)	\$89,933.6	\$85,265.6	\$87,690.0	\$2,424.4
Subtotal, Federal Support for Air Quality Management	\$93,053.0	\$88,065.6	\$90,490.0	\$2,424.4
Federal Support for Air Toxics Program	\$24,332.1	\$25,513.7	\$24,711.0	(\$802.7)
Radiation: Protection	\$11,301.6	\$10,648.6	\$10,186.0	(\$462.6)
Radiation: Response Preparedness	\$2,374.4	\$2,688.7	\$2,928.0	\$239.3
Stratospheric Ozone: Domestic Programs	\$5,560.8	\$5,221.4	\$4,489.0	(\$732.4)
Stratospheric Ozone: Multilateral Fund	\$8,534.7	\$13,365.0	\$9,865.0	(\$3,500.0)
Subtotal, Air Toxics and Quality	\$186,088.2	\$190,307.7	\$188,561.0	(\$1,746.7)
Brownfields				
Brownfields	\$21,848.2	\$24,637.3	\$23,450.0	(\$1,187.3)
Climate Protection Program				
Climate Protection Program				
Energy Star	\$33,391.6	\$45,722.8	\$43,926.0	(\$1,796.8)
Methane to Markets	\$2,147.5	\$4,420.5	\$4,436.0	\$15.5

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Climate Protection Program (other activities)	\$48,154.8	\$41,700.0	\$39,565.0	(\$2,135.0)
Subtotal, Climate Protection Program	\$83,693.9	\$91,843.3	\$87,927.0	(\$3,916.3)
Subtotal, Climate Protection Program	\$83,693.9	\$91,843.3	\$87,927.0	(\$3,916.3)
Compliance				
Compliance Assistance and Centers				
Energy Policy Act Implementation	\$0.0	\$111.2	\$131.0	\$19.8
Compliance Assistance and Centers (other activities)	\$27,774.3	\$28,779.5	\$29,416.0	\$636.5
Subtotal, Compliance Assistance and Centers	\$27,774.3	\$28,890.7	\$29,547.0	\$656.3
Compliance Incentives	\$8,338.9	\$9,702.2	\$9,786.0	\$83.8
Compliance Monitoring				
Energy Policy Act Implementation	\$172.0	\$986.9	\$1,128.0	\$141.1
Compliance Monitoring (other activities)	\$86,463.1	\$92,031.9	\$92,300.0	\$268.1
Subtotal, Compliance Monitoring	\$86,635.1	\$93,018.8	\$93,428.0	\$409.2
Subtotal, Compliance	\$122,748.3	\$131,611.7	\$132,761.0	\$1,149.3
Enforcement				
Civil Enforcement				
Energy Policy Act Implementation	\$0.0	\$753.2	\$810.0	\$56.8
Civil Enforcement (other activities)	\$118,560.9	\$120,024.5	\$125,835.0	\$5,810.5
Subtotal, Civil Enforcement	\$118,560.9	\$120,777.7	\$126,645.0	\$5,867.3
Criminal Enforcement	\$41,595.6	\$37,793.5	\$39,688.0	\$1,894.5
Enforcement Training	\$2,655.2	\$2,503.7	\$3,145.0	\$641.3
Environmental Justice	\$4,691.5	\$3,859.0	\$3,822.0	(\$37.0)
NEPA Implementation	\$12,890.2	\$13,787.5	\$14,366.0	\$578.5
Subtotal, Enforcement	\$180,393.4	\$178,721.4	\$187,666.0	\$8,944.6
Environmental Protection / Congressional Priorities				
Congressionally Mandated Projects	\$65,347.2	\$0.0	\$0.0	\$0.0
Geographic Programs				
Geographic Program: Chesapeake Bay	\$22,292.9	\$26,397.7	\$28,768.0	\$2,370.3
Geographic Program: Great Lakes	\$19,251.9	\$20,577.1	\$21,757.0	\$1,179.9
Geographic Program: Gulf of Mexico	\$3,715.9	\$4,310.7	\$4,457.0	\$146.3
Geographic Program: Lake Champlain	\$3,959.0	\$933.8	\$934.0	\$0.2
Geographic Program: Long Island Sound	\$946.0	\$466.9	\$467.0	\$0.1

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Geographic Program: Other				
Geographic Program: Puget Sound	\$2,307.8	\$0.0	\$1,000.0	\$1,000.0
Lake Pontchartrain	\$0.0	\$978.0	\$978.0	\$0.0
Community Action for a Renewed Environment (CARE)	\$1,148.2	\$4,448.4	\$3,448.0	(\$1,000.4)
Geographic Program: Other (other activities)	\$4,725.6	\$3,623.6	\$3,149.0	(\$474.6)
Subtotal, Geographic Program: Other	\$8,181.6	\$9,050.0	\$8,575.0	(\$475.0)
Regional Geographic Initiatives	\$7,717.1	\$9,137.3	\$9,553.0	\$415.7
Subtotal, Geographic Programs	\$66,064.4	\$70,873.5	\$74,511.0	\$3,637.5
Homeland Security				
Homeland Security: Communication and Information				
Laboratory Preparedness and Response	\$318.1	\$1,200.0	\$500.0	(\$700.0)
Homeland Security: Communication and Information (other activities)	\$4,961.9	\$5,599.7	\$6,406.0	\$806.3
Subtotal, Homeland Security: Communication and Information	\$5,280.0	\$6,799.7	\$6,906.0	\$106.3
Homeland Security: Critical Infrastructure Protection				
Decontamination	\$43.6	\$99.0	\$99.0	\$0.0
Homeland Security: Critical Infrastructure Protection (other activities)	\$4,673.8	\$7,143.7	\$7,688.0	\$544.3
Subtotal, Homeland Security: Critical Infrastructure Protection	\$4,717.4	\$7,242.7	\$7,787.0	\$544.3
Homeland Security: Preparedness, Response, and Recovery				
Decontamination	\$5.0	\$3,328.7	\$3,380.0	\$51.3
Homeland Security: Preparedness, Response, and Recovery (other activities)	\$1,654.2	\$0.0	\$1.0	\$1.0
Subtotal, Homeland Security: Preparedness, Response, and Recovery	\$1,659.2	\$3,328.7	\$3,381.0	\$52.3
Homeland Security: Protection of EPA Personnel and Infrastructure	\$8,845.1	\$6,268.9	\$6,345.0	\$76.1
Subtotal, Homeland Security	\$20,501.7	\$23,640.0	\$24,419.0	\$779.0
Indoor Air				
Indoor Air: Radon Program	\$7,418.0	\$5,519.2	\$5,429.0	(\$90.2)
Reduce Risks from Indoor Air	\$19,023.2	\$23,464.3	\$21,440.0	(\$2,024.3)
Subtotal, Indoor Air	\$26,441.2	\$28,983.5	\$26,869.0	(\$2,114.5)

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Information Exchange / Outreach				
Children and Other Sensitive Populations: Agency Coordination	\$5,695.1	\$6,063.8	\$6,203.0	\$139.2
Congressional, Intergovernmental, External Relations	\$48,586.7	\$52,142.7	\$49,747.0	(\$2,395.7)
Environmental Education	\$8,582.4	\$0.0	\$0.0	\$0.0
Exchange Network	\$18,725.7	\$16,048.5	\$15,364.0	(\$684.5)
Small Business Ombudsman	\$2,498.5	\$3,501.7	\$3,261.0	(\$240.7)
Small Minority Business Assistance	\$1,950.4	\$2,646.6	\$2,466.0	(\$180.6)
State and Local Prevention and Preparedness	\$11,576.0	\$12,508.4	\$12,960.0	\$451.6
TRI / Right to Know	\$13,914.4	\$15,243.4	\$15,728.0	\$484.6
Tribal - Capacity Building	\$11,841.6	\$11,435.7	\$11,477.0	\$41.3
Subtotal, Information Exchange / Outreach	\$123,370.8	\$119,590.8	\$117,206.0	(\$2,384.8)
International Programs				
Commission for Environmental Cooperation	\$4,229.9	\$4,137.0	\$4,022.0	(\$115.0)
Environment and Trade	\$1,695.8	\$1,861.2	\$1,945.0	\$83.8
International Capacity Building	\$7,687.0	\$6,390.3	\$5,311.0	(\$1,079.3)
POPs Implementation	\$1,707.9	\$1,808.7	\$1,831.0	\$22.3
US Mexico Border	\$8,145.2	\$6,061.0	\$4,646.0	(\$1,415.0)
Subtotal, International Programs	\$23,465.8	\$20,258.2	\$17,755.0	(\$2,503.2)
IT / Data Management / Security				
Information Security	\$4,198.5	\$5,562.1	\$5,583.0	\$20.9
IT / Data Management	\$98,871.4	\$96,807.2	\$91,019.0	(\$5,788.2)
Subtotal, IT / Data Management / Security	\$103,069.9	\$102,369.3	\$96,602.0	(\$5,767.3)
Legal / Science / Regulatory / Economic Review				
Administrative Law	\$4,289.0	\$4,860.9	\$5,260.0	\$399.1
Alternative Dispute Resolution	\$1,004.4	\$1,229.8	\$1,175.0	(\$54.8)
Civil Rights / Title VI Compliance	\$10,674.8	\$11,053.7	\$11,240.0	\$186.3
Legal Advice: Environmental Program	\$35,237.7	\$37,525.5	\$39,366.0	\$1,840.5
Legal Advice: Support Program	\$13,454.0	\$13,465.9	\$13,986.0	\$520.1
Regional Science and Technology	\$3,772.5	\$3,520.7	\$3,574.0	\$53.3
Regulatory Innovation	\$22,671.1	\$25,853.6	\$23,866.0	(\$1,987.6)
Regulatory/Economic-Management and Analysis	\$16,592.7	\$17,554.8	\$20,104.0	\$2,549.2
Science Advisory Board	\$4,555.8	\$4,615.7	\$4,790.0	\$174.3

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Subtotal, Legal / Science / Regulatory / Economic Review	\$112,252.0	\$119,680.6	\$123,361.0	\$3,680.4
Operations and Administration				
Acquisition Management	\$23,040.8	\$25,418.3	\$29,992.0	\$4,573.7
Central Planning, Budgeting, and Finance	\$70,768.6	\$83,548.1	\$74,960.0	(\$8,588.1)
Facilities Infrastructure and Operations	\$336,980.6	\$294,760.1	\$303,728.0	\$8,967.9
Financial Assistance Grants / IAG Management	\$22,280.0	\$21,847.0	\$23,439.0	\$1,592.0
Human Resources Management	\$42,966.8	\$40,202.5	\$40,175.0	(\$27.5)
Subtotal, Operations and Administration	\$496,036.8	\$465,776.0	\$472,294.0	\$6,518.0
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	\$0.0	\$0.0	\$62,514.0	\$62,514.0
Pesticides: Protect the Environment from Pesticide Risk	\$0.0	\$0.0	\$41,750.0	\$41,750.0
Pesticides: Realize the Value of Pesticide Availability	\$0.0	\$0.0	\$12,114.0	\$12,114.0
Pesticides: Field Programs	\$24,627.9	\$24,926.3	\$0.0	(\$24,926.3)
Pesticides: Registration of New Pesticides	\$39,406.5	\$39,767.6	\$0.0	(\$39,767.6)
Pesticides: Review / Reregistration of Existing Pesticides	\$54,507.5	\$51,814.6	\$0.0	(\$51,814.6)
Science Policy and Biotechnology	\$2,035.3	\$1,754.0	\$1,780.0	\$26.0
Subtotal, Pesticides Licensing	\$120,577.2	\$118,262.5	\$118,158.0	(\$104.5)
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	\$38,425.9	\$40,372.3	\$39,573.0	(\$799.3)
RCRA: Waste Management	\$66,819.2	\$67,887.3	\$69,158.0	\$1,270.7
RCRA: Waste Minimization & Recycling	\$12,067.4	\$12,235.1	\$13,666.0	\$1,430.9
Subtotal, Resource Conservation and Recovery Act (RCRA)	\$117,312.5	\$120,494.7	\$122,397.0	\$1,902.3
Toxics Risk Review and Prevention				
Toxic Substances: Chemical Risk Management	\$9,090.4	\$7,736.5	\$5,654.0	(\$2,082.5)
Toxic Substances: Chemical Risk Review and Reduction	\$41,500.9	\$44,637.0	\$45,046.0	\$409.0
Endocrine Disruptors	\$7,350.1	\$7,985.4	\$5,890.0	(\$2,095.4)
Toxic Substances: Lead Risk Reduction Program	\$12,087.0	\$11,367.6	\$13,546.0	\$2,178.4
Pollution Prevention Program	\$17,744.8	\$21,292.4	\$19,935.0	(\$1,357.4)
Subtotal, Toxics Risk Review and Prevention	\$87,773.2	\$93,018.9	\$90,071.0	(\$2,947.9)

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Underground Storage Tanks (LUST / UST)				
LUST / UST				
Energy Policy Act Implementation	\$0.0	\$11,713.7	\$11,707.0	(\$6.7)
LUST / UST (other activities)	\$9,042.3	\$0.0	\$12.0	\$12.0
Subtotal, LUST / UST	\$9,042.3	\$11,713.7	\$11,719.0	\$5.3
Subtotal, Underground Storage Tanks (LUST / UST)	\$9,042.3	\$11,713.7	\$11,719.0	\$5.3
Water: Ecosystems				
Great Lakes Legacy Act	\$26,771.7	\$49,600.0	\$35,000.0	(\$14,600.0)
National Estuary Program / Coastal Waterways	\$26,294.4	\$18,417.2	\$17,203.0	(\$1,214.2)
Wetlands	\$19,842.5	\$20,992.2	\$21,518.0	\$525.8
Subtotal, Water: Ecosystems	\$72,908.6	\$89,009.4	\$73,721.0	(\$15,288.4)
Water: Human Health Protection				
Beach / Fish Programs	\$3,593.8	\$2,653.9	\$2,830.0	\$176.1
Drinking Water Programs	\$90,252.9	\$99,121.0	\$96,967.0	(\$2,154.0)
Subtotal, Water: Human Health Protection	\$93,846.7	\$101,774.9	\$99,797.0	(\$1,977.9)
Water Quality Protection				
Marine Pollution	\$10,846.3	\$12,462.4	\$12,851.0	\$388.6
Surface Water Protection				
Water Quality Monitoring	\$5,480.4	\$7,120.7	\$7,121.0	\$0.3
Surface Water Protection (other activities)	\$182,825.7	\$184,466.5	\$188,971.0	\$4,504.5
Subtotal, Surface Water Protection	\$188,306.1	\$191,587.2	\$196,092.0	\$4,504.8
Subtotal, Water Quality Protection	\$199,152.4	\$204,049.6	\$208,943.0	\$4,893.4

Program Area: Air Toxics and Quality

Clean Air Allowance Trading Programs

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$17,710.5</i>	<i>\$19,126.4</i>	<i>\$19,388.0</i>	<i>\$261.6</i>
Science & Technology	\$8,036.1	\$9,259.4	\$8,259.0	(\$1,000.4)
Total Budget Authority / Obligations	\$25,746.6	\$28,385.8	\$27,647.0	(\$738.8)
Total Workyears	89.6	92.2	89.1	-3.1

Program Project Description:

The Acid Rain Program, established under Title IV of the Clean Air Act Amendments of 1990, requires major reductions in SO₂ and NO_x emissions from electric utilities. The authorizing legislation specifies two phases and numerous deadlines for both the SO₂ and NO_x program components. The U.S. is also committed under the US-Canada Air Quality Agreement of 1991 to making reductions in SO₂ and NO_x emissions. EPA's Acid Rain Program provides affected sources flexibility to select their own methods of compliance so the required emission reductions are achieved at the lowest cost (both to industry and government). The SO₂ program component uses a market-based approach with tradable units called "allowances" (one allowance authorizes the emission of one ton of SO₂) and sets a permanent cap in 2010 on the total amount of SO₂ that may be emitted by affected sources at approximately one-half the amount these sources emitted in 1980. Both the SO₂ and NO_x program components require accurate and verifiable measurement of emissions. The Acid Rain Program continues to be recognized as a model for flexible and effective air pollution regulation, both in the U.S. and abroad. The Clean Air Interstate Air Quality Rule relies on existing authorities to reduce emissions which contribute to interstate transport and interfere with other States' ability to meet the PM 2.5 and ozone standards. Using a market-based approach, CAIR is projected to reduce pollution from electrical power generation sources by close to 70%, when fully implemented.

At the request of the states, EPA administers the NO_x Budget Program (NBP), a market-based cap and trade program for reducing NO_x emissions and transported ozone in the eastern U.S. The initial program under the Ozone Transport Commission (OTC), the OTC program ended as a separate entity, integrating fully with the broader regional NBP under the NO_x SIP Call. Implementation of the NO_x SIP Call rule began in 2003 for the affected OTC states and in 2004 for other states. Based on data reported to EPA, in 2005, there were approximately 2,570 affected and operating units in the 19 NBP states and D.C.

FY 2008 Activities and Performance Plan:

In FY 2008, through the Clean Air Allowance Trading Programs, EPA is projected to measure, quality assure, and track emissions for SO₂ and/or NO_x from continuous emissions monitoring systems (CEMs) or equivalent monitoring methods at approximately 4,500 electric utility units and 330 industrial units. In addition, the Program will conduct audits and certify emissions

monitors. Through the SO₂ Allowance Tracking System (ATS) and the NO_x Allowance Tracking System (NATS), allowance transfers are recorded and reconciled against emissions for all affected sources to ensure compliance. Separate activities determine compliance for approximately 980 coal-fired utility boilers with the Acid Rain NO_x emission rate reduction program.

By FY 2008, the NO_x Budget Program (NBP) will have expanded to 20 states and D.C. EPA will continue to assist all the states in this program with implementation, especially activities related to allowance trading, emissions monitoring, and end-of-season reconciliation of emissions with allowances. Affected NBP sources include boilers, turbines, and combined cycle units from a diverse set of industries as well as electric utility units. EPA also will assist NBP states in transitioning their sources and allowances into the CAIR seasonal NO_x trading program. Six additional states and approximately 800 additional units will be affected under the CAIR seasonal program for reducing transported ozone pollution. Required NO_x monitoring for CAIR begins in 2008, or earlier for states and sources interested in qualifying for early emissions reduction credits.

In 2003, OMB assessed the Acid Rain program through the PART process and gave it a rating of “moderately effective.” EPA is working to develop and implement an industry-oriented measure of program efficiency that takes into consideration the full cost of the program. The National Ambient Air Quality Standards Federal program, PARTed in 2005, received a rating of “adequate.” EPA is working to implement improvements within current statutory limitations that address deficiencies in design and implementation, and identify and evaluate needed improvements that are beyond current statutory authority.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Tons of sulfur dioxide emissions from electric power generation sources	Data Available 2007	7,000,000	7,500,000	8,000,000	Tons Reduced

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent change in average sulfur deposition and mean ambient sulfate concentrations reduced.	No Target Established	No Target Established	29	No Target Established	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent change in average nitrogen	No Target Established	No Target Established	10	No Target Established	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	deposition and mean total ambient nitrate concentrations reduced.					

Reducing emissions of SO₂ and NO_x continues to be a crucial component of EPA's strategy for cleaner air. Particulate matter can be formed from direct sources (such as diesel exhaust or smoke), but can also be formed through chemical reactions. Emissions of SO₂ and NO_x can be chemically transformed into sulfates and nitrates ("acid rain particulate"), which are very tiny particles that can be carried by winds hundred of miles. These same small particles are also a main pollutant that impairs visibility across large areas of the country, particularly national parks that are known for their scenic views. Meeting EPA's national health-based air quality standards is an important step towards ensuring the air is safe to breathe. To meet the standards, EPA, states, tribes, and local governments work as partners to reduce emissions of SO₂ and NO_x. The Agency tracks Percent change in average sulfur and nitrogen deposition and mean ambient sulfate and nitrate concentrations triennially. There are no FY 2008 performance targets; the next planned report date is FY 2010.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$260.0) This reflects an increase for payroll and cost of living for existing FTE.
- (-3.1 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align regional resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (+\$1.6) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

C.A.A. (42 U.S.C. 7401-7661f).

Federal Stationary Source Regulations

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$23,221.1	\$25,678.3	\$26,504.0	\$825.7
Total Budget Authority / Obligations	\$23,221.1	\$25,678.3	\$26,504.0	\$825.7
Total Workyears	104.6	105.8	105.8	0.0

Program Project Description:

Under the Clean Air Act, EPA is responsible for setting, reviewing, and revising the National Ambient Air Quality Standards (NAAQS), as well as for setting emission standards for sources of air toxics. These national standards form the foundation for air quality management and air toxics programs implemented at the national, state, local and tribal levels, and establish goals that protect public health and the environment.

The Clean Air Act (CAA) requires EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. EPA has established NAAQS for the six most pervasive air pollutants: particulate matter (PM), ozone, sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), and lead.

This program includes activities related to the development of the Maximum Achievable Control Technology (MACT), combustion, and area source standards, the Stationary Source Residual Risk Program, and associated national guidance and outreach information.

FY 2008 Activities and Performance Plan:

The following chart illustrates EPA's schedule to review criteria pollutants and the current status of the NAAQS reviews:

Proposal	Criteria Pollutant*	Final
December 2010	Next PM	September 2011
May 2007	Ozone	February 2008
March 2009	CO	November 2009
February 2008	Lead	August 2008
September 2009 March 2010	Nitrogen Dioxide* Primary Secondary	May 2010 November 2010
	Sulfur Dioxide*	

November 2009 February 2010	Primary Secondary	August 2010 November 2010
--------------------------------	----------------------	------------------------------

* The schedules for reviewing the SO₂ & NO₂ standards are under litigation and subject to change

EPA will increasingly examine opportunities to meet multiple CAA requirements for stationary sources in more integrated ways, resulting in fewer individual standards in preference for rules that meet multiple CAA objectives for controlling both criteria and hazardous air pollutants in more consistent, cost-effective, and economically efficient ways. EPA will work with the regulated community to develop ways to optimize control of pollutant emissions through strategies that reach beyond classical source categories to allow for more flexible and cost-effective sector-based approaches.

The NAAQS Federal program, PARTed in 2005, received a rating of “adequate.” EPA is working to implement improvements within current statutory limitations that address deficiencies in design and implementation and identify and evaluate needed improvements that are beyond current statutory authority.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percentage reduction in tons of toxicity-weighted (for noncancer risk) emissions of air toxics from 1993 baseline.	Data Available 2009	58	58	59	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics from 1993 baseline.	Data Available 2009	34	35	35	Percentage

- Performance targets for reduction of toxicity weighted emissions are also supported by work under the Federal Support for Air Toxics program project.
- Implementation of the MACT standards is expected to result in the reduction of over 1.7 million tons of hazardous air pollutants.

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (+\$825.4) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$0.3) Change due to rounding in the FY 2008 President’s Budget.

Statutory Authority:

CAA (42 U.S.C. 7401-7661f).

Federal Support for Air Quality Management

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$93,053.0</i>	<i>\$88,065.6</i>	<i>\$90,490.0</i>	<i>\$2,424.4</i>
Science & Technology	\$9,647.9	\$10,272.9	\$10,886.0	\$613.1
Total Budget Authority / Obligations	\$102,700.9	\$98,338.5	\$101,376.0	\$3,037.5
Total Workyears	706.9	709.0	700.7	-8.3

Program Project Description:

The Federal support program assists state, Tribal, and local air pollution control agencies for the development, implementation, and evaluation of programs to implement the National Ambient Air Quality Standards (NAAQS). EPA develops Federal measures and regional strategies that help to reduce emissions from stationary and mobile sources; however, States and Tribes have the primary responsibility for developing clean air measures necessary to meet the NAAQS. EPA partners with states, Tribes, and local governments to create a comprehensive compliance program to ensure that multi-source and multi-pollutant reduction targets and air quality improvement objectives are met and sustained.

For each of the criteria pollutants, EPA tracks two kinds of air pollution trends: air pollutant concentrations based on actual measurements in the ambient (outside) air at selected monitoring sites throughout the country, and emissions based on engineering estimates or measurements of the total tons of pollutants released into the air each year. EPA works with states and local governments to ensure the technical integrity of the source controls in the state implementation plans (SIPs). EPA assists areas in identifying the most cost-effective control options available including consideration of multi-pollutant reduction and innovative strategies. The Federal support program includes working with other Federal agencies to ensure a coordinated approach, and working with the United Nations and other countries to address pollution sources outside U.S. borders that pose risks to public health and air quality within the U.S. This program also supports the development of risk assessment methodologies for the criteria air pollutants.

FY 2008 Activities and Performance Plan:

EPA will continue to improve its air quality management and assessment approaches in FY 2008, consistent with recent National Research Council (NRC) recommendations. EPA will: (1) develop a more integrated multiple pollutant management framework that incorporates criteria and toxics air pollutants; (2) more aggressively incorporate ecosystem impacts, community effects, and future air quality and climate interactions; and, (3) actively assess progress of air programs through an accountability framework.

EPA will continue to support the revised particulate matter (PM) NAAQS by developing policies to address implementation issues, especially transition issues between the previous 1997 and new 2006 standards. EPA will continue to assist state, Tribal, and local agencies by assessing and developing potential regional and national strategies, both regulatory and non-regulatory, for reducing criteria and hazardous air pollutants. Integrating these efforts will allow industrial and commercial sectors to pursue controls in more cost-effective ways that also consider opportunities for optimizing the control of criteria and hazardous air pollutants. EPA will classify areas as attaining or not attaining the new 2006 PM_{2.5} standards.

EPA will continue to implement the reform recommendations of the Clean Air Act Advisory Committee's Subcommittee on Air Quality Management, focusing on both near-term and longer-term improvements. In addition, EPA will review issues on reactivity of volatile organics and will propose updates to the volatile organic compound (VOC) control policy. EPA will continue to address visibility through region-specific programs, and provide technical and policy assistance to states developing regional haze implementation plans.

EPA, in concert with the Department of Justice, will continue to support litigation related to the Clean Air Interstate Rule (CAIR), and will implement the CAIR Federal Implementation Plan (FIP). These two actions will ensure that the CAIR reductions occur in the timeframe required to support: attainment of the PM_{2.5}; ozone NAAQS; and assessment of particle pollution, ozone and the transport of particle pollution. Additionally, the CAIR Federal Implementation Plan will provide support to states and Tribes in developing control strategies for attaining and maintaining the PM_{2.5} NAAQS and the 8-hour ozone NAAQS and improvement of PM_{2.5} measurement methods.

EPA will continue to assist state, local and Tribal agencies in implementing national programs and assessing their effectiveness. EPA uses a broad suite of analytical tools such as source characterization analyses, emission factors and inventories, statistical analyses, source apportionment techniques, quality assurance protocols and audits, improved source testing and monitoring techniques, augmented cost/benefit tools to assess control strategies, including voluntary measures, and urban and regional-scale numerical grid air quality models (<http://www.epa.gov/ttn/>). EPA will enhance these tools by developing and applying integrated multiple pollutant emissions inventory and air quality modeling platforms to provide the technical underpinnings for more efficient and comprehensive air quality management. In addition, EPA will continue to implement the National Ambient Air Monitoring Strategy to initiate co-located multiple pollutant monitors to support the development and evaluation of multiple pollutant air management strategies. EPA will also work closely with the Centers for Disease and Control (CDC) to expand accountability efforts by working with public health agencies to assess more broadly the progress of air regulations on public health outcomes.

EPA will also continue to assist other Federal agencies and state and local governments in implementing the conformity regulations during this period. The regulations require Federal agencies taking actions in nonattainment and maintenance areas to determine that the emissions caused by their actions will conform to the SIP.

EPA will continue to strengthen its leadership by addressing transboundary air pollution. EPA will continue to participate in negotiations under international treaties (e.g., US-Canada, Convention on Long Range Transboundary Air Pollution, Stockholm Convention on Persistent Organic Pollutants (POPs)) and to lead and participate in partnerships (e.g., the Global Mercury Programme partnerships) to address fine particles, ozone, mercury, and POPs; assess trends and impact on US air quality using sophisticated models; and build capacity to reduce transboundary air pollution in key regions and countries of the world (e.g., India, China, Mexico).

EPA will continue to improve and automate associated data and technology exchange/transfer. EPA will complete the modification of the Air Quality System (AQS) to reflect new ambient monitoring regulations and to ensure that it complies with programmatic needs and EPA's architecture and data standard requirements. The AQS Data Mart will continue to provide access to the scientific community and others to obtain air quality data via the internet. (<http://epa.gov/ttn/airs/airsaqs>) EPA will complete the design and development of the new emissions inventory system. After testing, tuning and training, the system will be operational in mid-2009. This will allow EPA and its stakeholders access to needed information more efficiently.

EPA will continue to focus on the timely issuance of renewal permits and to respond to petitions under the Title V operating permits program. EPA also will continue to address monitoring issues in underlying Federal and state rules. EPA will also take appropriate action to more broadly improve the Title V program by implementing recommendations from the Clean Air Act Advisory Committee's Task Force on Title V program performance. (<http://www.epa.gov/air/oaqps/permits/>)

EPA will continue its New Source Review reform efforts by finalizing rules currently under development. EPA will review and respond to the 2006 National Academy of Sciences (NAS) report evaluating the 2002 NSR reform rules. EPA will continue to work with states to implement revisions to the Prevention of Significant Deterioration requirements and NSR rules and will work to complete updates to delegation agreements (for delegated states) and review for approval implementation plan revisions (for SIP-approved states). EPA will also continue to review and respond to reconsideration requests and (working with DOJ) legal challenges related to NSR rule revisions, and to take any actions necessary to respond to court decisions. EPA will continue to work with industries on VOC measurement issues.

The NAAQS Federal program, PARTed in 2005, received a rating of "adequate." EPA is working to implement improvements within current statutory limitations that address deficiencies in design and implementation and identify and evaluate needed improvements that are beyond current statutory authority. The Air Quality Grants and Permitting Program, also PARTed in 2005, received a rating of "ineffective." EPA has updated current grant allocation processes to ensure resources are properly targeted, and developed measures of program efficiency.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percent reduction in population-weighted ambient concentration of fine particulate matter (PM-2.5) in all monitored counties from 2003 baseline.	Data Available 2007	2	3	4	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percent reduction in population-weighted ambient concentration of ozone in monitored counties from 2003 baseline.	Data Available 2007	5	6	8	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of major NSR permits issued within one year of receiving a complete permit application.	Data Available 2007	70	75	78	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of new Title V operating permits issued within 18 months of receiving a complete permit application.	Data Available 2007	83	87	91	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of significant Title V operating permit revisions issued	Data Available 2007	91	94	97	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	within 18 months of receiving a complete permit application.					

EPA, collaborating with the states, will continue implementing Federal measures and assisting with the development of clean air plans to move the remaining PM2.5 nonattainment areas into attainment by 2015.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$3,499.4) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$998.0) This reduction reflects anticipated efficiency gains from efforts to streamline the SIP review and NAAQS development processes.
- (-\$15.0) This reduction reflects an Agency-wide effort to reduce international travel.
- (-\$62.0) This reduction reflects savings from improvements to the Agency's small administrative IT systems.
- (-8.3 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align regional resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CAA (42 U.S.C. 7401-7661f).

Federal Support for Air Toxics Program

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$24,332.1	\$25,513.7	\$24,711.0	(\$802.7)
Science & Technology	\$2,029.6	\$2,264.7	\$2,252.0	(\$12.7)
Total Budget Authority / Obligations	\$26,361.7	\$27,778.4	\$26,963.0	(\$815.4)
Total Workyears	140.5	144.2	141.8	-2.4

Program Project Description:

Federal support for the air toxics programs includes non-financial support by EPA headquarters and Regional offices to state, Tribal and local air pollution control agencies and communities for: modeling, inventories, monitoring, assessments, strategy and program development; community-based toxics programs. EPA also provides support for voluntary programs including those that reduce inhalation risk and those that reduce deposition to water bodies and ecosystems; international cooperation to reduce transboundary and intercontinental air toxic pollution; National Emissions Inventory development and updates; Great Waters; the development of risk assessment methodologies for the toxic air pollutants; and Persistent Bioaccumulate Toxics (PBT) activities; and, training for air pollution professionals. In addition, it includes activities for implementation of Federal air toxics standards and the triennial National Air Toxics Assessments.

FY 2008 Activities and Performance Plan:

By FY 2008, EPA will have completed the 2005 National Emissions Inventory (NEI), which can be used by EPA, states, and others to analyze the public health risks from air toxics, and develop strategies to manage that risk. The 2005 NEI will be a more truly multi-pollutant inventory integrating criteria pollutants and HAP data. For more information visit: (<http://www.epa.gov/ttn/chief/net/index.html>)

In addition to meeting CAA requirements, EPA will build on its multi-pollutant and sector pilot efforts to take advantage of opportunities to increase hazardous air pollutant emissions reductions in conjunction with criteria air pollutant control programs and strategies.

To aid the Agency in characterizing risk, EPA will continue to work with state and local agencies, via the National Air Monitoring Steering Committee, to implement the National Air Toxics Monitoring Network. The network has two main parts: the National Air Toxics Trends Sites (NATTS), and Local Scale Monitoring (LSM) projects. The NATTS, designed to capture the impacts of widespread pollutants, is comprised of 22 permanent monitoring sites with 8 additional sites being added in FY2007. The LSMs are comprised of scores of short-term

monitoring projects, each designed to address specific local issues. More community scale monitoring projects will be initiated in FY 2008. Information on air toxics monitoring is available at: <http://www.epa.gov/ttn/amtic/airtoxpg.html>.

In addition to meeting CAA requirements, EPA will build on its multi-pollutant and sector pilot efforts to take advantage of opportunities to increase hazardous air pollutant emissions reductions in conjunction with criteria air pollutant control programs and strategies. Additionally, EPA will continue to improve both ambient and source air toxics measurement/monitoring methods.

EPA will provide information to states and communities through case examples, documents, websites, and workshops on tools to help them in conducting assessments and identifying risk reduction strategies for air toxics. This will allow State, local and Tribal governments, industry, public interest groups, and local citizens to work together to determine if actions are needed, and if so, what should be done.

Based on recommendations from EPA's PBT Monitoring Steering Committee, ambient mercury models will be improved to support understanding of changes in ambient concentrations and deposition rates because of changes in mercury emission rates. There will be improvements in both multi-scale and multimedia modeling. The multi-scale monitoring will enable assessment of near-field potential for elevated concentrations associated with both major and minor point sources. Re-emittance of mercury through soil, vegetation and water is believed to be an important factor affecting the mercury cycle; however, it is currently poorly characterized in atmospheric models. We will develop a true multimedia modeling framework that links air quality models with watershed/water surface models.

EPA will continue its efforts under the Air-Water Interface Work Plan to address and prevent adverse effects of atmospheric deposition to waterbodies, including coastal waters. For more information visit: <http://www.epa.gov/oar/oaqps/gr8water/>. These efforts involve the development and support of multi-media approaches to reduce risk and achieve water quality standards. Up-to-date information regarding multimedia work will be provided to state, local and Tribal agencies and other organizations.

The Air Toxics program, re-assessed by OMB in 2004 through the PART process, received a rating of "adequate." EPA is working on improving monitoring systems to fill data gaps and get a better assessment of actual population exposure to toxic air pollution.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percentage reduction in tons of toxicity-weighted (for noncancer risk) emissions of air toxics from 1993 baseline.	Data Available 2009	58	59	59	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics from 1993 baseline.	Data Available 2009	34	35	35	Percentage

Performance targets for reduction of toxicity weighted emissions also are supported by work under the Federal Stationary Source Regulations program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,206.4) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$10.0) This reduction reflects an Agency-wide effort to reduce international travel.
- (-\$2,000.0) This reflects a reduction to lower priority training activities and work related to Concentrated Animal Feeding Operations (CAFO's). The agency will meet its obligations outlined in the AFO Consent Agreement and Final Order.
- (+\$1.0) Change due to rounding in the FY 2008 President's Budget.
- (-2.4 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CAA (42 U.S.C. 7401-7661f).

Radiation: Protection

Program Area: Air Toxics and Quality
 Goal: Clean Air and Global Climate Change
 Objective(s): Radiation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$11,301.6</i>	<i>\$10,648.6</i>	<i>\$10,186.0</i>	<i>(\$462.6)</i>
Science & Technology	\$2,311.9	\$2,054.3	\$2,120.0	\$65.7
Hazardous Substance Superfund	\$1,938.3	\$2,323.3	\$2,373.0	\$49.7
Total Budget Authority / Obligations	\$15,551.8	\$15,026.2	\$14,679.0	(\$347.2)
Total Workyears	95.7	96.6	88.6	-8.0

Program Project Description:

The Radiation Protection Program includes activities that minimize public radiation exposure. EPA provides oversight of operations at the Waste Isolation Pilot Plant (WIPP) and is responsible for development of environmental standards applicable to Yucca Mountain. EPA also sets protective limits on radioactive air emissions and ensures that the Agency has appropriate methods to manage radioactive releases and exposures. EPA works with other Federal agencies, states, Tribes, and industry to develop and use training, public information, and voluntary programs to reduce public exposure to radiation.¹ Other EPA approaches include radiation clean-up and waste management guidance, radiation pollution prevention, and guidance on radiation protection standards and practices to Federal agencies.

EPA conducts radiation risk assessments and provides the technical tools and the scientific basis for generating radionuclide-specific risk coefficients. Risk managers use this information to assess health risks from radiation exposure and to determine appropriate levels for contaminated site clean-up. This information is also utilized by EPA to develop radiation protection and risk management policy, guidance, and rulemakings.

FY 2008 Activities and Performance Plan:

EPA will continue certifying that all radioactive waste shipped by the Department of Energy (DOE) to the Waste Isolation Pilot Plant (WIPP) is permanently and safely disposed of, consistent with EPA standards², by conducting inspections of waste generator facilities and evaluating DOE's compliance with applicable environmental laws and regulations every 5 years.

EPA will continue protecting people and the environment from harmful and avoidable exposure to radiation by providing information about radiation and hazards from radioactive materials. EPA, in partnership with other Federal agencies, will continue to promote the management of radiation risks in a consistent and safe manner at water treatment facilities, and during cleanups

¹ Additional information at: <http://www.epa.gov/radiation/assessment/index.html> last accessed 1/5/2007.

² Additional information at: <http://www.epa.gov/radiation/WIPP/> last accessed 1/5/2007.

at Superfund, DOE, Department of Defense (DOD), state, local and other Federal sites. EPA will continue to conduct risk assessments on radiation, including radon, and provide technical tools.

By 2008, EPA will have evaluated and proposed revisions to its cancer risk models and projections based on *Biological Effects of Ionizing Radiation (BEIR) VII* recommendations which will be submitted to the Science Advisory Board (SAB). The Agency will draft a report that presents the scientific basis of our understanding of radiation-induced health effects and revised methods for calculating radiogenic cancer risks. This draft report will be submitted to the SAB for formal review by FY 2008. Also, during FY 2008, EPA will begin to examine what impact the proposed changes might have on risk estimates for specific radionuclides as contained in Federal Guidance Report-13 and to assess possible policy implications. EPA will continue to provide national guidance on the risks posed by radiation in the environment, including technical guidance for conducting and documenting risk assessments.

Performance Targets:

EPA is on track through its ongoing work to meet its 2011 strategic plan goal of protecting public health and the environment from unwanted releases of EPA regulated radioactive pollutants and to minimize impacts to public health from radiation exposure. The Agency is developing new outcome-oriented strategic and annual performance measures for this program in preparation for a 2007 PART assessment. The program will have new performance measures to report in FY 2009. EPA will continue to track progress on routine program indicators such as preparedness and response capability for radiological incidents.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$4.1) This reflects a realignment of travel funds.
- (-\$466.7) This decrease is the net effect of increases for payroll and cost of living increases for existing FTE combined with a reduction based on the recalculation of base workforce costs.
- (-8.0 FTE) This reduces support for lower priority activities associated with radiation exposure. This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out of this program's goals. This reduces activities associated with radiation exposure such as removal of radioactive sources from recycled or manufactured material.

Statutory Authority:

AEA of 1954, as amended, 42 U.S.C 2011 et seq. (1970), and Reorganization Plan #3 of 1970; CAA Amendments of 1990; CERCLA, as amended by the SARA of 1986; Energy Policy Act of 1992, P.L. 102-486; Executive Order 12241 of September 1980, National Contingency Plan, 3 CFR, 1980; NWP Act of 1982; PHSA, as amended, 42 U.S.C 201 et seq.; SDWA; UMTRCA of 1978; WIPP Land Withdrawal Act.

Radiation: Response Preparedness
Program Area: Air Toxics and Quality
Goal: Clean Air and Global Climate Change
Objective(s): Radiation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$2,374.4	\$2,688.7	\$2,928.0	\$239.3
Science & Technology	\$3,263.4	\$3,585.9	\$3,721.0	\$135.1
Total Budget Authority / Obligations	\$5,637.8	\$6,274.6	\$6,649.0	\$374.4
Total Workyears	41.5	42.3	42.3	0.0

Program Project Description:

EPA generates policy guidance and procedures for EPA radiological response under the National Response Plan (NRP). EPA is a member of the Federal Radiological Preparedness Coordinating Committee (FRPCC), supports the federal Advisory Team for Environment, Food, and Health (the “A-Team”) and also maintains its own Radiological Emergency Response Team (RERT). EPA responds to radiological emergencies, conducts national and regional radiological response planning and training and develops response plans for radiological incidents or accidents.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA’s RERT, a component of the Agency’s emergency response structure, will maintain its preparedness for those radiological incidents for which EPA is the Coordinating Agency under the NRP and also will be prepared to fulfill its requirement under the Nuclear/Radiological Incident Annex to the NRP. EPA also will continue to develop and maintain Protective Action Guides (PAGs) for use by Federal, state, and local responders. EPA will provide training on the use of the PAGs to users through workshops and radiological emergency response exercises. EPA will design training and exercises to enhance the RERT’s ability to fulfill EPA responsibilities;¹ as well as analyze them for improvements needed for overall radiation response preparedness.

EPA will continue to coordinate with its interagency partners under the FRPCC to revise Federal radiation emergency response plans, develop radiological emergency response standard approaches. The Agency also will develop guidance for coordination of EPA support with other Federal and state response agencies.

In addition, EPA will continue to participate in planning, and implementing international and Federal table-top and field exercises including radiological anti-terrorism activities, with the Nuclear Regulatory Commission (NRC), Department of Energy (DOE), Department of Defense (DOD) and Department of Homeland Security (DHS). EPA also will continue to train state, local and Federal officials and provide technical support to federal and state radiation, emergency

¹ Additional information can be accessed at: <http://www.epa.gov/radiation/rert/> last accessed 1/8/2007.

management, solid waste, and health programs that are responsible for radiological emergency response and for development of their own preparedness programs.

Performance Targets:

EPA is developing new outcome-oriented performance measures for this program in preparation for a 2007 PART assessment. The program will have new performance information to report in FY 2009. EPA will continue to track progress on routine program indicators such as preparedness and response capability for radiological incidents.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$238.6) This increase is the net effect of increases for payroll and cost of living increases for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (+\$0.7) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Atomic Energy Act of 1954, as amended, 42 U.S.C 2011 et seq. (1970), and Reorganization Plan #3 of 1970; CAA Amendments of 1990; CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA); Executive Order 12241 of September 1980, National Contingency Plan, 3 CFR, 1980; Executive Order 12656 of November 1988, Assignment of Emergency Preparedness Responsibilities, 3 CFR, 1988; PHSA, as amended, 42 U.S.C 201 et seq.; Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, 42 U.S.C 5121 et seq.; SDWA.

Stratospheric Ozone: Domestic Programs

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Protect the Ozone Layer

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$5,560.8	\$5,221.4	\$4,489.0	(\$732.4)
Total Budget Authority / Obligations	\$5,560.8	\$5,221.4	\$4,489.0	(\$732.4)
Total Workyears	27.1	27.1	23.8	-3.3

Program Project Description:

The stratospheric ozone layer protects life on earth by preventing harmful UV radiation from reaching the earth's surface. Scientific evidence amassed over the past 25 years has shown that Ozone Depleting Substances (ODSs) used around the world are destroying the stratospheric ozone layer.¹ Increased levels of UV radiation due to ozone depletion may raise the incidence of skin cancer, cataracts, and other illnesses.² Skin cancer is the most common type of cancer and accounts for more than 50 percent of all cancers in adults.³ Increased UV levels have also been associated with other human and non-human risks, including immune suppression and effects on aquatic ecosystems and agricultural crops.

EPA estimates that in the United States alone, the worldwide phaseout of ODS will avoid 299 million cases of non-fatal skin cancers and 27.5 million cases of cataracts between 1990 and 2165.⁴ This estimate is based on the assumption that international ODS phaseout targets will be achieved, allowing the ozone layer to begin recovery by the middle of this century. According to current atmospheric research, the ozone layer is not expected to recover until the mid-21st century at the earliest, due to the very long lifetimes of ODS.⁵

EPA's Domestic Stratospheric Ozone Protection Program will implement the provisions of the Clean Air Act Amendments of 1990 (the Act) and the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), which will lead to the reduction and control of ODS in the U.S. and lower health risks to the American public due to exposure to UV radiation. The Act provides for a phaseout of production and consumption of ODS and requires controls on various products containing ODS. As a signatory to the Montreal Protocol, the U.S. also is committed to regulating and enforcing its terms domestically.

¹ World Meteorological Organization (WMO). "Scientific Assessment of Ozone Depletion: 2002." WMO: Geneva, Switzerland. February 2003.

² World Health Organization. "Solar Radiation and Human Health: Fact Sheet No. 227." August 1999. Accessed December 30, 2003. Available on the Internet at: www.who.int/inf-fs/en/fact227.html.

³ American Cancer Society. "What are the Key Statistics for Melanoma?" Accessed December 30, 2003. Available on the Internet at: www.cancer.org/docroot/CRI/CRI_0.asp.

⁴ U.S. Environmental Protection Agency (EPA). The Benefits and Costs of the Clean Air Act 1990-2010: EPA Report to Congress. EPA: Washington, DC. November 1999.

⁵ WMO, February 2003.

FY 2008 Activities and Performance Plan:

In carrying out the requirements of the Act and the Montreal Protocol in FY 2008, EPA will continue to implement the domestic rulemaking agenda for reduction and control of ODS and will provide compliance assistance and enforce rules controlling their production, import, and emission.

In FY 2008, EPA will focus its work to both assure that currently required caps on production and import are met, as well as on approving the use of alternatives to ODS to assist the market's transition to safer, non-ozone depleting alternatives.

Pollution prevention is an important element in achieving the ozone protection objective. The National Emission Reduction Program will require recovery and recycling or reclamation of ODSs, primarily in the air-conditioning and refrigeration sectors. Also, under the Significant New Alternatives Policy (SNAP), EPA will review newly developed alternatives to ODS and, if necessary, will restrict use of alternatives for a given application that are more harmful to human health and the environment on an overall basis. In addition, EPA will work with Federal and international agencies to curb illegal imports of ODS and ensure a smooth transition to non-ozone depleting alternatives in various sectors.

In 2004, OMB assessed the Stratospheric Ozone program through the PART process, and rated it as "adequate." The assessment found that the program has a clear purpose, addresses a specific need, is free of major flaws, and is effectively targeted. Investments in this program will help to assure that it continues to meet existing performance goals and continues work on performance measures and targets to track intermediate outcomes by measuring "thickness" of the ozone layer in the atmosphere.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Remaining US Consumption of HCFCs in tons of Ozone Depleting Potential (ODP).	Data Available 2008	<9,900	<9,900	<9,900	ODP MTs

- Annual performance goals are set to meet Clean Air Act requirements for the quantities and timing of phasing out the production and import of ozone depleting substances. The basis of comparison for assessing the program is the domestic consumption cap of class II HCFCs as set by the Parties to the Montreal Protocol. Each ozone depleting substance (ODS) is weighted based on the damage it does to stratospheric ozone -- this is the ozone depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8 percent of the domestic ODP-weighted consumption of CFCs in 1989 plus the ODP-weighted level of HCFCs in 1989. Consumption equals production plus import minus export.

- The next incremental reduction in production and import of class II HCFCs that the U.S. is required to meet is no more than 5334 MT starting in 2010. Further incremental reductions are required through 2020, until all ODS production and import is phased out except for exempted amounts.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$292.0, -3.3 FTE) This reduction eliminates funding for the SunWise program. This program provided awareness of health risks from UV radiation and sun safety behaviors are broadly accepted by the scientific community, public and private sectors.
- (-\$429.2) This decrease is the net effect of increases for payroll and cost of living increases for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-\$11.2) This is part of an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

CAA Amendments of 1990, Title I, Parts A and D (42U.S.C. 7401-7434, 7501-7515), Title V (42 U.S.C. 7661-7661 f), and Title VI (42 U.S.C. 7671-7671q); The Montreal Protocol on Substances that Deplete the Ozone Layer.

Stratospheric Ozone: Multilateral Fund

Program Area: Air Toxics and Quality

Goal: Clean Air and Global Climate Change

Objective(s): Protect the Ozone Layer

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$8,534.7	\$13,365.0	\$9,865.0	(\$3,500.0)
Total Budget Authority / Obligations	\$8,534.7	\$13,365.0	\$9,865.0	(\$3,500.0)
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The stratospheric ozone layer protects life on earth by preventing harmful UV radiation from reaching the earth's surface. Scientific evidence amassed over the past 25 years has show that Ozone Depleting Substances (ODS) used around the world are destroying the stratospheric ozone layer. Increased levels of UV radiation are due to ozone depletion and may increase incidence of health effects such as skin cancer, cataracts and other illnesses.

Under the *Montreal Protocol on Substances that Deplete the Ozone Layer*, the U.S. and other developed countries contribute to the Multilateral Fund to support projects and activities that eliminate the production and use of ozone depleting substances (ODS) in developing countries. Currently, the United States and 189 other countries are Parties to the Montreal Protocol. The United States has affirmed its commitment to this international treaty and to demonstrating world leadership by phasing out domestic production of ODS, as well as helping other countries find suitable alternatives.

EPA estimates that, in the United States alone, the worldwide phaseout of ODS will save 6.3 million lives from fatal cases of skin cancer, and will avoid 299 million cases of non-fatal skin cancers and 27.5 million cases of cataracts between 1990 and 2165. This estimate is based on the assumption that international ODS phaseout targets will be achieved, allowing the ozone layer to begin recovery by the middle of the century. In addition, the Multilateral Fund has reached long-term agreements to dismantle developing country CFC and halon production capacity to eliminate production of 119,648 metric tons.

FY 2008 Activities and Performance Plan:

EPA's contributions to the Multilateral Fund in FY 2008 will help the Multilateral Fund continue to support cost-effective projects that are designed to build capacity and eliminate ODS production and consumption in over 60 developing countries. Today the Multilateral Fund continues to support over 5,150 activities in 139 countries, and when fully implemented, will prevent annual emissions of more than 223,729 metric tons of ODS. Over 80% of already agreed project activities have been implemented to date, with remaining work in these already agreed projects expected to be fully implemented by 2009. Additional projects will be

considered and approved in accordance with Multilateral Fund guidelines to address the remaining 9,155 metric tonnes of ODSs (weighted by their potential to damage the ozone layer) for which there are not yet projects to assist in meeting developing country obligations under the Montreal Protocol.

In 2004, OMB assessed the Stratospheric Ozone program through the PART process, and rated it as “adequate.” The assessment found that the program has a clear purpose, addresses a specific need, is free of major flaws, and is effectively targeted. The assessment included a specific recommendation for continued support of the Multilateral Fund for the Implementation of the Montreal Protocol.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Remaining US Consumption of HCFCs in tons of Ozone Depleting Potential (ODP).	Data Available 2008	<9,900	<9,900	<9,900	ODP MTs

- Performance targets for ozone layer protection are also supported by work under Stratospheric Ozone: Domestic Programs.
- Annual performance goals are set to meet Clean Air Act requirements for the quantities and timing of phasing out the production and import of ozone depleting substances. The base of comparison for assessing the program is the domestic consumption cap of class II HCFCs as set by the Parties to the Montreal Protocol. Each ozone depleting substance (ODS) is weighted based on the damage it does to the stratospheric ozone -- this is the ozone depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8 percent of the domestic ODP-weighted consumption of CFCs in 1989 plus the ODP-weighted level of HCFCs in 1989. Consumption equals production plus import minus export.
- The next incremental reduction in production and import of class II HCFCs that the U.S. is required to meet is no more than 5334 MT starting in 2010. Further incremental reductions are required through 2020, until all ODS production and import is phased out except for exempted amounts.
- Long term performance goals are set to reflect environmental response to actions to reduce consumption of ozone depleting substances. Meeting the long term performance goal of reduced levels of effective equivalent stratospheric chlorine requires successful action not only by the U.S. and other developed countries, but by all developing nations worldwide.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$3,500.0) This reduction reflects the Multilateral Fund's achievement of implementing 80% of their project activities with remaining work expected to be fully implemented by 2009.

Statutory Authority:

CAA Amendments of 1990, Title 1, Parts A and D (42 U.S.C. 7401-7434, 7501-7515), Title V (42 U.S.C. 7661-7661f), and Title VI (42 U.S.C. 7671-7671q); The Montreal Protocol on Substances that Deplete the Ozone Layer.

Program Area: Brownfields

Brownfields

Program Area: Brownfields

Goal: Healthy Communities and Ecosystems

Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$21,848.2	\$24,637.3	\$23,450.0	(\$1,187.3)
Total Budget Authority / Obligations	\$21,848.2	\$24,637.3	\$23,450.0	(\$1,187.3)
Total Workyears	117.9	121.3	127.9	6.6

Program Project Description:

The Brownfields program is designed to help states, Tribes, local communities and other stakeholders in economic redevelopment to work together to assess, safely cleanup, and reuse brownfields. Revitalizing these once productive properties helps communities by removing blight, satisfying the growing demand for land, helping limit urban sprawl, fostering ecologic habitat enhancements, enabling economic development, and maintaining or improving quality of life. EPA's Brownfields program funds research efforts, clarifies liability issues, enters into Federal, state, and local partnerships, conducts outreach activities, and creates related job training and workforce development programs. EPA's work is focused on removing barriers and creating incentives for brownfield redevelopment. The program provides financial assistance for: 1) hazardous substances training for organizations representing the interests of states and Tribal co-implementers of the Brownfields law; and 2) Tribal technical outreach support to address environmental justice issues and support Brownfields research.

The Smart Growth program works with stakeholders to create an improved economic and institutional climate for Brownfields redevelopment. The Smart Growth program removes barriers and creates incentives for Brownfields redevelopment by changing development standards that affect the viability of Brownfields redevelopment; and creating cross-cutting solutions that improve the economic, regulatory and institutional climate for Brownfields redevelopment.

FY 2008 Activities and Performance Plan:

In addition to supporting the operations and management of the Brownfields program, funds requested will provide financial assistance for training on hazardous waste to organizations representing the interests of state and Tribal co-implementers of the Brownfields law: the Small Business Liability Relief and Brownfields Revitalization Act (SBLRBRA). The program also offers outreach support for environmental justice issues involving Tribal and native Alaskan villages or other disadvantaged communities that need to address perceived or real hazardous substance contamination at sites in their neighborhood or community. EPA also will provide technical assistance to communities that were awarded funding to combine smart growth policies with Brownfields redevelopment. EPA also will conduct further research on incentives for

cleanup that encourage Brownfields redevelopment, pilot additional techniques to accomplish redevelopment within communities, identify new policy and research needs, and create examples and best practices that can be copied in other communities.

The Smart Growth program will continue to address critical issues for Brownfield redevelopment including land assembly, development permitting issues, financing, parking and street standards, accountability to uniform systems of information for land use controls, and other factors that influence the economic viability of Brownfields redevelopment.

Performance Targets:

Performance goals and measures for the Brownfields EPM program are currently a component of the overall Brownfields Program measures. As a result, the Brownfields Projects program also contributes to the achievement of these performance measures and the Brownfields Categorical Grant program contributes to the achievement of the “properties assessed” measure. This also contributes to EPA efforts to assess and clean up Brownfields, as described in EPA’s 2006-2011 Strategic Plan.

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (+\$1,747.8) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$2,917.6) This reflects a reduction in Headquarters expenses including contract support and cooperative agreements.
- (+\$70.0) This increase provides funds for program evaluations in Brownfields.
- (-\$73.4) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to program travel expenses in Headquarters and the Regions.
- (-\$14.1) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+6.6 FTE) This change reflects EPA’s workforce management strategy that will help the Agency better align resources, skills, and Agency priorities. The change reflects an increase in administrative and programmatic support to implement the Brownfields program, including support for grantee project oversight, state coordination efforts, and outreach activities.

Statutory Authority:

CERCLA as amended by SBLRBRA (Public Law 107-118); RCRA, Section 8001; GMRA (1990); SWDA; FFGCAA.

Program Area: Climate Protection Program

Climate Protection Program

Program Area: Climate Protection Program

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air; Reduce Greenhouse Gas Intensity

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$83,693.9	\$91,843.3	\$87,927.0	(\$3,916.3)
Science & Technology	\$19,650.5	\$12,549.6	\$13,104.0	\$554.4
Total Budget Authority / Obligations	\$103,344.4	\$104,392.9	\$101,031.0	(\$3,361.9)
Total Workyears	210.9	214.1	212.5	-1.6

Program Project Description:

The core of EPA's climate change efforts are voluntary government/industry partnership programs designed to capitalize on the opportunities that consumers, businesses, and organizations have for making sound investments in efficient equipment, policies, and practices. Energy efficiency saves fuel and leads to reduction in emission from power plants.

EPA manages a number of efforts, such as the ENERGY STAR programs, clean energy partnerships, and transportation efficiency programs, to remove barriers in the marketplace and to deploy technology faster. EPA programs do not provide financial subsidies. Instead, they work by overcoming widely acknowledged barriers to energy efficiency: lack of clear, reliable information on technology opportunities; lack of awareness of energy efficient products, services, and transportation choices; and low incentives for manufacturers to invest in efficiency research and development. (For more information visit: www.epa.gov/energystar.html and www.epa.gov/smartway)

EPA also manages the continued implementation of the Methane to Markets Partnership – a U.S. led international initiative that promotes cost-effective, near-term methane recovery and use as a clean energy source. The Partnership has the potential to deliver, by 2015, annual reductions in methane emissions of up to 500 billion cubic feet (Bcf) of natural gas. Methane to Markets builds on the success of EPA's domestic methane voluntary programs by creating an international forum that will achieve its goals through collaboration among developing countries, developed countries, and countries with economies in transition- together with strong participation from the private sector, development banks, and other governmental and non-governmental organizations. (For more information visit: www.epa.gov/methanetomarkets/)

EPA's Climate Protection Program has encouraged the reduction of carbon dioxide (CO₂) and other greenhouse gases such as methane and perfluorocarbons (PFCs). EPA's climate change programs promote the use of energy efficient equipment. Since energy efficient equipment often has a working life of decades or more, consumer purchases of energy efficient equipment -- that are made today -- will continue to deliver environmental and economic benefits for many years to come. For every dollar spent by EPA on its technology deployment programs, EPA estimates

that the programs have reduced greenhouse gas emissions by up to 1.0 metric ton of carbon equivalent (3.67 tons of CO₂) and delivered nearly \$75 in energy bill savings.¹ This is based upon cumulative reductions since 1995.

EPA's international activities lead to greater information and technical capacity available for developing and industrialized countries to implement emissions reductions policies and climate protection programs. Most recently, the United States and EPA has partnered with Australia, China, India, Japan and South Korea to form the Asia - Pacific Partnership on Clean Development and Climate Change. This partnership will focus on voluntary practical measures taken by these six countries in the Asia-Pacific region to create new investment opportunities, build local capacity, and remove barriers to the introduction of clean, more efficient technologies. This partnership also will help each country meet nationally designed strategies for improving energy security, reducing pollution, and addressing the long-term challenge of climate change. EPA is an active participant in this Partnership and the agency's 2008 funding for this effort is \$5 million. The total 2008 funding for the Partnership government-wide is \$52 million.

FY 2008 Activities and Performance Plan:

OMB assessed the Climate Change Program in 2004 through the PART process, and gave it a rating of "adequate." There are over 20 climate change programs which work with the private sector to cost effectively reduce greenhouse gas emissions and facilitate energy efficiency improvements. Each sector (buildings, industry and transportation) has performance and efficiency measures to track the amount of greenhouse gas emissions that are reduced as a result of the program's efforts.

EPA will continue to implement its government/industry partnership efforts to achieve greenhouse gas reductions and contribute to the President's goal to reduce greenhouse gas intensity by 18 percent in 2012. In FY 2008, EPA's climate change programs are projected to:

- Reduce other forms of pollution, including air pollutants such as nitrogen oxides (NO_x), particulate matter, and mercury.
- Continue the ENERGY STAR program across the residential, commercial, and industrial sectors.
- Continue the SmartWay Transport Partnership to increase energy efficiency and lower emissions of freight transportation by helping to increase the market penetration of diesel engine retrofits, anti-idling technologies, lower rolling resistant tires, improved aerodynamic truck designs, improved freight logistics, and by partnering with international partners like Canada and Mexico, especially at border crossings.

¹ Climate Protection Partnerships Division, U.S. Environmental Protection Agency. 2004. Protecting the Environment-- Together, ENERGY STAR and Other Voluntary Programs, 2003 Annual Report.

- Work to promote renewable fuel blends with the greatest environmental benefit in order to maximize the potential of these fuels to reduce greenhouse gas intensity and improve air quality.
- Continue the extension of the Methane-to-Markets Partnership by assessing the feasibility of methane recovery and use projects at landfills, coal mines, and natural gas and oil facilities and by identifying and addressing institutional, legal, regulatory and other barriers to project development in partner countries.
- Continue assistance to developing countries and countries with economies-in-transition to reduce emissions of greenhouse gases through cost-effective measures and assist in the fulfillment of the U.S. obligations under the U.N. Framework Convention on Climate Change (UNFCCC) to facilitate technology transfer to developing countries.
- Produce measurable international greenhouse gas emission reductions through clean industrialization partnerships with key developing countries.
- Continue to actively support the government-wide Asia-Pacific Partnership on Clean Development to assist the Asia-Pacific region in developing country-specific strategies to improve energy security and reduce pollution. EPA will also work with the Asia-Pacific region to develop and deploy new and emerging technologies and tailor programs, such as methane capture and use, to meet the specific conditions of each area.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the buildings sector.	Data Available 2007	26.5	29.4	32	MMTCE

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the industry sector.	Data Available 2007	58	62.6	68	MMCTE

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Million metric tons of carbon equivalent (mmtce) of greenhouse	Data Available 2007	1.2	1.6	1.5	MMTCE

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	gas reductions in the transportation sector.					

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Tons of greenhouse gas emissions (mmtce) prevented per societal dollar in the transportation sector.	Data Available 2007	0.15	No FY07 Target	FY 2010	Dollars

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Tons of greenhouse gas emissions (mmtce) prevented per societal dollar in the industry sector.	Data Available 2007	3.1	No FY07 Target	FY 2010	Dollars

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Tons of greenhouse gas emissions (mmtce) prevented per societal dollar in the building sector.	Data Available 2007	0.7	No FY07 Target	FY 2010	Dollars

The program has reevaluated the baseline and targets for the transportation sector. Projected reductions have been adjusted to reflect the improved accounting. The agency tracks progress for the efficiency measures listed in the table above every four years. There are no performance targets for FY 2007 and FY 2008. The next report date for these measures is FY 2010.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$2,117.0) This reflects a reduction in Federal investment in the ENERGY STAR program due to public and private industry adoption of these programs
- (-\$2,000.0) This reduction eliminates the Best Workplaces for Commuters (BWC) program; there are several well-established commuter benefits programs in States and cities. This decrease a phase-out of some of the federal activities that is duplicative of efforts of States and cities

- (-\$600.0) Reduces funding for lower priority activities in the transportation sector.
- (-\$83.4) This decrease reflects the net changes to all other Climate Change programs, such as Industrial Carbon, Climate Leaders, and International Capacity Building.
- (+\$895.1) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$4.0) This reduction reflects savings from improvements to the Agency's small administrative IT Systems.
- (-\$7.0) This reduction reflects an Agency-wide effort to reduce international travel.
- (-1.6 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

Clean Air Act Amendments, 42 U.S.C. 7401 et seq. – Sections 102, 103, 104 and 108; Pollution Prevention Act, 42 U.S.C. 13101 et seq. – Sections 6602, 6603, 6604 and 6605; National Environmental Policy Act, 42 U.S.C. 4321 et seq. – Section 102; Global Climate Protection Act, 15 U.S.C. 2901 – Section 1103; Federal Technology Transfer Act, 15 U.S.C. – Section 3701a; Clean Water Act, 33 U.S.C. 1251 et seq. – Section 104; Solid Waste Disposal Act, 42 U.S.C. 6901 et seq.- Section 8001; Energy Policy Act, 42 U.S.C. 16104 et seq.

Program Area: Compliance

Compliance Assistance and Centers

Program Area: Compliance

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$27,774.3	\$28,890.7	\$29,547.0	\$656.3
Leaking Underground Storage Tanks	\$481.3	\$839.1	\$688.0	(\$151.1)
Oil Spill Response	\$257.8	\$280.2	\$291.0	\$10.8
Hazardous Substance Superfund	\$11.0	\$22.2	\$22.0	(\$0.2)
Total Budget Authority / Obligations	\$28,524.4	\$30,032.2	\$30,548.0	\$515.8
Total Workyears	197.9	212.1	208.4	-3.7

Program Project Description:

EPA's Compliance Assistance program includes a range of activities and tools designed to improve compliance with environmental laws. Regulated entities, Federal agencies and the public benefit from easy access to tools that help them understand these laws and find efficient, cost-effective means for putting them into practice.

To achieve these goals, the Compliance Assistance and Centers (CAC) program provides information, training and technical assistance to the regulated community to increase its understanding of statutory and regulatory environmental requirements, thereby gaining improvements in compliance and reducing risks to human health and the environment. The program also provides tools such as plain-language guides, interactive virtual compliance assistance centers and an on-line clearinghouse, training, and assistance to other compliance assistance providers. The program provides international enforcement and compliance training, promotes environmental "good governance," and promotes positive approaches to trade and environment. Activities are measured and reported using the Integrated Compliance Information System (ICIS). For more information, refer to: www.epa.gov/compliance/assistance/index.html, www.epa.gov/clearinghouse, and www.assistancecenters.net.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to provide general and targeted compliance assistance to the regulated community and integrate assistance into its enforcement and compliance assurance efforts. In partnership with trade associations and other assistance providers, the Agency will continue to support the CACs including the new Education Center to be created in FY 2007. These Centers are a key component of EPA's efforts to help small and medium-sized businesses and governments understand and comply with Federal environmental requirements. The 15 existing centers and the National Environmental Compliance Assistance Clearinghouse provide one-stop shopping through integration with the "Business Gateway" e-government initiative. The Business Gateway targets sectors of the regulated community and the public for regulatory

environmental and technical assistance, pollution prevention activities, and resources suited to the individual sector.

The Federal Facility Enforcement program will continue to provide technical guidance to other Federal agencies on compliance with applicable Executive Orders and environmental laws. In FY 2008, EPA will also continue working with other Federal agencies to support the Federal Facilities Stewardship and Compliance Assistance Center (www.fedcenter.gov). Also in FY 2008, the Agency will also carry out the actions outlined in the Energy Policy Act of 2005 by providing compliance assistance to owners and operators of Underground Storage Tanks (UST).

The Agency will improve local and state-specific information (e.g., state regulatory requirements) available in new and existing centers. EPA will also continue to integrate the centers and clearinghouse with the “Business Gateway” Initiative. In FY 2008, EPA will continue refining data elements to ensure accurate reporting into the Integrated Compliance Information System (ICIS), and build the Agency’s capacity to measure compliance assistance outcomes.

The program will continue to assist foreign industries (especially those along the United States border) who do business in the United States to comply with statutory and regulatory environmental requirements, and promote effective enforcement programs in foreign countries. This will strengthen environmental protection and level the economic playing field in a global trading system.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency’s Strategic Plan.

Performance Targets:

EPA measures the environmental results of our compliance assistance program by tracking the percentage of regulated entities that report improvements in environmental management practices and pollutant reductions resulting from direct EPA compliance assistance. EPA's Compliance Assistance program achieves pollutant reductions, improves regulated entities’ environmental management practices, and increases regulated entities understanding of environmental requirements, through direct compliance assistance provided by EPA personnel and through on-line CACs and the clearinghouse.

Through compliance assistance in FY 2006, EPA increased the understanding of regulated entities, improved environmental management practices (EMPs), and reduced pollution. Eighty-two percent of Compliance Assistance Center survey respondents reported improved EMPs.

Seventy-four percent of the regulated entities receiving direct compliance assistance reported improved EMPs. Fifty-five percent of regulated entities reported that they reduced, treated, or eliminated pollution as a result of using CACs and the Clearinghouse.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-2.5 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-0.5 FTE) The Agency proposes to shift a portion of an FTE from Prevention of Significant Deterioration (PSD) permit review of new sources and New Source Performance Standards (NSPS) applicability determinations to the enforcement of Maximum Achievable Control Technology Emission Standards (MACT) standards in the under the Clean Air Act.
- (-\$74.9) This decrease reflects a reduction to contractor support funds to the overall Compliance Assistance program.
- (-\$23.9) This decrease will reduce funding to the Agency's Fed Center, a Federal Facilities Environmental Stewardship and Compliance Assistance Center established to integrate and share all available information, tools, and expertise in one centralized location to assist federal facilities in complying with environmental laws, regulations, permits and Executive Orders.
- (+\$755.1) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

RCRA; CWA; SDWA; CAA; TSCA; EPCRA; RLBPRA; FIFRA; ODA; NEPA; CERCLA; NAAEC; LPA-US/MX-BR; EPAAct.

Compliance Incentives

Program Area: Compliance

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$8,338.9	\$9,702.2	\$9,786.0	\$83.8
Hazardous Substance Superfund	\$156.5	\$142.7	\$144.0	\$1.3
Total Budget Authority / Obligations	\$8,495.4	\$9,844.9	\$9,930.0	\$85.1
Total Workyears	68.3	76.6	74.6	-2.0

Program Project Description:

EPA's Compliance Incentives program (CIP) encourages regulated entities to monitor and quickly correct environmental violations, reduce pollution, and make improvements in regulated entities' environmental management practices. In addition, EPA uses a variety of approaches to encourage corporate self-disclosures of environmental violations under various environmental statutes. EPA's Audit Policy encourages corporate audits of environmental compliance and subsequent correction of self-discovered violations, providing a uniform enforcement response toward disclosures of violations. Under the Audit Policy, when companies voluntarily discover and promptly correct environmental violations, EPA may waive or substantially reduce civil penalties.¹

FY 2008 Activities and Performance Plan:

The Agency's Enforcement program will continue to implement the Audit/Self-Policing (Audit), Small Business Compliance, and Small Local Governments policies as core elements of the Enforcement and Compliance Assurance Program. Since FY 2001, over 5,000 facilities resolved violations under EPA's Voluntary Disclosure Policies. In FY 2008, the Agency will continue to expand use of the Audit Policy through aggressive outreach to industries. Several examples of the EPA's sector-specific efforts include refrigerated warehouses, colleges and universities, and healthcare facilities. EPA actively encourages disclosures at multiple facilities owned by the same regulated entity, because such disclosures allow each entity to review their operations holistically, which more effectively benefits the environment.

In FY 2008, the CIP will continue to promote Environmental Management Systems (EMSs). EMSs provide organizations with an approach to minimizing environmental impacts – regulated and unregulated – by integrating environmental concerns into business decisions and practices. EPA will continue to implement the National Environmental Performance Track (NEPT) program, which is a program that recognizes and motivates top-performing facilities that

¹ For more information refer to: www.epa.gov/compliance/incentives/programs/index.html.

consistently meet their legal requirements, have implemented EMS, and made tangible improvements to their environmental performance.

In FY 2008, the Agency will support and encourage states' efforts to adopt the innovative Environmental Results Program (ERP). ERP consists of four linked tools – compliance assistance, self-evaluation and certification, inspections, and performance measurement – that work together to hold facility owners and operators accountable for their environmental obligations. In Massachusetts, where ERP began, the program improved performance for small businesses and also resulted in savings for businesses, while allowing the state and EPA to focus resources on higher priority environmental problems.

EPA tracks compliance incentive environmental results in the Integrated Compliance Information System (ICIS) to enable the Agency to make strategic decisions for the best utilization of resources and tools, and to respond to increasing demands for compliance and environmental information. EPA will continue to make multi-media compliance incentives results information available to the public through the Enforcement and Compliance History On-line (ECHO) internet website during FY 2008. This site provides communities with compliance status and averages 65,000 queries per month.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review EPA, is beginning to transition the Enforcement and Compliance Assurance Program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Pounds of pollutants reduced, treated, or eliminated, as a result of audit agreements.	0.05	0.4	0.4	0.4	Million Pounds

One of the key Civil Enforcement PART program measures, pounds of pollutants reduced through audit agreements, looks at the overall reduction in pollution as a result of EPA Compliance Incentive programs². The Agency is exploring methodologies to strengthen this measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-2.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$5.1) This reflects a small decrease to resources used to provide incentives for regulated entities to comply with the environmental laws.
- (+\$88.9) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

RCRA; CWA; SDWA; CAA; TSCA; EPCRA; RLBHRA; FIFRA; ODA; NEPA; NAAEC;
LPA-US/MX-BR.

Compliance Monitoring

Program Area: Compliance

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$86,635.1</i>	<i>\$93,018.8</i>	<i>\$93,428.0</i>	<i>\$409.2</i>
Hazardous Substance Superfund	\$914.4	\$1,144.1	\$1,182.0	\$37.9
Total Budget Authority / Obligations	\$87,549.5	\$94,162.9	\$94,610.0	\$447.1
Total Workyears	614.4	632.0	629.5	-2.5

Program Project Description:

The Compliance Monitoring program reviews and evaluates the activities of the regulated community to determine compliance with applicable laws, regulations, permit conditions, and settlement agreements by conducting compliance inspections/evaluations, investigations, record reviews, and information requests, and by responding to tips and complaints from the public. The program conducts these activities to determine whether conditions that exist may present imminent and substantial endangerment to human health or the environment and to verify whether regulated sites are in compliance with environmental laws and regulations. EPA's Compliance Monitoring program includes the management of compliance and enforcement data and data systems, and the use of that data to manage the compliance and enforcement program.¹

In addition, as a part of this program, the Agency reviews and responds to 100 percent of the notices for movement of hazardous waste across U.S. international borders. The Agency ensures that these wastes are properly handled in accordance with international agreements and Resource Conservation and Recovery Act regulations.²

EPA conducts compliance monitoring activities, as well as coordinating with and providing support to state and Tribal partners that conduct compliance inspections/evaluations and investigations either under state or Tribal authorized programs or EPA statutory authority. EPA's activities target areas that pose risks to human health or the environment, display patterns of noncompliance, or involve disproportionately exposed populations. EPA's efforts complement state and Tribal programs to ensure compliance with laws throughout the United States. EPA works with states and tribes to identify where these compliance inspections, evaluations and investigations will have the greatest impact on achieving environmental results.

FY 2008 Activities and Performance Plan:

In 2008, Compliance Monitoring program activities will focus on the national program priorities selected in FY 2006 for the FY 2008-FY 2010 cycle. The program will also emphasize the core

¹ For more information, refer to: www.epa.gov/compliance/monitoring/index.html.

² For more information about the Import/Export program, refer to:
www.epa.gov/compliance/international/importexport.html.

programs identified in the Enforcement and Compliance Assurance's FY 2008-2010 National Program Guidance as well as on supporting and overseeing authorized state/Tribal programs.³

To ensure the quality of these compliance inspections/evaluations/investigations, EPA identifies and provides needed training. The training program ensures that the inspectors/investigators are: 1) knowledgeable of environmental requirements and policies, 2) technically proficient in conducting the compliance inspections/evaluations and taking samples, and 3) skilled at interviewing potential witnesses and documenting inspections/evaluations results. Compliance monitoring activities also include the management and use of compliance and enforcement data. The Agency implemented the modernized Permit Compliance System (PCS) in June 2006 for direct-user states. The Integrated Compliance Information System (ICIS) – National Pollutant Discharge Elimination System (NPDES), or modernized PCS, will improve the ability of EPA and the states to manage the Clean Water Act NPDES program. During the summer of 2006, thirty direct user states, tribes and territories began using ICIS-NPDES. The Modernized PCS for the states that provide their data through a batch system will continue in phases beginning with the planned development of an initial pilot phase for Monitoring Reports (DMR) in FY 2007, with planned implementation in FY 2008. Additional states that batch their DMRs are planned to be integrated in FY 2008 along with electronic DMRs from facilities. The final phase will be the release for the remaining states that will batch all of their data to ICIS-NPDES via the Exchange Network. Final phases of ICIS to include Air Facility System (AFS) Modernization are scheduled to be implemented by the end of FY 2011.

EPA will continue to make multi-media compliance monitoring information available to the public through the Enforcement and Compliance History On-line (ECHO) Internet website during FY 2008. This site provides communities with compliance status, averaging about 65,000 queries per month.

EPA will continue to review all notices for trans-boundary movement of hazardous waste. While the vast majority of the hazardous waste trade occurs with Canada, the United States also has international trade agreements with Mexico, Malaysia, Costa Rica and the Philippines; and is a member of the Organization for Economic Cooperation and Development (OECD) which issued a Council Decision controlling trans-boundary movement of hazardous waste applicable to all member countries. In 2005, EPA responded to 1,032 notices (representing 402 import notices and 630 export notices).

In FY 2008, the Agency also will implement the Energy Policy Act of 2005 by inspecting Underground Storage Tanks (UST) at sites not inspected since December 31, 1998, covering a wide range of industries including gas stations, chemical companies, and federal facilities. The program also will focus on monitoring compliance with gasoline rules.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other

³ For more information, refer to: www.epa.gov/ocfopage/npmguidance/index.htm.

measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. (civil enf)	890	450	500	550	million pounds

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of concluded enforcement cases requiring that pollution be reduced, treated, or eliminated.	Data Available FY 2008	30	30	30	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of concluded enforcement cases requiring implementation of improved environmental management practices.	82	65	70	70	Percentage

EPA's Monitoring and Enforcement program achieves pollutant reductions, and improvements in regulated entities environmental management practices through the settlement of enforcement cases. One of the key Civil Enforcement PART program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions⁴. The Agency is exploring methodologies to extend the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

Although the estimated pollution reductions, resulting from enforcement actions taken by EPA have grown over the past five years, these pollutant reductions are projections based on the

⁴ With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

settlement agreements entered during each specific fiscal year. One or two cases can have a significant effect on the end-of-year results.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-1.3 FTE) This decrease reflects the consolidation of a training function that will be moved into the National Enforcement Training Institute (NETI) located in the enforcement training program.
- (-0.2 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities.
- (-1.0 FTE) This decrease reflects a redirection to the Civil Enforcement program. The reduction will not adversely impact the Compliance Monitoring program because the Agency expects Pennsylvania and Delaware to assume primacy of the NPDES pretreatment program, reducing the need for compliance FTE.
- (-\$300.0) This decrease will reduce funding for the ICIS-NPDES modernization efforts. This reduction will extend implementation of the capability for the electronic reporting of CWA NPDES program Discharge Monitoring Report (DMR) data from the NPDES regulated facility to ICIS-NPDES. The capability for electronic reporting of CWA NPDES program DMR data in ICIS-NPDES will be delayed a year.
- (-\$232.5) This decrease reduces funding for Compliance Monitoring activities, including civil investigations.
- (-\$46.2) The enforcement program has invested a significant amount of effort to re-host the Integrated Data Enforcement Analysis (IDEA) system on a less costly mainframe platform, which the program expects will allow reductions in the cost of IDEA operations.
- (-\$39.7) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$5.0) This reduction reflects an Agencywide effort to reduce travel, including international travel.
- (+\$125.0) This increase provides funds for program evaluations of the effectiveness of the Office of Enforcement and Compliance Assurance's State Review Framework in all 50 states and five territories.
- (+\$907.6) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

RCRA; CWA; SDWA; CAA; TSCA; EPCRA; RLBPHRA; FIFRA; ODA; NEPA; NAAEC; LPA-US/MX-BR; EPAAct.

Program Area: Enforcement

Civil Enforcement

Program Area: Enforcement

Goal: Land Preservation and Restoration

Objective(s): Restore Land

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$118,560.9</i>	<i>\$120,777.7</i>	<i>\$126,645.0</i>	<i>\$5,867.3</i>
Oil Spill Response	\$1,759.1	\$1,826.3	\$2,065.0	\$238.7
Hazardous Substance Superfund	\$785.4	\$883.0	\$884.0	\$1.0
Total Budget Authority / Obligations	\$121,105.4	\$123,487.0	\$129,594.0	\$6,107.0
Total Workyears	936.4	958.5	969.1	10.6

Program Project Description:

The Civil Enforcement program's overarching goal is to protect human health and the environment, targeting enforcement actions according to degree of health and environmental risk. The program works with the Department of Justice to ensure consistent and fair enforcement of all environmental laws and regulations. The program seeks to level the economic playing field by ensuring that violators do not realize an economic benefit from noncompliance, and to deter future violations. The civil enforcement program develops, litigates, and settles administrative and civil judicial cases against serious violators of environmental laws.¹

EPA's national enforcement and compliance assurance program is responsible for maximizing compliance with 12 environmental statutes, 28 distinct programs under those statutes, and dozens of regulatory requirements under those programs (referred to as the "core program") which apply in various combinations to a universe of 40 million regulated entities. In addition, as a means for focusing its mission, the enforcement program identifies, in three-year cycles, specific environmental risks and noncompliance patterns as national priorities. The enforcement program coordinates with states, Tribes, and within EPA, as well as soliciting public comment, to establish these priorities.

To conduct the work necessary for the 28 programs and the national priorities, the enforcement program utilizes four primary tools: compliance assistance information to prevent violations; compliance incentives for motivating self-audits by facilities/companies; compliance monitoring to identify violations; and enforcement actions to correct violations. In addition to EPA's direct role in utilizing these tools, the enforcement program is responsible for oversight of state

¹ For more information visit: www.epa.gov/compliance/civil/index.html;
www.epa.gov/epaoswer/hazwaste/ca/backgnd.htm.

performance and ensuring that the national environmental laws are enforced in a consistent, equitable manner that protects public health and the environment.

FY 2008 Activities and Performance Plan:

In FY 2008, the Agency will continue to implement its core Civil Enforcement program, as well as the national compliance and enforcement priorities established in FY 2007 for 2008-2010. These priorities will build on the priorities established in FY 2005 for the years 2005-2007, including Clean Water Act (CWA) “Wet Weather” discharges (water contamination resulting from sewer overflows, contaminated stormwater runoff, and runoff from concentrated animal feeding operations); violations of the Clean Air Act (CAA)/New Source Review/Prevention of Significant Deterioration (NSR/PSD) and Air Toxics statutes and regulations; Resource Conservation and Recovery Act (RCRA) violations at Mineral Processing facilities; and violations of RCRA/SDWA/TSCA/Financial Responsibility requirements.

The program also will focus FY 2008 resources on trans-boundary pollutants, including international transport of hazardous waste and illegal imports by multi-state industrial violators. The Federal Facilities Enforcement program will continue to expeditiously pursue enforcement actions at Federal facilities where significant violations are discovered. The Civil Enforcement program also will support the Environmental Justice program by focusing enforcement actions on industries that have repeatedly violated environmental laws in disproportionately affected communities, including minority and/or low-income areas. Also in FY 2008, the Integrated Compliance Information System (ICIS) will continue to support the civil enforcement program by ensuring the security and integrity of environmental compliance data, and build the Agency’s capacity to measure civil enforcement outcomes.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency’s Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. (civil enf)	890	450	500	550	Million pounds

EPA's Monitoring and Enforcement Program achieves pollutant reductions and improvements in regulated entities' environmental management practices through the settlement of enforcement cases. There are many programs evaluated under the Civil Enforcement PART assessment. These programs include Compliance Assistance, Compliance Incentives, Compliance Monitoring, Civil Enforcement, Enforcement Training, Forensics, Superfund Enforcement, and categorical grant programs for toxic substances and sectors. One of the key Civil Enforcement PART program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions². The Agency is exploring methodologies to strengthen the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

Although the estimated pollution reductions as a result of the enforcement actions taken by EPA have grown over the past five years, they are projections made from future pollution reduction based on the settlement agreements entered during each specific fiscal year and one or two cases can have a significant affect on the end-of-year results.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-0.4 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (+2.0 FTE) This redirection of 1.0 FTE from Surface Water Protection program and 1.0 FTE from Compliance Monitoring will allow the Regional program to increase the level of effort required for National Pollutant Discharge Elimination System (NPDES) case development to address wet weather sources and reduce pollutant loads of nutrients, sediments and bacteria.
- (+3.2 FTE) This redirection from the Superfund Enforcement program is to support case development that could lead to increased number of enforcement actions, including legal support to the Emergency Planning & Community Right-To-Know Act (EPCRA) program.
- (+3.4 FTE) This increase reflects a realignment of FTE from Wetlands permit reviews, Prevention of Significant Deterioration (PSD) permit review of new sources, and Lead state program oversight to Wetlands enforcement, enforcement of Maximum Achievable Control Technology (MACT) and Lead standards.
- (+1.0 FTE) This increase reflects a realignment of FTE from compliance monitoring to civil enforcement to address non compliance in complex industrial and manufacturing sectors.

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

- (-3.0 FTE) This decrease reflects a realignment of FTE from civil enforcement to address the priority of reducing childhood lead poisoning through increased education and outreach, and increasing the number of individuals certified to engage in lead based paint activities and the numbers of state and Tribal training and certification programs.
- (+3.9 FTE) This increase reflects the realignment of FTE to be used to track Concentrated Animal Feeding Operations (CAFO) consent decrees to ensure their implementation.
- (-\$157.3) This decrease reflects a modest reduction of funding for case support activities.
- (-\$152.0 / -1.0 FTE) This reflects the consolidation of enforcement training resources that will be transferred to the National Enforcement Training Institute under the enforcement training program.
- (+\$1,753.0) These funds reflect a technical adjustment to centralized Agency support costs. There are no changes in programmatic or other levels.
- (+\$4,423.6) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

RCRA; CWA; SDWA; CAA; TSCA; EPCRA; RLBPHRA; FIFRA; ODA; NAAEC; LPA-US/MX-BR; NEPA; SBLRBRERA; CERCLA; PPA; CERFA; AEA; PPA; UMTRLWA; EPAAct.

Criminal Enforcement

Program Area: Enforcement

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$41,595.6</i>	<i>\$37,793.5</i>	<i>\$39,688.0</i>	<i>\$1,894.5</i>
Hazardous Substance Superfund	\$8,611.7	\$8,502.2	\$9,167.0	\$664.8
Total Budget Authority / Obligations	\$50,207.3	\$46,295.7	\$48,855.0	\$2,559.3
Total Workyears	270.6	270.8	268.9	-1.9

Program Project Description:

EPA's Criminal Enforcement program investigates and helps prosecute environmental violations which seriously threaten public health and the environment and which involve intentional, deliberate or criminal behavior on the part of the violator. The criminal enforcement program deters violations of environmental laws and regulations by demonstrating that the regulated community will be held accountable, through jail sentences and criminal fines, for such violations. The program serves as a warning for potential violators, enhancing aggregate compliance with laws and regulations.

The Criminal Enforcement program conducts investigations and requests that cases be prosecuted. Where appropriate, it helps secure plea agreements or sentencing conditions that will require defendants to undertake projects to improve environmental conditions or develop environmental management systems to enhance performance. The Agency is involved in all phases of the investigative process and works with other law enforcement agencies to present a highly visible and effective force in the Agency's overall enforcement strategy. Cases are referred to the Department of Justice for prosecution, with special agents serving as key witnesses in the proceedings.

The program also participates in task forces with state and local law enforcement, and provides specialized training at the Federal Law Enforcement Training Center (FLETC) in Glynco, GA. FLETC provides one of the few opportunities for state, local, and tribal environmental enforcement professionals to obtain criminal investigation training.¹

FY 2008 Activities and Performance Plan:

In FY 2008, the Criminal Enforcement program will continue implementing its strategic approach by emphasizing investigations and prosecutions of national and Regional enforcement priorities, as well as other types of "high impact" cases that affect human health, the environment, and enhance compliance and deterrence. The Criminal Enforcement program will

¹ For more information visit: <http://www.epa.gov/compliance/criminal/index.html>.

continue to enhance its collaboration and coordination with the Civil Enforcement program to ensure that the enforcement program as a whole responds to violations as effectively as possible. That is effectuated by co-locating key criminal and civil enforcement managers, establishing a more effective Regional case screening process to identify the most appropriate civil or criminal enforcement responses for a particular violation, and by taking criminal enforcement actions against long-term, or repeat significant non-compliers where appropriate. Coordination will also be facilitated by focusing on parallel proceedings and other mechanisms allowing us to use the most appropriate tools to address environmental violations and crimes.

EPA's Criminal Enforcement program is committed to fair and consistent enforcement of Federal laws and regulations as balanced with the flexibility to respond to region-specific environmental problems. Criminal enforcement has in place management oversight controls and national policies to ensure that violators in similar circumstances receive similar treatment under Federal environmental laws. Consistency is promoted by evaluating all investigations from the national perspective; overseeing all investigations to ensure compliance with national priorities; conducting regular "docket reviews" (detailed review of all open investigations in each EPA Regional office) to ensure consistency with investigatory discretion guidance and enforcement priorities, and developing, implementing, and periodically reviewing and revising policies and programs.

In FY 2008, the program will use data from the Criminal Case Reporting System made available through enhancements to be completed in FY 2007. Information associated with all closed criminal enforcement cases will be used to systematically compile a profile of criminal cases, including the extent to which the cases support Agencywide, program-specific, or Regional enforcement priorities. The profile will also describe the impact of the cases in terms of pollution released into the environment and resulting environmental harm such as the degradation of drinking water wells, human populations injured or made ill, and aquatic or animal life harmed.

In FY 2008, the program will also seek to deter environmental crime by increasing the volume and quality of leads reported to EPA by the public through the tips and complaints link. The web link was established on EPA's homepage in FY 2006.

The EPA Enforcement of Environmental Laws (Criminal) PART program received an "adequate" rating in 2004 with the addition of new outcome measures. The program created a measure implementation plan to set targets and milestones for performance measures. The program revised its Case Conclusion Data Sheet, conducted training, and issued the form to begin collecting new data for Criminal Enforcement PART measures in the field. EPA is collecting performance information for the pollution reduction performance target in 2006. The targets for the Improved Environmental Management and the Pollutant Impact measures will be developed in FY 2007 and FY 2008 respectively. During FY 2006 the program merged data from EPA's criminal and civil database to provide the information required to develop the target and baseline for the recidivism measure.

Performance Targets:

In FY 2008, the Criminal Enforcement program's Pollution Reduction measure will be reported against the baseline and target set in FY 2006, which uses an average of pollutant reduction data from three fiscal years (FY 2003-2005). The results of this measure are likely to fluctuate annually due to the specific characteristics of the enforcement cases concluded during a given fiscal year. However, long-term trend analysis of this information will help the program to identify and prioritize cases that present the most serious threats to public health and the environment.

In addition, in FY 2007 the Criminal Enforcement program will report its PART-approved measures on "improved environmental management" and "recidivism" after the targets and baselines are developed in FY 2006. The program will also develop the targets and baselines for its "pollutant impact" measure (i.e., the amount of illegal pollution released into the environment that cannot be treated, remediated or otherwise reduced) in order to begin external reporting of that measure in FY 2008. Work under this program supports the compliance and environmental stewardship objective. Currently, there are no performance measures specific to this program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$94.2) This reflects a decrease in the purchase of equipment for the criminal enforcement computer forensics program.
- (-\$25.9 / -1.5 FTE) This reflects the consolidation of enforcement training resources that will be transferred to the National Enforcement Training Institute under the enforcement training program.
- (+\$2,014.6) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

RCRA; CWA; SDWA; CAA; TSCA; EPCRA; Residential Lead-Based Paint Hazard Reduction Act (RLBPHRA); FIFRA; Ocean Dumping Act (i.e., MPRSA); Pollution Prosecution Act; Title 18 General Federal Crimes (e.g., false statements, conspiracy); Powers of Environmental Protection Agency (18 U.S.C. 3063).

Enforcement Training

Program Area: Enforcement

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$2,655.2	\$2,503.7	\$3,145.0	\$641.3
Hazardous Substance Superfund	\$568.9	\$621.9	\$840.0	\$218.1
Total Budget Authority / Obligations	\$3,224.1	\$3,125.6	\$3,985.0	\$859.4
Total Workyears	15.5	16.9	20.9	4.0

Program Project Description:

The Pollution Prosecution Act is the statutory mandate for the Agency's Enforcement Training program that provides environmental enforcement and compliance training nationwide, through EPA's National Enforcement Training Institute (NETI). The program oversees the design and delivery of core and specialized enforcement courses that sustain a well-trained workforce to carry out the Agency's enforcement and compliance goals. Courses are provided to lawyers, inspectors, civil and criminal investigators, and technical experts at all levels of government.

FY 2008 Activities and Performance Plan:

In FY 2008, NETI will develop and deliver training to address important gaps in enforcement and compliance assurance knowledge and skills identified in needs assessments and national strategic plans. The NETI advisory service will assist the Agency's enforcement experts to develop course agendas and determine the most effective methods to deliver quality training to the nation's enforcement professionals. The program funds training for states and Tribes through cooperative agreements with state/Tribal entities. NETI operates training facilities in Washington, D.C. and in Lakewood, CO.

NETI also maintains a training center on the Internet, "NETI Online," which offers targeted technical training courses and the capability to track individual training plans. "NETI Online's" clearinghouse of training information includes links to lists of course offerings, as well as tools for Agency training providers to assist with developing, managing, and evaluating the program's training.¹

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and

¹ For more information, refer to: <http://www.epa.gov/compliance/training/neti/index.html>

Compliance Assurance Program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. (civil enf)	890	450	500	550	Million pounds

One of the program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions². The Agency is exploring methodologies to strengthen the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

Although the estimated pollution reductions as a result of the enforcement actions taken by EPA have grown over the past five years, these pollutant reductions are projections based on the settlement agreements entered during each fiscal year. One or two cases can have a significant effect on the end-of-year results.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$178.1 / +3.8 FTE) This increase reflects the consolidation of a training function that is being moved from the Civil Enforcement, Compliance Monitoring, and Criminal Enforcement programs and into the National Enforcement Training Institute (NETI) located in the Enforcement Training program.
- (-1.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities.
- (-\$20.2) This reduction reduces funding to the National Enforcement Training Institute (NETI).
- (+\$483.4) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

PPA; RLBPHRA; RCRA; CWA; SDWA; CAA; TSCA; EPCRA; TSCA; FIFRA; ODA; NAAEC; LPA-US/MX-BR; NEPA.

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Environmental Justice

Program Area: Enforcement

Goal: Healthy Communities and Ecosystems

Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$4,691.5</i>	<i>\$3,859.0</i>	<i>\$3,822.0</i>	<i>(\$37.0)</i>
Hazardous Substance Superfund	\$638.6	\$756.7	\$757.0	\$0.3
Total Budget Authority / Obligations	\$5,330.1	\$4,615.7	\$4,579.0	(\$36.7)
Total Workyears	19.7	17.9	16.9	-1.0

Program Project Description:

The Environmental Justice (EJ) program addresses environmental and/or human health concerns in all communities, including minority and/or low-income communities. Research has shown that the minority segments and low-income segments of the population have been, or could be, disproportionately exposed to environmental harm and risks. Thus, EPA focuses attention on minority communities and low-income communities to ensure that EPA actions do not adversely affect these or any other communities that face critical environmental or public health issues.

The EJ program also provides education, outreach, and data to communities and facilitates the integration of environmental justice considerations into Agency programs, policies, and activities. The Agency also supports state and Tribal environmental justice programs and conducts outreach and technical assistance to states, local governments, and stakeholders on environmental justice issues.¹

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will enhance and maintain the Online Environmental Justice Geographical Information System Assessment Tool (EJGAT) to help individuals, government, industry, and organizations better identify and address environmental and public health issues that may affect them. The Environmental Justice Geographical Information System Assessment Tool provides ready access to environmental, public health, economic, and social demographic information from EPA and other government sources.

The Program will also work with other EPA offices to develop customized online tools that help the Agency integrate environmental justice considerations into its day-to-day work in an efficient and effective manner. The enforcement program has developed a tool to help ensure that enforcement and compliance activities focus on communities that need the most attention. The Environmental Justice Smart Enforcement Assessment Tool (EJSEAT) represents a methodology that uses a set of indicators to help the enforcement program identify areas that may have significant environmental and/or public health issues.

¹ For more information on the Environmental Justice program, please refer to:
www.epa.gov/compliance/environmentaljustice/index.html.

EJSEAT enhances EPA's ability to protect burdened communities, including minority communities and low-income communities, from adverse human health and environmental effects, consistent with existing environmental and civil rights laws, and their implementing regulations, as well as Executive Order 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, issued February 11, 1994). The enforcement program made environmental justice an element of each of its FY2005-2007 national priorities. This assessment tool was field-tested as part of an extensive agency review process during FY 2007 and is expected to be fully operational in FY 2008. Under EJSEAT EPA will identify, in a more consistent and analytically rigorous manner, potential disproportionately high and adversely affected areas that are referred to as "Areas with Potential Environmental Justice Concerns," to assist the enforcement program make fair and efficient resource deployment decisions, and will consistently analyze, based on demographic (i.e., race and income) information, how its enforcement actions have affected areas with minority and/or low-income populations.

In FY 2008, EPA will maintain the Environmental Justice Collaborative Problem-Solving (CPS) Cooperative Agreement Program. This grant program provides financial assistance to affected local community-based organizations that wish to engage in constructive and collaborative problem-solving. This is achieved by utilizing tools developed by EPA and others to find viable solutions for their community's environmental and/or public health concerns.

EPA will continue to manage its Environmental Justice Small Grants program, which assists community-based organizations in developing solutions to local environmental issues. The program has awarded more than 1,000 grants of up to \$20,000 each to community-based organizations, and other entities such as universities, Tribes, and schools.

In FY 2008, EPA's EJ program will continue to lead an Agency-wide effort to integrate more fully environmental justice considerations into EPA's programs and operations, including its five-year strategic planning and annual budget processes. The Agency's 2006-2011 Strategic Plan will reflect a strategic target for identifying the cumulative number of communities with potential environmental justice concerns that achieve significant measurable environmental or public health improvement through collaborative problem-solving strategies to applicable portions of the Headquarters program and Regional offices' environmental justice activities.

In FY 2008, the EJ program will continue to use alternative dispute resolution (ADR), where appropriate, as an effective means of addressing disputes by training local community organizations on its use. Through the use of ADR, the EJ program expects to reduce time and resources accompanying litigation and anticipates that decisions reached will be more efficient and favorable for all parties involved.

The EJ program will also continue to assist program offices and other environmental organizations and government agencies in the delivery of customized training to increase the capacity of their personnel to effectively address issues of environmental justice. This training includes both in-person presentations and development of online training.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

EPA will identify the cumulative number of communities with potential environmental justice concerns that achieve significant measurable environmental and/or public health improvements through collaborative problem-solving strategies.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-1.0 FTE) This decrease reflects efficiencies achieved in FY 2005 from reducing the number of National Environmental Justice Advisory Committee (NEJAC) subcommittees. Less headquarters coordination and support is required due to a fewer number of subcommittees.
- (-\$32.1) This decrease reflects a small reduction in funding for the Agency's environmental justice activities.
- (-\$4.9) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.

Statutory Authority:

Executive Order 12898; RCRA; CWA; SDWA; CAA; TSCA; EPCRA; FIFRA; NEPA; Pollution Prevention Act.

NEPA Implementation

Program Area: Enforcement

Goal: Compliance and Environmental Stewardship

Objective(s): Improve Environmental Performance through Pollution Prevention and Innovation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$12,890.2</i>	<i>\$13,787.5</i>	<i>\$14,366.0</i>	<i>\$578.5</i>
Total Budget Authority / Obligations	\$12,890.2	\$13,787.5	\$14,366.0	\$578.5
Total Workyears	106.5	104.0	104.0	0.0

Program Project Description:

As required by National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the NEPA Implementation program reviews Environmental Impact Statements (EIS) detailing the anticipated environmental impacts of proposed major Federal actions, including options for avoiding or mitigating them, and makes the comments available to the public. The program manages the Agency's official filing activity for all Federal EISs, in accordance with a Memorandum of Understanding with the Council on Environmental Quality. The program also manages the review of Environmental Impact Assessments of non-governmental activities in Antarctica, in accordance with the Antarctic Science, Tourism, and Conservation Act.

In addition, the program fosters cooperation with other Federal agencies to ensure compliance with applicable environmental statutes, promote better integration of pollution prevention and ecological risk assessment elements into their programs, and provide technical assistance in developing projects and associated environmental impacts that prevent adverse environmental impacts. The Agency targets high impact Federal program areas, such as energy/transportation-related projects and water resources projects. The program also develops policy and technical guidance on issues related to NEPA, the Endangered Species Act, the National Historic Preservation Act and relevant Executive Orders.¹

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will work with other Federal agencies to streamline and improve their NEPA processes. Work will focus on a number of key areas such as approval of on-shore and off-shore liquid natural gas facilities, coal bed methane development and other energy-related projects, nuclear power/hydro-power plant licensing/re-licensing, highway and airport expansion, military base realignment/redevelopment, flood control and port development, and management of national forests and public lands.

¹ For more information, refer to: www.epa.gov/compliance/nepa.

The NEPA Implementation program also guides EPA's own compliance with NEPA, other applicable statutes and executive orders, and related Environmental Justice requirements. Corresponding efforts include EPA-issued new source National Pollutant Discharge Elimination System (NPDES) permits in cases where a state or Tribe has not assumed responsibility for the NPDES program, off-shore oil and gas projects, Clean Water Act wastewater treatment plant grants, and special appropriation grants for wastewater, water supply and solid waste collection facilities. In FY 2008, 90% of EPA projects subject to NEPA environmental assessment (EA) or EIS requirements (e.g., water treatment facility projects and other grants, new source NPDES permits and EPA facilities) are expected to result in no significant environmental impact.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$38.9) This decrease will reduce contractor support for EIS and EA work.
- (+\$617.4) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

CAA; NEPA; ASTCA; CWA; ESA; NHPA; AHPA; FCMA; FWCA; EO 12898.

Program Area: Geographic Programs

Geographic Program: Chesapeake Bay

Program Area: Geographic Programs

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$22,292.9	\$26,397.7	\$28,768.0	\$2,370.3
Total Budget Authority / Obligations	\$22,292.9	\$26,397.7	\$28,768.0	\$2,370.3
Total Workyears	24.7	21.7	21.7	0.0

Program Project Description:

EPA's Chesapeake Bay work is based on a collaborative regional partnership formed to direct and conduct restoration of the Bay and its tidal tributaries. Partners include Maryland; Virginia; Pennsylvania; Delaware; New York; West Virginia; the District of Columbia; the Chesapeake Bay Commission, a tri-state legislative body; EPA, which represents the Federal government; and participating citizen advisory groups. Chesapeake 2000, a comprehensive and far-reaching agreement, guides restoration and protection efforts through 2010, and focuses on improving water quality. Through this agreement, the partners committed to "correcting the nutrient- and sediment- related problems in the Chesapeake Bay and its tidal tributaries sufficiently to remove the Bay and the tidal portions of the tributaries from the list of impaired waters under the Clean Water Act."

Two key measures of success in achieving improved Bay water quality to remove impairments in the Bay and its tidal tributaries are restoring submerged aquatic vegetation (SAV) and attaining the dissolved oxygen (DO) standards in the Bay's tidal waters. The Chesapeake Bay Program's (CBP's) long-term goal for SAV restoration is 185,000 acres and long-term goal for DO restoration is 100 percent attainment of DO standards in all tidal waters of the Bay. To achieve these long-term goals, Bay watershed models estimate that the Bay Program partners must reduce long-term annual nitrogen loadings by 162.4 million pounds, long-term annual phosphorus loadings by 14.36 million pounds, and long-term annual sediment loadings by 1.69 million tons from 1985 levels.

To achieve water quality standards in the Chesapeake Bay as soon as possible, the Bay Program partners must commit to increasing the current pace of restoration by fully implementing coordinated pollution reduction strategies. EPA is committed to work with our Bay Program partners to identify opportunities to reduce nutrient and sediment loads and find new economies and innovations to dramatically accelerate progress and increase the cost effectiveness of reduction strategies. The majority of the nutrient and sediment pollution entering the Bay comes from non-point sources, primarily agricultural runoff. Therefore, implementing best agricultural management practices (BMPs) to reduce nutrients and sediment is crucial to achieving Chesapeake Bay goals. Agricultural BMPs are generally the most cost effective strategy for reducing nutrients and sediment. Another key strategy to reduce non-point nitrogen, phosphorus,

and sediment loadings is restoring and protecting riparian forests that prevent sediment and nutrient pollution from entering waterways from the land. Largely through advanced wastewater treatment, the partners have achieved 82% of the point-source phosphorous reduction goal and 65% of the point-source nitrogen reduction goal. We will continue to work with other Federal agencies and states on related initiatives to protect and restore critical Bay watershed habitat and improve fisheries management.

For more information see <http://www.epa.gov/region03/chesapeake/>.

FY 2008 Activities and Performance Plan:

The CBP has shown how Federal agencies and states can work together collaboratively. The greatest success in the last five years has been the water quality initiative, which has resulted in:

- New water quality standards for the Bay and its tidal tributaries that protect living resources and are both more attainable and more valid scientifically, incorporating innovative features such as habitat zoning and adoption of area-specific submerged aquatic vegetation acreage targets;
- Adoption of nutrient and sediment allocations for all parts of the watershed, to meet the new standards, which reflect a consensus of all six basin states, the District of Columbia, and EPA;
- Tributary-specific pollution reduction and habitat restoration plans which spell out the treatment technologies, Best Management Practices (BMPs), and restoration goals for riparian forest buffers and wetlands which must be employed to achieve the allocations; and
- A common National Pollutant Discharge Elimination System (NPDES) permitting approach for all significant wastewater treatment facilities that unites both upstream and downstream states in the enforcement of the new water quality standards and allocations, including implementation of watershed permitting and nutrient trading.

To help accelerate restoration of the Bay, in FY 2008, EPA will provide additional funding to specifically address cost-effective non-point source nutrient reduction through competitive grants. With analytical help from EPA, the CBP partners will continue to emphasize implementation of the most cost-effective BMPs. Priorities for restoration efforts were established by CBP leaders in 2005. EPA and its partners are also supporting watershed projects that test the effectiveness of key nonpoint source BMPs and spur innovations such as better technology and market incentives. In order to accelerate the pace of water quality and aquatic habitat restoration, EPA and Bay area states are taking a number of steps to make the most cost-effective use of available regulatory, incentive and partnership tools, including the following key actions for FY 2008:

- Fully implement base clean water programs in the Bay.
- Support implementation of watershed permitting and nutrient trading programs.

- Accelerate Bay cleanup by focusing on the most cost-effective nutrient-sediment control and key habitat restoration strategies.
- Enhance use of monitoring, modeling and demonstration projects to target and assess the effectiveness of restoration actions.
- Strengthen accountability for implementation of restoration measures.
- Use the CBP Federal partnership for cooperative conservation to improve access to available financial and technical assistance programs, and link Federal programs to CBP's strategic priorities.

The Chesapeake Bay Program completed a PART review in 2006 and achieved a moderately effective rating. New performance measures developed for the FY 2006 PART assessments are included in the FY 2008 President's Budget. Follow-up actions in the improvement plan include investigating potential methods to characterize the uncertainty of the watershed and water quality models, developing a comprehensive implementation strategy, and promoting and tracking the most cost effective restoration activities to maximize water quality improvements

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of goal achieved for implementation of nitrogen reduction practices (expressed as progress meeting the nitrogen reduction goal of 162.5 million pounds).	44	44	47	50	Percent Goal

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of goal achieved for implementation of phosphorus reduction practices (expressed as progress meeting the phosphorus reduction goal of 14.36 million pounds).	61	61	64	66	Percent Goal

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of goal achieved for implementation of sediment reduction practices (expressed as progress meeting the sediment reduction goal of 1.69 million pounds).	57	57	61	64	Percent Goal

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of point source nitrogen reduction goal of 49.9 million pounds achieved.	65	65	70	74	Percent Goal

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of point source phosphorus reduction goal of 6.16 million pounds achieved.	82	82	84	85	Percent Goal

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of forest buffer planting goal of 10,000 miles achieved.	46	46	53	60	Percent Goal

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Total nitrogen reduction practices implementation achieved as a result of agricultural best management practices implementation per million dollars to implement agricultural BMPs.	45,928	49,113	47,031	48,134	Pounds per million \$

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$6,000.0) This decrease reflects end of one-year funding for the Corsica River project.
- (+\$8,000.0) This increase is for competitive grants for innovative, cost-effective non-point source watershed projects which reduce nutrient and/or sediment discharges to the Bay. The Federal cost share will not exceed 50%.
- (+\$368.8) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$1.5) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CWA.

Geographic Program: Great Lakes

Program Area: Geographic Programs

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$19,251.9</i>	<i>\$20,577.1</i>	<i>\$21,757.0</i>	<i>\$1,179.9</i>
Total Budget Authority / Obligations	\$19,251.9	\$20,577.1	\$21,757.0	\$1,179.9
Total Workyears	52.8	65.1	58.1	-7.0

Program Project Description:

The Great Lakes are the largest system of surface freshwater on earth, containing 20 percent of the world's surface freshwater and accounting for 84 percent of the surface freshwater in the United States. The watershed includes two nations, eight U.S. states, a Canadian province, more than 40 Tribes, and more than one-tenth of the U.S. population. The goal of the Agency's Great Lakes Program is to restore and maintain the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem. The Great Lakes Program:

- Monitors and reports annual air and water monitoring data for nutrients, toxics and biota for five lakes in partnership with other Federal, state and Canadian agencies.
- Operates the bi-national Great Lakes Integrated Atmospheric Deposition Network.
- Performs toxic reduction activities by implementing the Great Lakes Bi-national Toxics Strategy for reduced loadings of targeted pollutants in accordance with the Great Lakes Water Quality Agreement (GLWQA)¹.
- Performs demonstrations and investigations related to contaminated sediments in Great Lakes rivers and harbors.
- Protects and restores habitat to decrease loss of high quality ecological communities and rare species and increase ecosystem conditions and functions providing habitat with the necessary size, mixture, and quality to sustain native plants and animals.
- Addresses invasive species, though collaboration with partners, by emphasizing prevention of additional introductions.

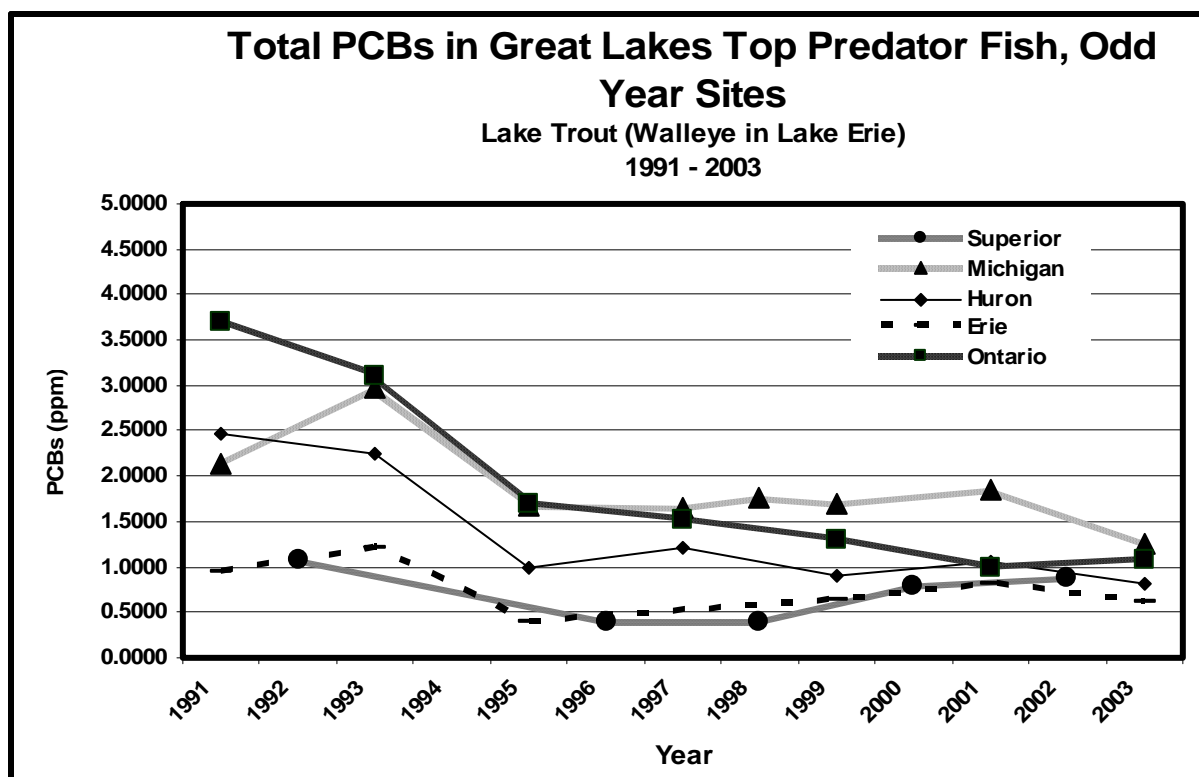
(See <http://www.epa.gov/glnpo/> for more information.)

¹ U.S. EPA Great Lakes National Program Office. April 1997. *The Great Lakes Bi-national Toxics Strategy*. Washington, DC. (<http://www.epa.gov/glnpo/p2/bns.html>)

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue efforts to protect and restore the Great Lakes, and will work with state, local, and Tribal partners, using the Great Lakes Regional Collaboration's strategy as a guide. EPA will continue working with partners to restore the chemical, physical, and biological integrity of the Great Lakes ecosystem through the core water protection programs. EPA will give priority to working with states and local communities to clean-up and de-list 8 Areas of Concern (AOCs) by calendar year (CY) 2010 and most AOCs by CY 2025. An AOC is a geographic area that fails to meet the objectives of the GLWQA where such failure has caused or is likely to cause impairment of beneficial use or of the area's ability to support aquatic life. In general, these are bays, harbors, and river mouths with damaged fish and wildlife populations, contaminated bottom sediments, and past or continuing loadings of toxic and bacterial pollutants. EPA will continue to work toward the existing Agency goals of a 25 percent reduction in PCB concentrations in lake trout and walleye (see Figure 1) and for 90 percent of monitored Great Lakes beaches to be open 95 percent of the season.

EPA will work with states, industry, Tribes, non-governmental organizations, and other stakeholders to coordinate Great Lakes monitoring, information management, pollution prevention, contaminated sediments, habitat, invasive species, lake-wide management, and remedial action plan programs to be consistent with the Great Lakes Regional Collaboration Strategic Plan. Following intensive ship- and land-based monitoring of Lakes Michigan, Superior, and Huron in CY 2005 through CY 2007, EPA will focus on similar cooperative monitoring efforts with Canada on Lake Ontario in CY 2008. Planned scientific peer reviews in CY 2007 may result in revisions of the Open Lake Trend Monitoring Program's Data Quality Objective (DQO) to reflect present day contaminant trends and the creation of a DQO for the Sport Fish Monitoring Program.



PCBs in Great Lakes Top Predator Fish²

EPA will continue to monitor the annual occurrence of high rates of oxygen depletion, which lead to low dissolved-oxygen levels in the Lake Erie “dead zone.” Despite U.S. and Canadian success in achieving total phosphorus load reductions, phosphorus in the central basin of Lake Erie has increased since the early 1990’s to levels substantially in excess of the GLWQA Objective of 10ug-P/l³. During CYs 2006 and 2007, EPA is working with the National Oceanic and Atmospheric Association (NOAA) to investigate the depleted oxygen conditions, to update models of Lake Erie’s response to nutrients, and to fill in information gaps through modeling nutrient dynamics processes. In Fiscal Year (FY) 2008, EPA will support additional modeling and will begin identification of management implications for Lake Erie restoration.

In FY 2008, EPA will continue to lead Canadian and U.S. Federal agencies and the academic community in exploring causes of the rapid decline of the *Diporeia* population in the Great Lakes. The decline may be related to invasive species. *Diporeia* are normally the predominant organism at the base of the Great Lakes food web (up to 70 percent of living biomass of a

² A sample of 50 whole fish is collected each year (x-axis). 10 sets of 5 fish are composited and averaged for the data points above. Great Lakes Fish Monitoring Program – Quality Assurance Project Plan for Sample Analysis, University of Minnesota. <http://www.epa.gov/glnpo/glindicators/fishtoxics/GLFMP%20QAPP%20v7.pdf> Great Lakes Fish Monitoring Program – Quality Assurance Project Plan for Sample Collection Activities, Great Lakes National Program Office. http://www.epa.gov/glnpo/glindicators/fishtoxics/GLFMP_QAPP_082504.pdf Quality Management Plan for the Great Lakes National Program Office. EPA905-R-02-009. October 2002, Approved April 2003. (<http://www.epa.gov/glnpo/qmp/>)

³ Great Lakes National Program Office Annual Monitoring Program - Changes in Phosphorus levels and direction over time, Great Lakes Environmental Database. (<http://www.epa.gov/grtlakes/glindicators/index.html>)

healthy lake bottom). Their decline may portend adverse affects on Great Lakes fish and fisheries.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Prevent water pollution and protect aquatic systems so that overall ecosystem health of the Great Lakes is improved (cumulative)	21.10	21	21	21	Scale

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Average concentrations of PCBs in whole lake trout and walleye samples will decline.	Data Available 2007	5	5	5	Percent Annual Decrease

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Average concentrations of toxic chemicals in the air in the Great Lakes basin will decline	8	7	7	7	Percent Annual Decrease

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Restore and delist Areas of Concern (AOCs) within the Great Lakes basin	1	2	4	2	AOC

Following long-term trends, average concentrations of PCBs in whole lake trout and walleye samples are expected to continue to decline by 5 percent annually, reflecting modest continual improvement in Great Lakes health. Also, following long-term trends, average concentrations of toxic chemicals (PCBs) in the air in the Great Lakes basin are expected to continue to decline by 7 percent annually.

Each of these performance measures reflects the results of multiple EPA base programs and other activities of organizations working to improve Great Lakes environmental conditions. The score to be reported in FY 2008 for overall ecosystem health of the Great Lakes is expected to remain constant or improve slightly from the score reported in FY 2007. Ecosystem

improvement on a scale as large as the Great Lakes is likely to be reflected in time periods greater than a year.

Forty-three AOCs have been identified: 26 located entirely within the United States; 12 located wholly within Canada; and five that are shared by both countries. Since 1987, the Great Lakes National Program Office (GLNPO) has tracked the 31 AOCs that are within the U.S. or shared with Canada. On June 19, 2006, the Oswego River, New York's AOC, became the first U.S. AOC to be officially removed from the list of U.S. AOCs. Guided by the Great Lakes Regional Collaboration goals, EPA and the Great Lakes states have renewed efforts to de-list (clean up) the U.S. AOCs.

This program has not been reviewed under the PART process.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-7.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction brings the workforce in better alignment with the requested funding level of the Great Lakes Legacy Act cleanup program, which is managed through this program. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (+\$1,447.9) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$268.6) This reduction reflects a redirection of workforce support to the Surface Water Protection program.
- (-\$0.6) This is part of an Agencywide effort to reduce travel, including international travel.
- (+\$1.2) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

1990 Great Lakes Critical Programs Act; 2002 Great Lakes and Lake Champlain Act (Great Lakes Legacy Act); CWA; Coastal Wetlands Planning, Protection, and Restoration Act of 1990; Estuaries and Clean Waters Act of 2000; North American Wetlands Conservation Act; US-Canada Agreements; WRDA; 1909 The Boundary Waters Treaty; 1978 GLWQA; 1987 GLWQA; 1987 Montreal Protocol on Ozone Depleting Substances; 1996 Habitat Agenda; 1997 Canada-U.S. Great Lakes Bi-national Toxics Strategy.

Geographic Program: Gulf of Mexico

Program Area: Geographic Programs

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$3,715.9	\$4,310.7	\$4,457.0	\$146.3
Total Budget Authority / Obligations	\$3,715.9	\$4,310.7	\$4,457.0	\$146.3
Total Workyears	12.8	14.0	14.0	0.0

Program Project Description:

EPA's efforts in the Gulf of Mexico directly support a collaborative, multi-organizational Gulf states-led partnership comprised of regional businesses and industries, agriculture, state and local governments, citizens, environmental and fishery interests, and numerous Federal departments and agencies. The Gulf of Mexico Program (<http://www.epa.gov/gmpo>) is designed to assist the Gulf states and stakeholders in developing a regional, ecosystem-based framework for restoring and protecting the Gulf of Mexico. In response to the U.S. Ocean Action Plan, thirteen Federal agencies have come together to form a Regional Partnership to provide support to the Gulf of Mexico Alliance, a partnership of the five Gulf states. The Gulf states have identified five key priority coastal and ocean issues that are regionally significant and can be effectively addressed through cooperation at the local, state, and Federal levels. The partnership will target specific Federal, state, local, and private programs and identify processes and financial authorities in order to leverage the resources needed to support the *Gulf of Mexico Governors' Action Plan*. EPA supports this partnership's efforts to effectively address the complex and pressing issues facing the Gulf of Mexico.

FY 2008 Activities and Performance Plan:

The Gulf of Mexico's environmental issues can be broadly categorized as affecting water quality, public health, nutrient reductions, and coastal restoration. Activities of the Gulf of Mexico Program and its partners include:

- Supporting efforts to achieve the 2008 target to restore 64 percent of impaired segments in the 13 priority coastal areas to achieve water and habitat quality levels that meet state water quality standards;
- Supporting projects with the goal of creating, restoring or protecting 18,200 acres of important coastal and marine habitats in the Gulf of Mexico;
- Supporting state and coastal community efforts to manage Harmful Algal Blooms (HABs) by implementing an integrated bi-national early-warning system;

- Assisting the Gulf states in reducing contamination of seafood and local beaches through efforts to establish effective microbial source tracking methods and technologies;
- Assisting in consumer awareness/educational efforts to reduce the rate of shellfish-borne *Vibrio vulnificus* illnesses caused by consumption of commercially-harvested raw or undercooked oysters;
- Supporting efforts to reduce nutrient loadings to watersheds and reduce the size of the hypoxic zone; and
- Fostering regional stewardship through Gulf Guardian Awards and outreach projects.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Improve overall health of coastal waters of the Gulf of Mexico on the "good/fair/poor" scale of the National Coastal Condition Report.	2.40	2.4	2.4	2.5	Scale

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico, as measured by the five year running average	14,944	14,128	14,128	13,500	Sq km

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of water and habitat quality restored to meet water quality standards in impaired segments in 13 priority coastal areas.				64	Percent impair segmts

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Acres of important coastal and marine habitats restored, enhanced or protected.				18,200	Acres

A major indication of improvement in the overall health of the entire Gulf of Mexico is the National Coastal Condition Report Index. The score for the Gulf of Mexico in the 2001 Report was 1.9 on a 5 point system where 1 is poor and 5 is good. The score reported in the 2005 Report improved to 2.4 for the Gulf of Mexico.

This score does not include the impact of the hypoxic zone (low oxygen) in offshore Gulf Coast waters. The National Coastal Condition score includes indicators used to calculate regional, ecosystem-wide characterizations that include all primary estuaries. The hypoxic zone is a site specific, not regional indicator of dissolved oxygen. The coast-wide extent of the hypoxic zone mapped in 2006 was 17,280 square kilometers (6,662 square miles). The low oxygen waters extended from near the Mississippi River to the Louisiana/Texas border. The long-term average since mapping began in 1985 is 13,000 KM2 (5,000 square miles). The target by 2015 is to reduce the zone to less than 5,000 KM2.

The Mississippi River Basin, which drains more than 41 percent of the continental U.S., accounts for the bulk of the nonpoint nutrient inputs to the Gulf of Mexico. Reduction in the amount of nutrients from this source is a critical management objective that requires implementation coordination among the many state and Federal partners in the Mississippi River Basin.

This program has not been reviewed under the PART process.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$146.9) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$0.5) This is part of an Agencywide effort to reduce travel, including international travel.
- (-\$0.1) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CWA.

Geographic Program: Lake Champlain

Program Area: Geographic Programs

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$3,959.0	\$933.8	\$934.0	\$0.2
Total Budget Authority / Obligations	\$3,959.0	\$933.8	\$934.0	\$0.2
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

Lake Champlain was designated a resource of national significance by the Lake Champlain Special Designation Act (Public Law 101-596) that was signed into law on November 5, 1990. A plan, "Opportunities for Action," was developed to achieve the goal of the Act, to bring together people with diverse interests in the Lake to create a comprehensive pollution prevention, control, and restoration plan for protecting the future of the Lake Champlain Basin. Efforts to protect Lake Champlain support the successful interstate, interagency, and international partnership undertaking the implementation of the Plan. "Opportunities for Action" is designed to address various threats to the Lake's water quality, including phosphorus loadings, invasive species, and toxic substances. (See <http://www.epa.gov/NE/eco/lakechamplain/index.html>, <http://www.lcbp.org>, and http://nh.water.usgs.gov/champlain_feds/ for more information.)

FY 2008 Activities and Performance Plan:

EPA works with state and local partners to protect and improve Lake Champlain Basin's water quality, fisheries, wetlands, wildlife, recreation, and cultural resources. Activities include:

- Revising the Lake Champlain Basin Management Plan to incorporate recent developments and ongoing work in the Basin;
- Monitoring population of alewives, a recent invasive species affecting Lake Champlain;
- Increasing focus on establishing and tracking ecological status and progress in Lake Champlain;
- Establishing a farmer-to-farmer outreach program designed to improve water quality in Missisquoi Bay of Lake Champlain by reducing agriculturally-based pollutants. The focus will be on improved crop management, implementing best management programs, soil testing, assistance in performing self-assessments, and other methods;
- Revamping the long-term limnological monitoring program for Lake Champlain;

- Addressing high levels of phosphorous, which encourage algal blooms in parts of the lake;
- Reducing levels of persistent toxic contaminants in the lake's sediments and fish;
- Addressing invasive, non-native aquatic plants, and animals, such as zebra mussels, milfoil, and water chestnuts, which displace native species and reduce recreational values; and
- Continuing work to understand the high seasonal concentrations of toxic cyanobacteria, particularly microcystin, in the northern reaches of Lake Champlain.

Performance Targets:

Work under this program supports EPA's Restore and Protect Critical Ecosystems objective. Currently, there are no performance measures for this specific program/project.

This program has not been reviewed under the PART process.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+0.2) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

1909 The Boundary Waters Treaty; 1990 Great Lakes Critical Programs Act; 2002 Great Lakes and Lake Champlain Act; Clean Water Act; North American Wetlands Conservation Act; U.S.-Canada Agreements; and Water Resources Development Act (WRDA).

Geographic Program: Long Island Sound

Program Area: Geographic Programs

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$946.0</i>	<i>\$466.9</i>	<i>\$467.0</i>	<i>\$0.1</i>
Total Budget Authority / Obligations	\$946.0	\$466.9	\$467.0	\$0.1
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

EPA supports the protection and restoration of Long Island Sound by assisting the states in implementing the Sound's Comprehensive Conservation and Management Plan (CCMP), approved in September 1994 under Section 320 of the Clean Water Act as amended.

The CCMP was developed under the Long Island Sound Study (LISS) bi-state Management Conference. The LISS is sponsored by EPA and the states of Connecticut and New York, and involves regional water pollution control agencies, scientific researchers, user groups, environmental organizations, industry, and other interested organizations and individuals. The LISS CCMP identified six critical environmental problem areas that require sustained coordinated action to address: the effects of hypoxia on the ecosystem, including living marine resources; the impacts of toxic contamination in the food web and living resources; pathogen pollution; floatable debris deposition; the impacts of habitat degradation and loss on the health of living resources; and the effects of land use and development on the Sound. The CCMP also identifies public education, information, and participation as priority action items in protecting and restoring the Sound.

The states of New York and Connecticut are active in reducing nitrogen through their Trading programs. In 2005, 51 facilities in Connecticut purchased approximately \$2.5 million of credits; sold by 28 facilities. Capital savings in construction costs avoided from this Nitrogen Credit Exchange Program is estimated to be more than \$200 million.

(See <http://www.longislandsoundstudy.net> and <http://www.epa.gov/region01/eco/lis> for further information.)

FY 2008 Activities and Performance Plan:

EPA will continue to oversee implementation of the LISS CCMP in 2008 by coordinating the cleanup and restoration actions of the LISS Management Conference as authorized under Sections 119 and 320 of the Clean Water Act as amended. EPA's efforts will focus in the following six primary areas: nitrogen reduction; watershed protection; water quality monitoring;

habitat restoration, protection and stewardship; scientific research; and public information and education.

- Nitrogen reduction from point and nonpoint sources of pollution is expected to reduce the area of the Sound that is seasonally impaired as habitat for fish and shellfish because of low dissolved oxygen levels, a condition called hypoxia. In FY 2008, a key new performance measure was added to track progress against nitrogen reduction goals.
- Monitoring of water quality, including environmental indicators such as dissolved oxygen levels, temperature, salinity, and water clarity, and biological indicators such as chlorophyll *a*, will assess environmental conditions that may contribute to impaired water quality.
- Habitat restoration and protection will improve the productivity of tidal wetlands, intertidal zones, and other key habitats that have been adversely affected by unplanned development, overuse, or land use related pollution effects.
- Watershed protection and nonpoint source pollution controls will help reduce the effects of runoff pollution on rivers and streams discharging to the Sound, and restoration and protection efforts will increase streamside buffer zones as natural filters of pollutants and runoff.
- Stewardship of ecologically and biologically significant areas, and identification and management of recreationally important areas, will assist in developing compatible public access and uses of Sound resources.
- Results from focused scientific research into the causes and effects of pollution on the Sound's living marine resources, ecosystems, water quality and human uses will assist managers and public decision-makers to develop policies and strategies to address environmental, social, and human health impacts.
- Targeted environmental education and public information will inform the public and decision-makers on progress in restoring and protecting the Sound and the status of environmental and other indicators of ecosystem health.

This program was included in OMB's PART assessment, Ocean, Coastal, and Estuary Protection, completed in 2005 and was rated "adequate".

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Reduce point source nitrogen discharges to LIS.				8303	Lbs/day

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Acres of coastal habitat, including tidal wetlands, dunes, riparian buffers, and freshwater wetlands restored or protected.				50	Acres

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Additional miles of river and stream corridor reopened to anadromous fish passage through removal of dams and barriers or installation of by-pass structures such as fishways.				8.3	Miles

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$0.1) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Long Island Sound Restoration Act, P.L. 106-457 as amended by P.L. 109-137; 33 U.S.C. 1269.

Geographic Program: Other

Program Area: Geographic Programs

Goal: Healthy Communities and Ecosystems

Objective(s): Communities; Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$8,181.6	\$9,050.0	\$8,575.0	(\$475.0)
Total Budget Authority / Obligations	\$8,181.6	\$9,050.0	\$8,575.0	(\$475.0)
Total Workyears	4.4	12.4	12.4	0.0

Program Project Description:

EPA targets efforts to protect and restore various communities and ecosystems impacted by environmental problems. Under this program, the Agency works with communities to develop and implement community-based approaches to mitigate diffuse sources of pollution and cumulative risk for four geographic programs: South Florida; Northwest Forest; Lake Pontchartrain Basin Restoration; Puget Sound; and Community Action for a Renewed Environment (CARE). The Agency also fosters community efforts to build consensus and mobilize local resources to target highest risks.

The South Florida Program leads special initiatives and planning activities in the South Florida region, which includes the Everglades and Florida Keys coral reef ecosystem. Implementing, coordinating, and facilitating activities include the Section 404 Wetlands Protection Program of the Clean Water Act, Comprehensive Everglades Restoration Program (CERP), Water Quality Protection Program for the Florida Keys National Marine Sanctuary (FKNMS), the Southeast Florida Coral Reef Initiative (SEFCRI) as directed by the U.S. Coral Reef Task Force, the Brownfields Program, and other programs.

The Northwest (NW) Forest Program implements a collaborative planning and management framework that supports interagency management agreement and joint funding for watershed assessment, planning, protection, and restoration efforts. The NW aquatic and watershed monitoring effort contributes to aquatic and riparian monitoring under the NW Forest Plan and the Pacific NW Aquatic Monitoring Partnership. These two efforts contribute to the achievement of national examples of watershed scale aquatic monitoring and collaborative monitoring across Federal, Tribal, state, and private lands.

The Lake Pontchartrain Basin Restoration Program strives to restore the ecological health of the Basin by developing and funding restoration projects. It also supports related scientific and public education projects.

The Puget Sound program is a critical ecosystem to be restored and protected. EPA efforts are focused on the Basin's highest priority environmental problems: air and water quality.

The Community Action for a Renewed Environment (CARE) is a community-based, multi-media program designed to help local communities address the cumulative risk of toxics exposure. Through the CARE program, EPA provides technical support for communities, helps them use collaborative processes to select and implement local actions, and awards Federal funding for projects to reduce exposure to toxic pollutants. Much of the risk reduction comes through the application of over 25 EPA voluntary programs from across the Agency. Communities can tap a range of efforts designed to address community concerns such as Diesel Retrofits, Brownfields, National Estuary Program, Design for Environment, Environmental Justice Revitalization Projects, Tools for Schools, and Regional Geographic Initiatives, improving their effectiveness by working to integrate them to better meet the needs of communities.

FY 2008 Activities and Performance Plan:

South Florida - In conducting special initiatives and planning activities, the South Florida Program will:

- Assist with coordinating and facilitating the ongoing implementation of the Water Quality Protection Program for the FKNMS, including management of long-term status and trends monitoring projects (water quality, coral reef, and seagrass) and the associated data management program.
- Conduct studies to determine cause and effect relationships among pollutants and biological resources, implement wastewater and storm water master plans, and provide public education and outreach activities.
- Provide monetary and/or technical/managerial support for priority environmental projects and programs in South Florida, including:
 - Southeast Florida Coral Reef Initiative;
 - Water Quality Protection Strategy for the South Florida Ecosystem;
 - Integrated Mercury Study; and
 - REMAP Monitoring Program (assess ecosystem characteristics and conditions throughout the Everglades ecosystem).
- Implement the Wetlands Conservation, Permitting, and Mitigation Strategy.
- Support collaborative efforts through interagency workgroups/committees/task forces, including South Florida Ecosystem Restoration Task Force Working Group, Florida Bay Program Management Committee, U.S. Army Corps of Engineers Review Study Team for the Central and Southern Florida Project, Central and South Florida Restudy Science Coordination Team, and South Florida Urban Initiative.
- Assist with development of Total Maximum Daily Loads (TMDLs) for South Florida.

New strategic targets are proposed for the South Florida Program in the 2006-2011 Strategic Plan. The new strategic targets address important environmental markers such as stony coral

cover, health and functionality of seagrass beds, and water quality in the FKNMS and the general water quality in the Everglades ecosystem.

Northwest Forest - Federal, state, and Tribal partners implement shared responsibilities for the Aquatic Monitoring Strategy, including broad scale monitoring indicators, protocols, and a design framework. In addition, the NW Forest Program will:

- Implement an intensive effectiveness monitoring network in 3 to 5 basins in Oregon and Washington.
- Develop shared data standards and data sharing network/tools (state, Tribal, and Federal).
- Complete watershed condition/trend monitoring in 25 to 30 watersheds in California, Oregon, and Washington.

Lake Pontchartrain – The program will work to restore the ecological health of the Lake Pontchartrain Basin by:

- Completing plans and studies as identified in the Lake Pontchartrain Basin Program Comprehensive Management Plan (LPBCMP) which supports the following goals:
 - Planning and design of consolidated wastewater treatment systems, which support the Agency's Sustainable Infrastructure goal;
 - Repair and replacement studies to improve existing wastewater systems; and
 - Design of storm water management systems.
- Conducting outreach and public education projects that address the goals of the LPBCMP, such as:
 - Improving the management of animal waste lagoons by educating and assisting the agricultural community on lagoon maintenance techniques; and
 - Protecting and restoring critical habitats and encouraging sustainable growth by providing information and guidance on habitat protection and green development techniques.

Puget Sound Basin – In FY 2008, EPA will provide an additional \$1 million to improve water quality, air quality, and minimize the adverse impacts of rapid development in the Puget Sound Basin the program will:

- Improve water quality and enable lifting of harvest restrictions in shellfish beds.
- Remediate contaminated sediments.
- Restore seasonally-influenced estuarine wetlands.

CARE

Through the CARE program, EPA provides technical support for communities, helps them use collaborative processes to select and implement local actions, and awards Federal funding for projects to reduce exposure to toxic pollutants. CARE uses two sets of cooperative agreements. In the smaller Level I agreements, the community, working with EPA, creates a collaborative

problem-solving group made up of the various stakeholders in the community. That group assesses the community's toxic exposure problems and begins to identify potential solutions. In the larger Level II agreements, the community, working with EPA, selects and funds projects that reduce risk and improve the environment in the community.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Mean percent stony coral cover in the Florida Keys National Marine Sanctuary (FKNMS) and in the coastal waters of Dade, Broward, and Palm Beach Counties, Florida, working with all stakeholders.				6.7/5.9	Mean % area

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Maintain the overall water quality of the near shore and coastal waters of the FKNMS.				Maintain	Water quality

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Total phosphorous in Everglades surface waters.				Maintain	Parts per B

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	% of population in each of U.S. Pacific Island Territories served by CWS will receive drinking water that meets all applicable health-based drinking water standards throughout the year.				72	Percent population

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	The sewage treatment plants in the U.S. Pacific Island Territories will comply with permit limits for biochemical oxygen demand (BOD) and total suspended solids (TSS).				67	Percent Time

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Beaches in each of the U.S. Pacific Island Territories monitored under the Beach Safety Program will be open and safe for swimming during the beach season.				70	Percent Days

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Acres of wetland habitat and acres of upland habitat protected, enhanced, or restored in the Columbia River Basin.				3000	Acres

This program has not been reviewed under the PART process.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$480.2) This reduction reflects elimination of targeted monitoring activities for South Florida. Future monitoring will be part of the national monitoring program.
- (+\$1,000.0) This increase is for Puget Sound restoration activities linked to nonpoint sources or habitat restoration work. Federal cost share for projects can not exceed 50%.
- (-\$1,000.0) This reduction to the CARE program will fund higher priority activities and decrease the number of grants awarded from approximately 20 to approximately 13. The

decrease will primarily focus on the Level I grants to ensure that funds are available for the existing CARE communities eligible for the larger Level II grants.

- (+\$5.9) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$0.7) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

South Florida: Florida Keys National Marine Sanctuary and Protection Act of 1990; National Marine Sanctuaries Program Amendments Act of 1992; CWA; Water Resources Development Act of 1996, RCRA; and CERCLA.

Northwest Forest: CWA; Economy Act of 1932; and the Intergovernmental Cooperation Act.

Lake Pontchartrain: CWA.

CARE: CAA, CWA, SWDA, and TSCA.

Regional Geographic Initiatives

Program Area: Geographic Programs

Goal: Healthy Communities and Ecosystems

Objective(s): Communities; Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$7,717.1</i>	<i>\$9,137.3</i>	<i>\$9,553.0</i>	<i>\$415.7</i>
Total Budget Authority / Obligations	\$7,717.1	\$9,137.3	\$9,553.0	\$415.7
Total Workyears	16.3	15.3	17.3	2.0

Program Project Description:

EPA's ten Regional Offices use Regional Geographic Initiative (RGI) funds to support innovative, geographically-based projects. These funds are available to EPA Regional Offices to support priority local and regional environmental projects, which may include protecting children's health, restoring watersheds, providing for clean air, preventing pollution and fostering environmental stewardship. RGI provides an essential tool to facilitate holistic, innovative resolutions to complex environmental problems. RGI is one of EPA's premiere innovation resources -- spurring local projects that have often become national models (such as school bus diesel retrofits; watershed planning; and developing agricultural pollution prevention performance standards for pest management). This initiative has been very cost-effective: every RGI dollar is matched by more than 10 non-Federal dollars from states, localities, non-profit organizations, and the private sector.

FY 2008 Activities and Performance Plan:

RGI provides modest funding to support eight to 10 environmental and public health projects per Regional Office. These initiatives encourage communities to invest in projects that will yield improved environmental results important to their communities. Examples of projects funded in the past include:

- **Public Access to Data on Pesticide Use and Exposure:** Some 200 million pounds of pesticide active ingredients are applied to California crops each year. These materials increase crop yield, but also pose concerns for human and environmental health. Through a partnership with EPA Region 9, the Pesticide Action Network (PAN) incorporated EPA datasets on ecotoxicity, pesticides compatible with organic production, and water bodies listed as pesticide-impaired under the Clean Water Act, into their web-based dataset. The site <http://www.pesticideinfo.org/Index.html> provides the largest and most comprehensive collection of information on pesticide registration, regulation, and toxicity in the world, and receives more than 10,000 visits each month from state regulatory agencies, researchers, and consumers.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$421.4) This increase is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-\$5.7) This decrease represents anticipated savings accomplished through more efficient management and administrative practices, as well as other IT and telecommunication changes that reflect more economically efficient resource utilization.
- (+2.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency to better align resources, skills, and Agency priorities.

Statutory Authority:

CWA; CAA; TSCA; CERLA; SDWA; PPA; RCRA.

Program Area: Homeland Security

Homeland Security: Communication and Information

Program Area: Homeland Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$5,280.0</i>	<i>\$6,799.7</i>	<i>\$6,906.0</i>	<i>\$106.3</i>
Hazardous Substance Superfund	\$100.4	\$300.0	\$0.0	(\$300.0)
Total Budget Authority / Obligations	\$5,380.4	\$7,099.7	\$6,906.0	(\$193.7)
Total Workyears	7.3	13.0	17.0	4.0

Program Project Description:

This program coordinates development and implementation of homeland security policy and related information security across the Agency. EPA coordinates its homeland security policy with other Federal partners as well as within the Agency through dedicated implementation of Homeland Security Presidential Directives (HSPDs), and EPA's Homeland Security Strategy. EPA also works to ensure rapid access to relevant communication tools, accelerated transfers of data, the development of models and maps to support response activities, and effective Agency wide communication in emergency situations.

The HSPDs, the Homeland Security Strategy, and use of an Agency-wide Homeland Security Collaborative Network support the Agency's ability to effectively implement its broad range of homeland security responsibilities, ensure consistent development and implementation of homeland security policies and procedures, avoid duplication, and build a network of partners so that EPA's homeland security efforts are integrated into the Federal homeland security efforts. This program also serves to capitalize on the concept of "dual-benefits" so that EPA's homeland security efforts enhance and are integrated into EPA core environmental programs that serve to protect human health and the environment. Homeland Security information technology efforts are closely coordinated with the Agency-wide Information Security and Infrastructure activities which is managed in the Information Security and IT/Data Management programs.

FY 2008 Activities and Performance Plan:

Beginning in FY 2008, the Agency is formalizing liaisons to the U.S. Intelligence Community to enhance coordination on matters related to classified and other sensitive but unclassified information. The Administrator commissioned a programmatic review of EPA's national security information program that identified this as a potential gap in the existing program.

EPA's FY 2008 resources will continue to support the Agency's rapid response infrastructure by continuing deployment of an integrated Internet/Wide Area Network (WAN)/Local Area Network (LAN) solution – Mobile Laboratory LAN-in-a-Box – that equips mobile laboratories with high speed, secure access to the Internet and EPA WAN and also delivering increased network capacity, expanding the Agency's bandwidth and functions (e.g., Voice over IP). These capabilities will allow secure, reliable, and high-speed data access and communication to first responders, on-scene coordinators, emergency response teams, and investigators wherever they are located and regardless of what jurisdiction they operate under and support EPA's Homeland Security Presidential Directive responsibilities.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$812.5) This reflects an increase for payroll and cost of living for existing and new FTE.
- (+4.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This increase will improve coordination on intelligence matters between EPA and the U.S. Intelligence community as well as improved coordination between EPA and other response organizations.
- (-\$705.7) This change reflects progress in completing LAN-in-a-Box deployments.
- (-\$0.5) This decrease represents a redistribution of IT and telecommunications resources to better reflect utilization.

Statutory Authority:

NCP; CERCLA; SDWA; CWA; CAA; BioTerrorism Act; Homeland Security Act of 2002; Defense Against Weapons of Mass Destruction Act (Title XIV of Public Law 104-201).

Homeland Security: Critical Infrastructure Protection

Program Area: Homeland Security

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air; Radiation

Goal: Clean and Safe Water

Objective(s): Protect Human Health

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$4,717.4</i>	<i>\$7,242.7</i>	<i>\$7,787.0</i>	<i>\$544.3</i>
Science & Technology	\$13,306.1	\$45,251.0	\$25,586.0	(\$19,665.0)
Hazardous Substance Superfund	\$985.1	\$1,571.6	\$1,857.0	\$285.4
Total Budget Authority / Obligations	\$19,008.6	\$54,065.3	\$35,230.0	(\$18,835.3)
Total Workyears	47.1	59.0	59.0	0.0

Program Project Description:

This program involves several EPA activities that coordinate and support the protection of the nation's critical public infrastructure from terrorist threats. EPA activities support effective information sharing and dissemination to help protect critical water infrastructure. Support to state and local governments also helps them develop methods to detect anomalies in ambient air. EPA also provides subject matter expertise in environmental criminal investigations and training support for terrorism-related investigations.

FY 2008 Activities and Performance Plan:

Water Security

In FY 2008, EPA will continue to build its capacity to identify and respond to threats to critical national infrastructure. EPA's wastewater and drinking water security efforts will continue to support the implementation of information sharing tools and mechanisms to provide timely information on contaminant properties, water treatment effectiveness, detection technologies, analytical protocols and laboratory capabilities for use in responding to a water contamination event. EPA will continue to support effective communication conduits to disseminate threat and incident information and to serve as a clearing-house for sensitive information. EPA promotes information sharing between the water sector and such groups as environmental professionals and scientists, law enforcement and public health agencies, the intelligence community, and technical assistance providers. Through such exchange, water systems can obtain up-to-date information on current technologies in water security, accurately assess their vulnerabilities to

terror acts and work cooperatively with public health officials, first responders and law enforcement officials to respond effectively in the event of an emergency.

EPA partners with both the Water Information Sharing and Analysis Center (WaterISAC) and the Water Security Channel (WaterSC) to provide up-to-date security information for drinking and wastewater utilities. This group is continuing to evaluate the potential for integration with the Department of Homeland Security's Homeland Security Information Network (HSIN) – a new information sharing network offered to the critical infrastructure sectors, including all utilities within the water sector. In FY 2008, more than 9,000 drinking water and wastewater utilities will receive notices and have access to the WaterSC web portal, a service of the WaterISAC designed to provide communication from the Federal government to the water sector affiliates. In addition, more than 500 water utilities, representing 60% of the population, will rely on a secure and up-to-date web-based environment on water system security as members of WaterISAC.

Counterterrorism

In FY 2008, EPA will continue to train all EPA criminal investigators in “Hot Zone Forensic Evidence Collection” typically utilized at crime scenes involving weapons of mass destruction as well as environmental crimes. The program will continue this multi-year effort to train and provide these agents with the necessary specialized response and evidence collection equipment. This will enable EPA criminal investigators to collect evidence and process a crime scene safely and effectively in a contaminated environment (hot zone). Advanced crime scene processing training will also be provided to those EPA criminal investigators assigned to the National Counter Terrorism Evidence Response Team (NCERT). EPA criminal investigators will continue to provide environmental expertise for criminal cases and support the FBI and Department of Homeland Security (DHS) during select National Special Security Events (NSSE) and in the event of a terrorist attack anywhere in the United States. Additionally, EPA criminal investigators will provide more robust support, involving evidence collection, to the BioWatch, water security initiative, and RadNet programs. During FY 2008, it is anticipated that the number of NSSEs and other events to which EPA criminal investigators are deployed will remain high as a result of the Presidential campaign and its related activities.

Monitoring

EPA will continue to provide support for infrastructure protection by assisting state and local governments to develop methods for detecting anomalies in ambient air. This includes the continued development of source-oriented, near-field modeling science and techniques to address direct releases or emission of toxic and/or harmful air pollutants as well as the development and improvements of multi-pollutant models to demonstrate effects of air threats to air quality. For monitoring, EPA will continue the testing and improvement of monitoring technologies and institutional infrastructure of the Federal, state and local ambient air monitoring networks and capabilities. EPA will provide technical assistance as necessary to respond to or be prepared for an air quality threat in the United States.

Performance Targets:

Work under this program supports multiple performance objectives. Currently, there are no performance measures specific to this program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$544.6) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$0.3) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

SDWA; CWA; Public Health Security and Bioterrorism Emergency and Response Act of 2002; EPCRA; CAA; RCRA; TSCA; Residential Lead-Based Paint Hazard Reduction Act; FIFRA; ODA; NEPA; North American Agreement on Environmental Cooperation; 1983 La Paz Agreement on U.S.- Mexico Border Region; Pollution Prosecution Act.

Homeland Security: Preparedness, Response, and Recovery

Program Area: Homeland Security

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$1,659.2</i>	<i>\$3,328.7</i>	<i>\$3,381.0</i>	<i>\$52.3</i>
Science & Technology	\$32,692.8	\$44,498.1	\$40,768.0	(\$3,730.1)
Hazardous Substance Superfund	\$40,400.0	\$49,774.9	\$45,280.0	(\$4,494.9)
Total Budget Authority / Obligations	\$74,752.0	\$97,601.7	\$89,429.0	(\$8,172.7)
Total Workyears	148.6	165.6	167.6	2.0

Program Project Description:

EPA's Homeland Security Emergency Preparedness and Response program develops and maintains an agency-wide capability to address environmental decontamination after incidents of national significance with emphasis on those that may involve Weapons of Mass Destruction (WMD). The Agency is working to prepare for incidents that release or introduce dangerous chemicals or certain foreign plant or animal pathogens or other pests into the environment. The response to chemicals is different from the response to pests, but for both the goal is to facilitate safe re-occupancy of buildings or other locations and to protect the production of crops, livestock, and food in the U.S. The Agency develops Acute Exposure Guideline Levels (AEGLs) that are needed by first responders and Chemical Risk Managers to help guide response and preparedness efforts. In addition to informing evacuation or shelter-in-place decisions, AEGLs are used to help guide the development of chemical protective equipment and chemical detection limits.

EPA, working with other Federal and state agencies and industry, is addressing the need for readily available chemical pesticide products for decontamination of agricultural structures, crops, and livestock and food facilities.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will review and make decisions on requests from other Federal and state agencies and/or pesticide manufacturers for the use of specific pesticides to inactivate biological agents or emerging pathogens that have been identified by authorities as potential significant threats to the public's health and/or livestock animals and crops and the nation's food supply and economy. The goal is to ensure availability of adequate pesticides to prevent, control, and recover from a major incident.

In FY 2008, depending on the number of submitted requests, the Agency will make regulatory decisions on approximately 5 pesticides for use against potentially dangerous crop and livestock pests. EPA will review extensive scientific data on each of these pesticides to ensure their use

will meet current safety standards for human health and the environment and additionally, for public health antimicrobial pesticides, that they meet efficacy standards. EPA will also establish by regulation any necessary maximum residue limits (tolerances) for those pesticides to ensure a safe food supply and enable interstate commerce and international trade of treated crop and food commodities.

EPA will maintain the accelerated development of AEGLs that are needed by First Responders and Chemical Risk Managers for use in chemical emergency and counterterrorism planning, prevention and response programs. In FY 2008, EPA's program plans to develop proposed AEGL values for 24 chemicals.

Performance Targets:

Work under this program supports the Healthy Communities objective. Currently, there are no performance measures specific to this program project. However, a performance measure tracking development of proposed AEGL values is included in the Chemical Risk Review and Reduction Program/Project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$53.3) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$1.0) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Public Health Security and Bioterrorism Emergency and Response Act of 2002; CERCLA; SARA; TSCA; Oil Pollution Act; Pollution Prevention Act; RCRA; EPCRA; SDWA; CWA; CAA; FIFRA; FFDCA; FQPA; Ocean Dumping Act; Public Health Service Act, as amended; 42 U.S.C 201 et seq.; Executive Order 10831 (1970); Public Law 86-373; PRIA.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$8,845.1</i>	<i>\$6,268.9</i>	<i>\$6,345.0</i>	<i>\$76.1</i>
Science & Technology	\$3,013.8	\$2,079.0	\$594.0	(\$1,485.0)
Building and Facilities	\$10,800.9	\$11,385.1	\$7,870.0	(\$3,515.1)
Hazardous Substance Superfund	\$534.7	\$594.2	\$594.0	(\$0.2)
Total Budget Authority / Obligations	\$23,194.5	\$20,327.2	\$15,403.0	(\$4,924.2)
Total Workyears	3.0	3.0	3.0	0.0

Program Project Description:

This program involves activities to ensure that EPA's physical structures and assets are secure and operational and that certain physical security procedures are in place to help safeguard staff in the event of an emergency, protecting the capability of EPA's vital infrastructure assets. The program also includes the personnel security clearance process and protection of classified information.

FY 2008 Activities and Performance Plan:

The Agency funds three types of activities with these homeland security resources: physical security, personnel security, and national security information activities. In FY 2008, the Agency will focus on Homeland Security Presidential Directive 12 by conducting identity proofing, registration, and smart card issuance for EPA's 18,500 and more than 12,000 on-site non-federal workforce. Additionally, EPA will continue its support for physical security activities, including conducting nationwide physical security and window vulnerability assessments at EPA's facilities nationwide.

Physical security activities involve conducting nationwide vulnerability assessments at EPA's 191 facilities on a regular basis in accordance with Federal mandates. In FY 2008, the Agency will focus on physical security activities to retrofit access control systems in order to comply with Homeland Security Presidential Directive (HSPD) 12 – Policy for a Common Identification Standard for Federal Employees and Contractors.

Personnel security activities include conducting position risk designations; performing prescreening activities on prospective new hires; initiating, tracking and monitoring, and

adjudicating Federal investigations to determine if employees and select non-Federal workers are suitable for employment and/or obtaining a smart card, or worthy of possessing national security clearances; maintaining personnel security files and information on more than 26,000 employees and select non-Federal workers; leveraging and optimizing technology to automate personnel security functions and services, such as processing personnel actions and investigations; developing and distributing guidance and outreach to employees on various topics. The Agency will also be required to comply with the Intelligence Reform and Terrorism Prevention Act of 2004, in which the timelines for initiating and adjudicating federal investigations are being reduced significantly.

National security information activities include classifying, declassifying, and safeguarding classified information; identification and marking of classified information; education, training, and outreach; audits and self inspections; certification and accreditation of secure access facilities (SAFs) and sensitive compartmented information facilities (SCIFs); and reporting.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$74.6) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$1.5) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Public Health Security and Bioterrorism Emergency and Response Act of 2002; and Secure Embassy Construction and Counterterrorism Act (Sections 604 and 629).

Program Area: Indoor Air

Indoor Air: Radon Program

Program Area: Indoor Air

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Indoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$7,418.0</i>	<i>\$5,519.2</i>	<i>\$5,429.0</i>	<i>(\$90.2)</i>
Science & Technology	\$583.9	\$442.2	\$428.0	(\$14.2)
Total Budget Authority / Obligations	\$8,001.9	\$5,961.4	\$5,857.0	(\$104.4)
Total Workyears	37.3	42.9	39.9	-3.0

Program Project Description:

EPA's non-regulatory indoor radon program promotes voluntary public action to reduce health risk from indoor radon (second only to smoking as a cause of lung cancer). EPA and the Surgeon General recommend that people do a simple home test and, if levels above EPA's guidelines are confirmed, reduce those levels by home mitigation using inexpensive and proven techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. This voluntary program includes national, regional, state, and Tribal programs and activities that promote radon risk reduction activities.

FY 2008 Activities and Performance Plan:

In FY 2008 EPA will:

- Continue to partner with national organizations and conduct public outreach on radon risks and solutions;
- Work with states, Tribes, and localities to improve their radon programs to get more risk reduction; and,
- Continue partnerships that will make radon risk reduction a normal part of doing business in the marketplace.

In FY 2008, EPA will continue to promote public action to test homes for indoor radon and where levels are above the action level, to mitigate; to encourage builders to construct new homes with radon-resistant features in areas where there is elevated radon; to encourage radon action during real estate transactions.

EPA will also, continue its work with national partners to inform and motivate public action using risk estimates from the National Academy of Sciences that show substantial risks associated with radon exposure.

The Indoor Air program received a rating of "moderately effective" during a 2005 PART assessment. The Indoor Air program is not regulatory; instead, EPA works toward its goal by conducting research and promoting appropriate risk reduction actions through voluntary

education and outreach programs. The Agency will continue to focus on making efficiency improvements and plans to improve transparency by making State radon grantee performance data available to the public via a website or other easily accessible means.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of additional homes (new and existing) with radon reducing features	Data Available 2007	180,000	190,000	225,000	Homes

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Total Cost (public and private) per future premature cancer death prevented through lowered radon exposure.		450,000	No Target Established	No Target Established	Dollars

These program goals are a result of the total funding the program area receives through EPM, S&T, and State Indoor Radon Grant (SIRG) funding.

In FY 2008, EPA expects 225,000 additional homes to have radon reducing features bringing the cumulative number of U.S. homes with radon reducing features to over 2 million. EPA estimates that this cumulative number will result in approximately 800 future premature cancer deaths prevented (each year these radon reducing features are in place). EPA will track progress against the efficiency measure in the table above triennially with the next report date in FY 2009.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$10.4) This decrease reduces funding for non-critical administrative activities.
- (-\$79.8) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-3.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align regional resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CAA Amendments of 1990; IRAA, Section 306; Radon Gas and Indoor Air Quality Research Act; Title IV of the SARA of 1986; TSCA, section 6, Titles II, and Title III (15 U.S.C. 2605 and 2641-2671), and Section 10.

Reduce Risks from Indoor Air

Program Area: Indoor Air

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Indoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$19,023.2</i>	<i>\$23,464.3</i>	<i>\$21,440.0</i>	<i>(\$2,024.3)</i>
Science & Technology	\$759.9	\$828.7	\$788.0	(\$40.7)
Total Budget Authority / Obligations	\$19,783.1	\$24,293.0	\$22,228.0	(\$2,065.0)
Total Workyears	71.1	68.9	68.3	-0.6

Program Project Description:

In this non-regulatory, voluntary program, EPA creates partnerships with non-governmental organizations and Federal partners as well as professional organizations to educate and encourage individuals, schools, industry, the health care community, and others to take action to reduce health risks from poor indoor air quality. EPA uses technology transfer to improve the design, operation, and maintenance of buildings – including schools, homes, and workplaces – to promote healthier indoor air. EPA’s technical assistance directly supports State and local governments and public health organizations in designing local programs to promote practices that reduce exposures to asthma triggers through environmental management as well as assistance to improve indoor air quality in schools, and to promote smoke-free environments for children.

The Partnership for Clean Indoor Air (PCIA) addresses the 4th worst health risk in poor developing countries (the World Health Organization estimates 1.6 million premature deaths each year): the indoor smoke breathed by the more than 3 billion people who burn traditional fuels (e.g., biomass, coal, dung) indoors for cooking and heating. EPA obtains formal commitments from partners to address development of sustainable business models and markets to support changes; establishes criteria to assess technologies for more efficient cooking and heating approaches; and, assesses health impacts of improvements.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue its national, multi-faceted asthma education and outreach program, in partnership with other Federal and non-profit agencies, to deliver comprehensive asthma-care programs that emphasize management of environmental asthma triggers such as environmental tobacco smoke, dust mites, mold, pet dander, cockroaches and other pests, and nitrogen dioxide. EPA will promote the adoption of best practices to achieve positive health outcomes in environmental management of asthma triggers. EPA will also focus its efforts to reach populations disproportionately impacted by asthma and environmental tobacco smoke.

Through public awareness and mass-media communications such as the Childhood Asthma “Goldfish” Campaign, EPA and its partners will continue to spread knowledge of comprehensive asthma care and the importance of environmental management to reduce exposure to indoor triggers. EPA will continue to work with the health care provider community to integrate environmental asthma management into the standards of care for asthma. In such public-health settings, EPA’s role as environmental steward reinforces families’ trust and acceptance of key risk-avoidance messages. In addition, EPA will work in partnership and collaboration with other Federal agencies, the health care community, and state and local organizations to promote its Smoke-free Homes Pledge Campaign.

Through its partnership agreements, EPA will continue, at reduced level, to reach out to the school community to encourage adoption of the *Indoor Air Quality Tools for Schools (IAQ TFS)* approach or comparable indoor air quality programs. For new construction and renovation, EPA will promote *Design Tools for Schools (DTfS)*¹ a web-based guidance tool, as well as EPA’s Healthy School Environments Assessment Tool (HealthySEAT) which assists school districts in integrating indoor air quality and performance goals into the design, construction, and renovation of school buildings. EPA uses partnerships to inform and motivate school officials, school nurses, teachers, facility managers and planners, and parents to improve IAQ in schools.

EPA will respond to interest in reducing indoor air risks through community building activities (i.e., design, construction, operations and maintenance), by promoting a suite of “best practice” guidance including guidance for the control and management of moisture and mold in commercial and public buildings, comprehensive best practice guidance for IAQ during each phase of the building cycle and subsequent best practices for indoor environmental quality and energy efficiency.

Through the PCIA, EPA will address indoor smoke from cooking fires in developing countries. EPA will continue to develop solutions and focus on two priorities: providing regional trainings in critical areas, including stove design and performance, pollutant exposure and monitoring, and developing enterprises to market and sell clean stoves. Together these steps will yield tremendous health benefits in developing countries. Many of these emissions reductions (e.g., in Central America, China, and India) also will reduce pollution that is transported across our borders and the northern hemisphere into the United States.

The Indoor Air program, rated by OMB as “moderately effective” during a 2005 PART assessment will continue to focus on making efficiency improvements in response to recommendations in the PART assessment.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of public that is aware of the asthma program's media campaign.	33	>20	>20	>20	Percentage

¹ www.epa.gov/iaq/schooldesign last accessed 8/10/2006.

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Additional health care professionals trained annually by EPA and its partner on the environmental management of asthma triggers.	Data Available 2007	2000	2000	2000	Number

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Annual Cost to EPA per person with asthma taking all essential actions to reduce exposure to indoor environmental asthma triggers.	Data Available 2007	8.38	No Target Established	No Target Established	Dollars

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Estimated annual number of schools establishing indoor air quality programs based on EPA's Tools for Schools guidance.	Data Available 2007	1200	1100	1100	Number

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Average cost to EPA per student per year in a school that is implementing an Indoor Air Quality plan.	Data Available 2007	2	No Target Established	No Target Established	Dollars

EPA will continue to work towards its long term 2012 goal to have 6.5 million people with asthma take the essential actions to reduce their exposure to their environmental triggers of asthma, including environmental tobacco smoke. EPA's goal is to have close to 400,000 additional people with asthma to take these actions in 2008, bringing the total number to approximately 4.9 million people with asthma taking these actions. As part of this goal, EPA

will continue to work to reduce existing disparities between disproportionately impacted populations and the overall population. EPA will track progress against the efficiency measures included in the tables above triennially with the next planned report date in FY 2009.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$2,500.0) This decrease reduces funding for lower priority Schools and Workplaces program outreach and education efforts by EPA and by its non-governmental not-for-profit national partners who currently receive funding from EPA. The program will continue to make adequate progress toward its goals however in 2008, fewer schools may be reached than initially expected.
- (+\$300.0) This increase supports the implementation of the Partnership for Clean Indoor Air at the World Summit on Sustainable Development (WSSD). This funding will support regional trainings in critical areas, such as stove design and performance, pollutant exposure and monitoring, and developing enterprises to market and sell clean stoves.
- (+\$201.8) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$26.1) This reduction reflects savings from improvements to the Agency's small administrative IT Systems.
- (-0.6 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align regional resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CAA Amendments of 1990; Title IV of the SARA of 1986.

Program Area: Information Exchange / Outreach

Children and Other Sensitive Populations: Agency Coordination

Program Area: Information Exchange / Outreach

Goal: Healthy Communities and Ecosystems

Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$5,695.1	\$6,063.8	\$6,203.0	\$139.2
Total Budget Authority / Obligations	\$5,695.1	\$6,063.8	\$6,203.0	\$139.2
Total Workyears	12.0	15.9	13.9	-2.0

Program Project Description:

The Child and Aging Health Protection Division (CAHPD) advocates for, and facilitates the consideration of, children's environmental health concerns, as identified in the Agency's *National Agenda to Protect Children's Health from Environmental Threats*, and Executive Order 13045, *Protection of Children's Health from Environmental Health Risks and Safety Risks*. EPA also recognizes that older adults are more susceptible to environmental health risks than the general population. EPA's Aging Initiative is an emphasis within CAHPD that strives to protect the health of older adults. This cross-cutting, non-regulatory program works with other EPA offices, Federal agencies, states, Tribes, the public, healthcare providers, industry, and non-governmental organizations to achieve its mission. Core activities focus on building capacity, providing tools and information to inform decisions, and engaging in educational outreach activities.¹

FY 2008 Activities and Performance Plan:

In FY 2008, this program will continue to ensure that EPA's policies and programs explicitly consider and use the most up-to-date data and methods for protecting children and older adults from heightened public health risks. EPA also will work to ensure that states, Tribes, and local governments will effectively incorporate environmental health of children and older adults into new or existing programs; and that non-governmental organizations and the public (family members, health care providers, community leaders, etc.) have and use reliable/valid scientific information when making decisions that impact the health of children and older adults. The following are examples of current and planned activities:

- Work with other Agency offices to develop guidance for considering health risks to children in rule making and evaluating the application of such guidance throughout EPA.
- Work within EPA to generate and apply new scientific research, tools and assessments, and promote easy access to information regarding children's environmental health.

¹ Please refer to: <http://yosemite.epa.gov/oceph/ocephweb.nsf/content/homepage.htm>.

Support efforts within the Agency's Regional Offices to address children's environmental health issues that are of high priority in their states.

- Provide tools, information, and support to build capacity in states, Tribes and local governments to protect children from environmental health risks. Continue support for the Healthy Schools Environmental Health Assessment Tool launched in December 2005.
- Support partners outside of the Agency to ensure healthcare providers, civic entities and the public have access to tools and information needed to protect children and older adults from environmental health risks. Since 2005, the EPA Children's Environmental Health Awards program recognizes successful programs, and encourages other organizations to develop their own programs. EPA also helps provide health professionals and the public with consultation, education, and referral services through its support for Pediatric Environmental Health Specialty Units.
- Continue to support the Agency's global efforts to protect children through ongoing partnerships with international organizations including the World Health Organization, the Pan American Health Organization, and the Organization for Economic Co-operation and Development.
- Provide an Agency oversight role, in collaboration with the National Education and Training Foundation (NEETF), to ensure that NEETF's Environmental Education grants support the Agency's goals for protecting human health and the environment.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$40.0) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-\$824.8) This adjustment of Agency resources reflects an increased emphasis on the integration of children's health issues in ongoing programs throughout the EPA.
- (+\$1,000.0) This increase provides funding to award and manage Environmental Education grants, in order to ensure that children and educators have the information they need to help protect against health risks.
- (+\$4.0) This represents a redistribution of IT and telecommunication resources to better reflect utilization.

- (-2.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

Executive Order 13045.

Congressional, Intergovernmental, External Relations

Program Area: Information Exchange / Outreach

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$48,586.7</i>	<i>\$52,142.7</i>	<i>\$49,747.0</i>	<i>(\$2,395.7)</i>
Hazardous Substance Superfund	\$35.4	\$130.4	\$155.0	\$24.6
Total Budget Authority / Obligations	\$48,622.1	\$52,273.1	\$49,902.0	(\$2,371.1)
Total Workyears	389.5	381.1	379.1	-2.0

Program Project Description:

This program provides the vision, leadership, and support needed to enable EPA to meet its commitments to protect public health and the environment. Program staff responds to Congressional requests for information and provides written and oral testimony, briefings, and briefing materials. The program develops legislative strategies to support program offices and coordinate Agency appearances before Congress. Staff inform the public (including state, local and Tribal governments) about environmental problems and goals, and act to strengthen communications with state, local and Tribal governments and organizations, news media, and the public. The program also works to increase public awareness and enhance public perceptions of environmental issues, as well as their social, technological and scientific solutions.

Program staff work with states, local and Tribal governments, and their respective associations, to ensure that their concerns are considered in Agency policies, guidance, and regulations. The office also serves as EPA's lead on issues relating to the National Environmental Performance Partnerships System (NEPPS). The staff also manages correspondence received by the Administrator, Deputy Administrator, and Regional Administrators. This program also provides the resources for the direct support to four Federal advisory committees (FACAs) as well as resources to develop and manage Agencywide FACA policy and guidance.

The Enforcement and Compliance Assurance program also contributes to the mission of this program by disseminating information about enforcement actions, compliance monitoring and the availability of compliance assistance. Monthly Enforcement Alerts, regular news briefs about enforcement and compliance assistance activities, and a website with easily accessible tools for retrieving information are some of the tools used to inform stakeholders.

FY 2008 Activities and Performance Plan:

The emphasis and priority of these programs are to provide vision and leadership for a full range of activities that support EPA's mission. The Regional Administrators and their staff also continue to provide leadership to the Regional offices and states they serve. Congressional and Intergovernmental Relations efforts continue to:

- Lead and support the Administration's efforts to pass legislation to protect human health and the environment (such as the Treaty on Persistent Organic Pollutants and Water Resources) and begin implementation of the recently passed Energy and Transportation legislation.
- During FY 2008, the Agency will continue to foster public awareness of environmental issues and the Federal government's role in monitoring compliance and enforcing the nation's environmental laws. This awareness is critical to public support and to the Agency's success in meeting its goals. The program will issue the following informational materials: enforcement alerts; accomplishments reports, daily updating of the website; weekly news alerts; specialized list-serves with periodic postings; and news releases as Superfund major cases are concluded.
- Build a stronger EPA partnership with local governments, and to coordinate with other EPA offices and the Clean Air Advisory Committee, on such issues as recycling, landfills, Brownfields and the Clean Diesel campaign.
- Provide national policy and program management to more fully integrate the NEPPS framework and principles into the Agency's core business practices. Key activities include:
 - a) Implementing the OMB-directed State Grants Performance Measures Template;
 - b) Leading a Performance Partnership Grants (PPG) initiative to encourage broader application of PPG programmatic flexibility by the states;
 - c) Working with the National Academy of Public Administration to complete their assessment of U.S. Environmental Services Delivery System; and
 - d) Working with states to develop a longer term Strategic Plan for Performance Partnerships.
- Manage EPA's cooperative agreement with the Environmental Council of the States (ECOS) through close coordination and involvement of several of EPA's program offices.

The Office of Cooperative Environmental Management (OCEM) ensures that EPA's 48 Federal advisory committees and sub-committees are in compliance with FACA requirements and administrative guidelines provided by GSA's Committee Management Secretariat. To accomplish this, OCEM staff will create uniform policy and guidance, provide oversight of Federal advisory committees, survey committee members and stakeholders, identify and share best practices, and train Agency Designated Federal Officers (DFOs) and committee

Chairpersons. These efforts will ensure consistent application of an open process throughout all of EPA's advisory committees. Key activities include:

- Implementing a comprehensive "assist/oversight visit" process which allows OCEM to conduct on-site compliance reviews to ensure Agency compliance with FACA as required by law, including notice and open meeting requirements, recordkeeping procedures and availability of committee documents for public inspection. In FY 2008, the Agency will complete at least 10 reviews at the committee level.
- Implementing requirements for FACAs to incorporate performance goals and measurable results into their Charters.

The Office of Public Affairs (OPA) continues to support the achievement of Agency strategic goals by communicating Agency proposals, actions, policy, data, research and information through mass media, print publications and directly via the Web. With the Web becoming a primary source for Agency information, in FY 2008, OPA will continue the process of reviewing and consolidating Web content to provide the public with easily accessible, high quality, timely, coherent and comprehensive information on the Agency's activities and policies. OPA will continue to coordinate with the Office of Environmental Information to ensure effective distribution of policy and regulatory information requested by citizens, the media, other government entities and non-government organizations.

The Office of the Executive Secretariat supports the Agency's strategic goals by continuing to:

- Manage the Agency's correspondence tracking and workflow management database.
- Provide records management support, training, and guidance for Office of the Administrator staff offices.
- Manage all aspects of the Administrator's and Deputy Administrator's non-Congressional correspondence and records management, including identification and maintenance of vital records.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$740.8) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.

- (-\$1,654.9) This decrease represents anticipated savings accomplished through more efficient management and administrative practices, as well as other IT and telecommunication changes that reflect more economically efficient resource utilization.
- (-2.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

As provided in Appropriations Act funding; FACA; EAIA; NAFTA Implementation Act; RLBPHRA; NAAED; LPA-US/MX-BR; CERCLA

Exchange Network

Program Area: Information Exchange / Outreach

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$18,725.7</i>	<i>\$16,048.5</i>	<i>\$15,364.0</i>	<i>(\$684.5)</i>
Hazardous Substance Superfund	\$1,883.6	\$1,432.4	\$1,433.0	\$0.6
Total Budget Authority / Obligations	\$20,609.3	\$17,480.9	\$16,797.0	(\$683.9)
Total Workyears	23.8	24.0	24.0	0.0

Program Project Description:

This program supports the development and maintenance of the Environmental Information Exchange Network (the Exchange Network). The Exchange Network is an integrated information system using standardized data formats and definitions to facilitate information sharing among EPA and its partners. The Exchange Network provides a centralized approach to receiving, distributing, and accessing timely and reliable environmental information. This program provides resources to develop, implement, operate and maintain the Agency's Central Data Exchange (CDX, www.epa.gov/cdx), EPA's node on the Exchange Network, which is the point of entry for data submissions to the Agency.

This program also develops the regulatory framework to ensure that electronic submissions are legally acceptable; establishes partnerships with states, Tribes, territories and Tribal consortia; and, supports the E-Rulemaking E-Government (E-Gov) initiative. E-Rulemaking is designed to improve the public's ability to find, view, understand and comment on Federal regulatory actions, and EPA is providing the leadership role on this effort.

FY 2008 Activities and Performance Plan:

In FY 2008, the major focus is on fulfilling the Agency's E-Gov commitments and supporting EPA's information technology initiatives. These activities build on efforts started in FY's 2004-2006 to enhance the availability, quality and analytical usefulness of environmental information for EPA and its partners and stakeholders. These efforts support data exchange by states, Tribes and other partners through the use of the Exchange Network and the CDX, EPA's node on the Exchange Network.

The Exchange Network is the cornerstone of the Agency's efforts to partner with states, Tribes and territories to exchange secure, accurate and timely information to facilitate decisions on

environmental and health issues. After FY 2007, all 50 states and approximately 10 Tribes will have nodes on the Exchange Network and will be mapping data to the new schemas so it can be electronically submitted to EPA and shared with other partners. In FY 2008, EPA, states, Tribes, and territories will continue to re-engineer data systems so information that was previously not available, or not easily available, can be exchanged using common data standards and computer language called schemas. These efforts will be closely coordinated with the Agency's program offices and the system of data registries. As data flows are added, the broader use of data standards, tools that check data before it is submitted, and reusable schemas will increase the accuracy and timeliness of the data, improve analytical capabilities, and create savings through economies of scale.

In addition, EPA will improve security by implementing electronic reporting standards that support the authentication and electronic signatures of report submitters. EPA will work to provide assistance to states, Tribes and territories in implementing these standards.

Effective implementation of the Exchange Network activities relies on close coordination with the Information Security, EPA Enterprise Architecture, and data management activities. Coordination helps to ensure that necessary security measures are adhered to, system platforms follow the Agency's Enterprise Architecture, and data management follows documented standards.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data.	32	29	36	43	Systems

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Number of users from states, tribes, laboratories, and others that choose CDX to report environmental data electronically to EPA.	62,000	47,000	55000	70000	Users

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$250.9) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$935.4) The reduction in resources reflects a continued shift in emphasis from building infrastructure to adding data flows and Web services, and also reflects efficiencies resulting from scheduling Enterprise Content Management System (ECMS) and enterprise solutions deployments to better align with Agency readiness and the lifecycle phase of the E-Rulemaking project.

Statutory Authority:

FACA; GISRA; CERCLA; CAAA; CWA and amendments; ERD & DAA; TSCA; FIFRA; FQPA; SDWA and amendments; FFDCA; EPCRA; CERCLA; SARA; GPRA; GMRA.; CCA; PRA; FOIA; CSA; Privacy Act Electronic Freedom of Information Act.

Small Business Ombudsman

Program Area: Information Exchange / Outreach

Goal: Compliance and Environmental Stewardship

Objective(s): Improve Environmental Performance through Pollution Prevention and Innovation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$2,498.5	\$3,501.7	\$3,261.0	(\$240.7)
Total Budget Authority / Obligations	\$2,498.5	\$3,501.7	\$3,261.0	(\$240.7)
Total Workyears	8.5	13.0	12.0	-1.0

Program Project Description:

The Small Business Ombudsman (SBO) serves as EPA's gateway and leading advocate for small business regulatory issues. The SBO partners with state Small Business Environmental Assistance Programs (SBEAPs) nationwide, and with hundreds of small business trade associations to reach out to the small business community. These partnerships provide the information and perspective EPA needs to help small businesses achieve their environmental goals. This is a comprehensive program that provides networks, resources, tools, and forums for education and advocacy on behalf of small businesses.¹

The core SBO functions include participating in the regulatory development process, operating the Small Business Ombudsman Hotline, supporting the Small Business Environmental Homepage, participating in program and Regional Offices' small business related meetings, and supporting internal and external small business activities. The SBO's outreach and communication services help small businesses learn about new EPA actions and developments and help EPA learn about the concerns and needs of small businesses. The SBO provides a service to EPA, other Federal agencies, state SBEAPs, and trade associations by disseminating information and providing tools that assist small businesses with their environmental needs. The SBO supports partnerships with, and provides training to, state SBEAPs in order to reach an ever-increasing number of small businesses and to assist them with updated and new approaches for improving their environmental performance. The SBO provides technical assistance in the form of workshops, conferences, hotlines, and training forums designed to help small businesses become better environmental performers and helps our partners provide the assistance that small businesses need.

FY 2008 Activities and Performance Plan:

In FY 2008, the Small Business Ombudsman will:

- Support and promote EPA's Small Business Strategy and the President's Management Agenda, by encouraging small businesses, states, and trade associations to comment on

¹ Please refer to: <http://www.epa.gov/sbo/>.

EPA rulemaking through the E-Rulemaking initiative, as well as providing updates on the Agency's rulemaking activities in the semi-annual Small Business Ombudsman Update.

- Serve as the Agency's Point of Contact for the Small Business Paperwork Relief Act by coordinating efforts with the Agency's program offices to further reduce the information collection burden for small business concerns with fewer than 25 employees.
- Participate with the Small Business Administration and other Federal agencies in Business Gateway "one-stop" activities which help improve services and reduce the burden on small businesses by guiding them through government rules and regulations. Support and promote a state-lead multi-media initiative and coordinate efforts within the Agency.
- Strengthen and support partnerships with state SBEAPs and trade associations, as well as provide recognition to state SBEAPs, small businesses, and trade associations that have directly impacted the improved environmental performance of small businesses. Develop a compendium of small business environmental assistance success stories that demonstrate what really works.
- Improve the environmental performance and administrative efficiencies within eight business sectors that have a large proportion of small businesses, through the Sectors Strategy program.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$67.1) This increase is the net effect of increases for payroll and cost of living for existing FTE, combined with a recalculation of base workforce costs.
- (-1.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities.
- (-\$307.8) This decrease represents anticipated savings accomplished through more efficient management and administrative practices, as well as other IT and telecommunication changes that reflect more economically efficient resource utilization.

Statutory Authority:

CAA of 1990, section 507.

Small Minority Business Assistance
Program Area: Information Exchange / Outreach

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$1,950.4</i>	<i>\$2,646.6</i>	<i>\$2,466.0</i>	<i>(\$180.6)</i>
Total Budget Authority / Obligations	\$1,950.4	\$2,646.6	\$2,466.0	(\$180.6)
Total Workyears	9.2	11.8	11.8	0.0

Program Project Description:

This program provides technical assistance to small businesses, and to Headquarters and Regional employees, to ensure that small, disadvantaged, women-owned, Historically Underutilized Business Zone (HUBZone), and Service-Disabled Veteran-Owned Small Businesses (SDVOSBs) receive a fair share of EPA's procurement dollars. This program enhances the ability of these businesses to participate in the protection of public health and the environment. The functions assigned to this area involve ultimate accountability for evaluating and monitoring contracts, grants and cooperative agreements entered into, and on behalf of, EPA's Headquarters and Regional Offices. This will ensure that the Agency's contract and procurement practices further the Federal laws and regulations regarding utilization of small and disadvantaged businesses in direct procurement acquisitions and indirect procurement assistance.¹

FY 2008 Activities and Performance Plan:

Small and disadvantaged business procurement experts will provide assistance to Headquarters and Regional program office personnel, as well as small business owners, to ensure that small, disadvantaged, Women-Owned Small Businesses (WOSBs), HUBZone firms, and SDVOSBs receive a fair share of EPA's procurement dollars. This fair share may be received either directly or indirectly through contracts, grants, cooperative agreements, or interagency agreements. EPA has a number of national goals that it negotiates with the Small Business Administration (SBA) every two years. EPA's goals for FY 2006/2007 were based on estimated contract obligations of \$1.2 billion for prime contracts and \$200 million for subcontracts. (See chart below.) EPA exceeded four of its small business goals in FY2006, and is on track to meet or exceed the remaining goals (HUBZone and Service-Disabled Veteran Owned firms) by the end of FY 2007. The Agency's FY2008/2009 goals will be negotiated during the summer of 2007.

¹ Please refer to: <http://www.epa.gov/osdbu/>.

EPA's Direct Procurement Goals for FY2006-FY2007

Estimated Obligations	Proposed FY2006/2007 Goals	
DIRECT	\$ Value	Goal
Small Businesses	\$432M	36.0%
8(a) Businesses	\$90M	7.5%
Non 8(a) Small Disadvantaged Businesses	\$36M	3.0%
Women-Owned Small Businesses	\$66M	5.5%
HUBZone Businesses	\$36M	3.0%
Service Disabled Veteran-Owned Small Businesses	\$36M	3.0%
SUBCONTRACT	\$ Value	Goal
Small Businesses	\$100M	50.0%
Small Disadvantaged Businesses	\$40M	20.0%
Women-Owned Small Businesses	\$15M	7.5%
HUBZone Businesses	\$6M	3.0%
Service Disabled Veteran-Owned Small Businesses	\$6M	3.0%

Contract bundling reviews of an increased number of Agency contracts will emphasize ways to: 1) eliminate unnecessary contract bundling; and 2) mitigate the effects of bundling on America's small business community. In FY 2008, special emphasis will be placed on implementing Section 811 of the Small Business Reauthorization Act of 2000 that authorizes contracting officers to restrict competition to eligible WOSBs for certain Federal contracts in industries in which the SBA has determined that WOSBs are underrepresented or substantially underrepresented in Federal procurement. We will also continue to emphasize contracting with SDVOSBs, as mandated by the White House's October 21, 2004 Executive Order, which requires increased Federal contracting opportunities for this group of entrepreneurs. Outreach and in-reach efforts will help EPA meet its 5.5% procurement goal for WOSBs, 3% goal for SDVOSBs, and 7.5% goal for 8(a) firms.

Under its Indirect Procurement Program, EPA has a statutory goal of 10% utilization of Minority Business Enterprises/Women-Owned Business Enterprises for research conducted under the Clean Air Act Amendments of 1990, as well as a statutory 8% goal for all other programs. The Small Minority Business Assistance program encourages the Agency to meet these direct and indirect procurement goals. These efforts will enhance the ability of America's small and disadvantaged businesses to help the Agency protect human health and the environment and, at the same time, create more jobs. As a result of the Supreme Court's decision in *Adarand v. Peña*, 115 S. Ct. 2097 (1995), EPA will begin implementation of its rule for the participation of Disadvantaged Business Enterprises in procurements funded through EPA's assistance agreements, as well as the certification requirements of the final rule.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$181.3) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on recalculation of base workforce costs.
- (+\$0.7) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Small Business Act, sections 8 and 15, as amended; Executive Orders 12073, 12432, and 12138; P.L. 106-50; CAA Amendments of 1990.

State and Local Prevention and Preparedness

Program Area: Information Exchange / Outreach

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$11,576.0</i>	<i>\$12,508.4</i>	<i>\$12,960.0</i>	<i>\$451.6</i>
Total Budget Authority / Obligations	\$11,576.0	\$12,508.4	\$12,960.0	\$451.6
Total Workyears	51.2	57.4	57.9	0.5

Program Project Description:

EPA works with state and local partners to help protect the public and the environment from catastrophic releases of hazardous substances that occur at chemical handling facilities. Under the Clean Air Act (CAA), EPA regulations require that facilities handling more than a threshold quantity of certain extremely hazardous substances must implement a risk management program and submit to EPA a Risk Management Plan (RMP). The RMP must also be sent to the state, local planning entity, the Chemical Safety and Hazard Investigation Board, and be made available to the public. The RMP describes the hazards of the chemicals used by the facility, the potential consequences of worst case and other accidental release scenarios, a five-year accident history, the chemical accident prevention program in place at the site, and the emergency response program used by the site to minimize the impacts on the public and environment should a chemical release occur. Facilities are required to update their RMP at least once every five years, and sooner if certain changes are made at the facility.

The Agency works with state and local partners to help them implement their own risk management program through technical assistance grants, technical support, outreach, and training and also works with industry partners to produce tools and guidance used by industry, government and local communities to control hazardous materials. EPA works with communities to provide chemical risk information on local facilities, as well as assist them in understanding how the chemical risks may affect their citizens. Additionally, EPA supports continuing development of emergency planning and response tools such as the Computer-Aided Management of Emergency Operations (CAMEO) software suite. With this information and these tools, communities are in a better position to prepare for, reduce and mitigate releases that may occur.

RMP data are a valuable source of information to homeland security analysts for the identification of potential hazards in the chemical sector. EPA assists the Department of Homeland Security and other Federal agencies by providing updated copies of the RMP database and analytical support for their vulnerability analyses. EPA also provides state and local government entities information and analysis from the RMP database that is helpful for homeland security planning related to chemical accidents and terrorism. In addition, EPA conducts analyses of RMP data to identify chemical accident trends and industrial sectors that

may be more accident-prone, to gain knowledge on the effectiveness of risk management measures, and for other analyses in support of the Agency's mission.

Additional information on the risk management and community right-to-know programs can be found on the internet at: <http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/RMPS.htm>

FY 2008 Activities and Performance Plan:

In FY 2008, the Agency will continue its efforts to help state and local partners implement their risk management programs. EPA will continue to refine RMP database analyses, make the data more easily available to appropriate government agencies and improve data utility for security and emergency prevention, preparedness, and response efforts. EPA also will use information generated by the RMPs with other right-to-know data to conduct initiatives and activities aimed at risk reduction in high-risk facilities, priority industry sectors, and/or specific geographic areas.

The CAA requires EPA to establish a system to audit RMPs. In an effort to help agencies, states, and prospective third party auditors acquire or improve skills required to conduct audits, EPA has developed and implemented an RMP audit and inspection program. The audit and inspection program is used to continuously improve the quality of risk management programs as well as check compliance with the requirements.

In FY 2008, EPA activities in support of these efforts include the following:

- EPA and other implementing agencies will perform their audit and inspection obligations through a combination of desk audits of RMP plans and at least 400 on-site facility inspections. EPA will continue its extensive quality assurance oversight of data collection and reporting procedures.
- EPA will continue its work to transition the RMP submission system to allow complete internet-based risk management plan submission. Transitioning the system to full internet-based submission capability will reduce facility burden, reduce data processing errors, and result in more timely updates of EPA's RMP*Info database. Full transition is expected to be complete in early FY 2009.
- EPA and the National Oceanic Atmospheric Administration will continue improvements to the CAMEO software suite by updating the MARPLOT® mapping program, adding new information to the CAMEO chemical library to assist first responders and emergency planners, and, in conjunction with industry associations, initiating development of a new Chemical Reactivity Management software system that will allow users to more accurately identify and manage hazards involving reactive chemical mixtures.
- EPA will publish new RMP implementation guidance for the agriculture sector – the largest industry sector covered by the RMP rule. The new guidance will provide this sector with additional assistance in meeting their compliance obligations under the rule.

- EPA will participate with the National Fire Protection Association (NFPA) to continue development of the new international NFPA Hazardous Chemicals Code (NFPA-400). After its final publication in 2008, this new code will eventually be adopted by state and local authorities as the basic standard for storage and handling of hazardous chemicals in most commercial sites. EPA also will continue working with NFPA on revisions to the Liquefied Petroleum Gas safety code (NFPA-58) to make important improvements in safety requirements for propane facilities nationwide.

Performance Targets:

Work under this program supports EPA's Chemical, Organism, and Pesticide Risks objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+0.5 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities.
- (+\$477.5) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$21.8) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to program travel expenses in Headquarters and the Regions.
- (-\$7.5) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+\$3.4) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

EPCRA; SARA of 1986; Section 112r, Accidental Release Provisions of the CAA of 1990; Chemical Safety Information, Site Security, and Fuels Regulatory Relief Act.

TRI / Right to Know

Program Area: Information Exchange / Outreach

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$13,914.4</i>	<i>\$15,243.4</i>	<i>\$15,728.0</i>	<i>\$484.6</i>
Total Budget Authority / Obligations	\$13,914.4	\$15,243.4	\$15,728.0	\$484.6
Total Workyears	44.1	44.0	43.0	-1.0

Program Project Description:

The Toxics Release Inventory (TRI) program provides the public with information on the releases and other waste management of toxic chemicals. The program 1) collects information on listed toxic chemicals from certain industries; 2) makes that information available to the public through a variety of means, including a publicly accessible national database; 3) operates and maintains the TRI (TRIS), TRI-Explorer and TRI-Made Easy (TRI-ME) (www.epa.gov/tri) systems to facilitate the program's data collection and reporting requirements; and 4) provides compliance assistance to TRI reporting facilities through outreach efforts such as informational mailings, workshops, the Internet, and telephone hotlines.

FY 2008 Activities and Performance Plan:

In 2008, EPA will continue its efforts to reduce the TRI reporting burden on industry and improve TRI data quality by developing and implementing regulations to reduce reporting requirements without compromising the utility or quality of the data; improving and distributing software for the *TRI-Made Easy* (TRI-ME) data collection tool, including the development of a web-based application; and re-engineering the TRI data processing flow (i.e., from collection through dissemination) in an effort to better align with EPA's Enterprise Architecture.

TRI-ME Web will be web-based software to help facility owners and operators complete their Form R and Form A certification statements. These statements are required by the Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 (TRI). TRI-ME Web will be an interactive, intelligent, user-friendly software tool that guides facility owners and operators through the TRI reporting process.

TRIS-II requires the relocation of the TRI database from a contractor's site to the EPA National Computer Center (NCC) in Research Triangle Park, NC. This fundamental step will enable direct and secure access of TRI data by the Agency's new TRI data mart, thereby providing real-time updates and Agency-wide access to complete TRI information.

In addition, EPA will continue to provide TRI reporting facilities with compliance assistance through workshops, web-based reference tools, and telephone hotline support. EPA will also

continue working to increase the percentage of TRI chemical forms that are submitted in electronic format via EPA's Central Data Exchange (CDX) (i.e., Internet reporting).

The TRI program works closely with the Exchange Network program to coordinate more efficient and effective data collection and system access using EPA's CDX node on the Exchange Network. TRI data collection and reporting use the data standards and reporting requirements outlined in the IT/Data Management program, which closely links the programs and ensures appropriate information security. The TRI program implements information security measures as outlined by the Information Security program and in compliance with FISMA regulations.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$34.7) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (+\$519.3) The additional funding supports future TRI system enhancements by using the Integrated Portal which allows EPA and its partners to access, exchange and integrate standardized local, Regional and national environmental and public health data, in various technical media, which EPA has stored in centralized data marts.
- (-1.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

FACA; GISRA; CERCLA; SARA; EPCRA; CAA and amendments; CWA and amendments; SDWA and amendments; TSCA; FIFRA; FQPA; FFDCA; ERD & DAA; GPRA; GMRA; CCA; PRA; FOIA; CSA; PR; EFOIA; Pollution Prevention Act.

Tribal - Capacity Building

Program Area: Information Exchange / Outreach

Goal: Compliance and Environmental Stewardship

Objective(s): Improve Human Health and the Environment in Indian Country

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$11,841.6</i>	<i>\$11,435.7</i>	<i>\$11,477.0</i>	<i>\$41.3</i>
Total Budget Authority / Obligations	\$11,841.6	\$11,435.7	\$11,477.0	\$41.3
Total Workyears	77.0	74.1	73.1	-1.0

Program Project Description:

Under Federal environmental statutes, EPA has responsibility for protecting human health and the environment in Indian country. EPA has worked to establish the internal infrastructure and organize its activities in order to meet this responsibility.

Since adopting the EPA Indian Policy in 1984, EPA has worked with Tribes on a government-to-government basis that affirms the Federal trust responsibility between EPA and each Federally-recognized Tribe. EPA's American Indian Environmental Office leads the Agency-wide effort to ensure environmental protection in Indian country.

(See <http://www.epa.gov/indian/policyintitvs.htm> and <http://www.epa.gov/indian/> for more information.)

EPA's strategy for this program has three major components:

- Work with Tribes to create an environmental presence for each Federally-recognized Tribe (discussed under the Tribal General Assistance Program in the STAG appropriation);
- Provide the data and information needed by Tribal governments and EPA to meet Tribal environmental priorities. At the same time, ensure EPA has the ability to view and analyze the conditions on Indian lands and the effects of EPA and Tribal actions and programs on the environmental conditions; and
- Provide the opportunity for implementation of Tribal environmental programs by Tribes, or directly by EPA, as necessary.

FY 2008 Activities and Performance Plan:

The ability to comprehensively and accurately examine conditions and make assessments provides a blueprint for planning future activities through the development of Tribal/EPA Environmental Agreements (TEAs) or similar Tribal environmental plans that address and

support priority environmental multi-media concerns in Indian country. Complementary to the efforts of providing an environmental presence through the Indian General Assistance Program (GAP), in FY 2008 EPA will continue to expand its information technology infrastructure, known as the Tribal Program Enterprise Architecture (TPEA), to organize environmental data on a Tribal basis, bringing together data from different agencies, programs and tribes in a format providing a clear, up-to-date picture of environmental conditions in Indian country. TPEA is designed to track the following three classes of information: environmental information from national monitoring and facility management databases; EPA programmatic information, generally utilizing customized databases where data are input by regional program offices; and individual sets of information to be submitted by Tribes, a process that is only just beginning. The entire system is web based.

EPA's Indian Policy affirms the principle that the Agency has a government-to-government relationship with Tribes and that "EPA recognizes Tribes as the primary parties for setting standards, making environmental policy decisions and managing programs for reservations, consistent with agency standards and regulations." To that end, EPA "encourage[s] and assist[s] Tribes in assuming regulatory and program management responsibilities," primarily through the treatment in a manner similar to a state (TAS) processes available under several environmental statutes. EPA continues to encourage Tribal capacity development to implement Federal environmental programs, including the use of Direct Implementation Tribal Cooperative Agreement (DITCA) authority.

In FY 2005, EPA instituted a review of the national GAP grant program to assure effective management of grant resources. This effort, described in Regional Oversight Reports, includes review of Regional GAP programs and individual GAP grant files. These program oversight activities will continue in FY 2008.

Performance Targets:

In FY 2008, EPA will continue to support standardization and a crosswalk of Tribal identifier codes to integrate and consistently report Tribal information across Federal agencies. One example of this effort is the adoption by EPA of the Bureau of Indian Affairs (BIA) Tribal identifier code system as an agency standard for all the EPA databases. TPEA will also, by FY 2008, compile and display the "universe" of Tribal EPA regulated facilities, assigning each one to a specific Tribal entity, through the use of an Indian country flag in the EPA Facility Registry System. This type of cross-platform data analysis was not possible without EPA's TPEA initiative. With the addition of these two data systems, EPA will be able to measure environmental quality in Tribal lands in two important areas: ambient quality of air and water, and emissions of pollutants into the environment. Both kinds of measures (ambient quality and emissions) are important in the development of outcome-based performance measures for EPA Tribal programs.

In FY 2008 TPEA will work to link directly to the Sanitation Deficiency System Database (SDS) of the Indian Health Service (IHS). Information in the IHS SDS system is reported in the Agency's Strategic Plan.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$43.9) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$0.6) This is part of an Agencywide effort to reduce travel, including international travel.
- (-\$2.0) Change due to rounding in the FY 2008 President's Budget.
- (-1.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

Indian General Assistance Program Act, 42 U.S.C. § 4368b (1992), as amended.

Program Area: International Programs

Commission for Environmental Cooperation

Program Area: International Programs

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks; Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$4,229.9</i>	<i>\$4,137.0</i>	<i>\$4,022.0</i>	<i>(\$115.0)</i>
Total Budget Authority / Obligations	\$4,229.9	\$4,137.0	\$4,022.0	(\$115.0)
Total Workyears	8.4	7.4	6.4	-1.0

Program Project Description:

The Commission on Environmental Cooperation (CEC) is an international organization that was created by the United States, Canada, and Mexico under the North American Agreement on Environmental Cooperation (NAAEC), a side agreement to the North American Free Trade Agreement (NAFTA). The CEC addresses regional environmental concerns, helps prevent potential trade and environmental conflicts, and promotes the effective enforcement of environmental law. The CEC is comprised of a Council, a Secretariat, and a Joint Public Advisory Committee. U.S. participation in the CEC is coordinated by the EPA Administrator, who represents the United States on the three-member Council that governs the Commission.

FY 2008 Activities and Performance Plan:

EPA will ensure that the CEC supports the objectives of the NAAEC. In particular, the CEC will facilitate trade expansion while protecting the environment by:

- Increasing the comparability, reliability and compatibility of national and sub-regional information.
- Strengthening institutions and sharing environmental knowledge among a broad range of stakeholders.
- Promoting policies and actions that provide mutual benefits for the environment, trade and the economy.

EPA will continue to strengthen cooperation and promote public participation in the development and improvement of environmental laws, regulations, procedures, policies and practices. EPA will support the CEC's efforts to strengthen capacity and improve compliance with environmental laws while encouraging voluntary measures on the part of industry. EPA also will continue to work with the CEC to implement quality assurance mechanisms, transparency, and cost effectiveness.

EPA will support the CEC's efforts to publish report data on pollutant releases and transfers from industrial activities in North America with an emphasis on increasing the comparability of Pollutant Release and Transfer Registers (PRTRs) and building Mexico's capacity to collect and report data. EPA will continue to support the development of an integrated monitoring program for the sound management of chemicals and the development of a digital North American Environmental Atlas.

EPA will support CEC efforts as it works with the Parties to the NAAEC to: 1) strengthen enforcement of environmental laws; 2) facilitate the movement of legal materials across borders by improving the exchange of information, training customs and other law enforcement officials; and 3) build the capacity of legal and judicial systems, with an emphasis on Mexico. The CEC and the Parties to the NAAEC are working to develop risk assessment guidelines to protect North America's marine, freshwater, and terrestrial ecosystems from the harmful effects of invasive alien species.

The CEC continues efforts on the Sound Management of Chemicals program, which promotes regional cooperation and capacity building for pollution prevention, source reduction, and pollution control for chemicals of common concern. North American Regional Action Plans were developed and are being implemented for mercury, lindane, and dioxin and furans.

In addition, EPA will continue to address the environmental concerns associated with increased trade. The Agency will work to decouple economic growth from negative environmental impacts by: 1) promoting the North American market for renewable energy; 2) encouraging green purchasing; 3) expanding the use of market based mechanisms to increase sustainable trade while encouraging conservations; and 4) developing a tri-national approach to prevent trade-related pathways for invasive alien species.

Performance Targets:

Work under this program supports EPA's objective to sustain, clean up and restore communities and the ecological systems that support them, and also indirectly supports pertinent objectives under all 5 Goals of EPA's Strategic Plan. Currently, there are no performance measures for this specific program.

FY 2008 Change from 2007 President's Budget (Dollars in Thousands):

- (-\$97.7) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs. With the maturation of the CEC program, the opportunity of transferring lessons learned, achieving program implementation savings, and enhanced environmental gains are being implemented. This reduction will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-1.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not

impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

- (-\$18.2) This is part of an Agencywide effort to reduce travel, including international travel.
- (+\$0.9) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

NAFTA; NAAEC.

Environment and Trade

Program Area: International Programs
 Goal: Healthy Communities and Ecosystems
 Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$1,695.8</i>	<i>\$1,861.2</i>	<i>\$1,945.0</i>	<i>\$83.8</i>
Total Budget Authority / Obligations	\$1,695.8	\$1,861.2	\$1,945.0	\$83.8
Total Workyears	9.6	8.9	8.9	0.0

Program Project Description:

EPA is a member of the Trade Policy Staff Committee (TPSC) and the Trade Policy Review Group (TPRG), interagency mechanisms that are organized and coordinated by the Office of the United States Trade Representative (USTR) to provide advice, guidance and clearance to the USTR in the development of U.S. international trade and investment policy. This input pertains to comprehensive multilateral trade rounds (e.g., the ongoing Doha round of the World Trade Organization (WTO)), bilateral or plurilateral free trade agreements, and other matters. In addition, USTR and EPA co-manage the Trade and Environment Policy Advisory Committee (TEPAC), a Congressionally-mandated private sector advisory group that provides advice and information in connection with the development, implementation, and administration of U.S. trade policy.

The Trade Promotion Authority (TPA) section of the Trade Act of 2002 requires that the U.S. seek provisions in each trade agreement to prevent lowering environmental standards or weakening the enforcement of existing laws to attract investment or trade. It also calls for environmental reviews of trade agreements and the provision of U.S. assistance to promote sustainable development and increase the capacity of U.S. trading partners to develop and implement environmental protection standards.

In its capacity as a member of the TPSC and TPRG, EPA performs three major functions pursuant to the TPA. First, by contributing to the development, negotiation and implementation of environment-related provisions in all new U.S. free trade agreements, EPA helps to ensure that U.S. trading partner countries improve and enforce their domestic environmental laws, which promotes sound environmental practices. In addition, EPA facilitates trade in environmentally-preferable goods and services during negotiations. As U.S. trading partner countries pursue more environmentally-sound economic development under the trade agreement's environmental provisions, reduced growth in environmental impacts such as air pollution and the inadvertent transmission of invasive alien species is expected. A second major function involves helping to develop the U.S. Government's (USG) environmental reviews of each new free trade agreement. As a complement of this effort, we encourage and support our trade partners in conducting their own assessments of the environmental implications of trade liberalization. EPA's third major function involves helping to negotiate and implement the

environmental cooperation agreements that parallel each new trade agreement. EPA and other entities of the USG provide assistance to promote sustainable development and increase the capacity of U.S. trading partners to develop and implement environmental protection standards that offer high levels of protection.

FY 2008 Activities and Performance Plan:

During FY 2008, the U.S. will continue its engagement in multilateral trade negotiations and will initiate and/or conclude new bilateral free trade agreements and trade and investment framework agreements. In addition to helping the U.S. Trade Representative (USTR) develop and negotiate the environmental provisions of each new free trade agreement (approximately four per year) as well as ongoing multilateral trade negotiations through the WTO, EPA will contribute to the associated environmental reviews and environmental cooperation agreements by: developing baseline assessments of existing environmental law and enforcement regimes in a number of U.S. trading partner countries; advocating greater attention to invasive species and other concerns associated with the movement of traded goods. EPA also provides targeted capacity building support under the environmental cooperation agreements already developed in parallel with concluded U.S. free trade agreements- including potential activities- with Jordan, Chile, Bahrain, Morocco, Singapore, seven countries in Central America and the Caribbean, countries in the Andean region, Oman, the United Arab Emirates, and possibly Malaysia, Thailand and/or South Korea. These priorities are established through a State Department-chaired and -led inter-agency process in which EPA is a full member, with additional input provided by the USTR-led TPSC process.

In addition, to facilitate a successful reengagement and possible redirection of the Doha Round of negotiations under the World Trade Organization (WTO), EPA will continue to provide the USTR with policy and analytical data to influence environmental practices in the U.S. and other countries. Based on decisions from the interagency TPSC, EPA will continue to work with other major U.S. trading partners such as China and India that pose increasingly complex environmental and health challenges. More specifically, in FY 2008 EPA will continue working to help these two countries to address air pollution problems that result from the emissions from ships that export goods to the U.S. and other countries. In this regard, EPA also will seek to expand the voluntary Pacific Rim Ports Air Quality Collaboration (now made up of the U.S. and China) to other major trading partners in the Pacific Rim and possibly beyond.

Performance Targets:

Work under this program supports EPA's objective to sustain, clean up and restore communities and the ecological systems that support them, and also indirectly supports pertinent objectives under Goals 1 (e.g., long-range transboundary air pollution) and 2 (e.g., marine pollution and invasives) of EPA's Strategic Plan. To illustrate, EPA's work with China, a major source and shipper of goods to the U.S., is expected to help to reduce ship- and port operations-related air emissions (e.g., of PM and SO_x) associated with U.S imports of their goods. This should help to improve air quality in communities around major U.S. and Chinese ports and help to reduce long-range transmission of air pollution from China. With the conclusion in FY 2008 of ongoing work to develop baseline assessments of the environmental law and enforcement regimes of nine

trading partner countries, EPA will be better positioned to advance new performance measures and objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$108.6) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$25.0) This is part of an Agencywide effort to reduce travel, including international travel.
- (+\$0.2) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Trade Act of 2002; Executive Order 13141 (Environmental Review of Trade Agreements); Executive Order 13277 (Delegation of Certain Authorities and Assignment of Certain Functions Under the Trade Act of 2002); WTO Agreements; NAFTA; NAAEC; PPA.

International Capacity Building

Program Area: International Programs

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air; Healthier Indoor Air

Goal: Clean and Safe Water

Objective(s): Protect Human Health; Protect Water Quality

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$7,687.0</i>	<i>\$6,390.3</i>	<i>\$5,311.0</i>	<i>(\$1,079.3)</i>
Total Budget Authority / Obligations	\$7,687.0	\$6,390.3	\$5,311.0	(\$1,079.3)
Total Workyears	39.2	37.1	27.1	-10.0

Program Project Description:

EPA has improved the quality of life for all Americans by safeguarding their air, water, and land and helping protect their health. Addressing issues at home is only part of the environmental effort. As globalization continues and as we better understand the interdependencies of ecosystems and the transport of pollutants, it becomes clearer that the actions of other countries can affect the U.S. environment. For example, the water quality of a lake here in the U.S. is affected not only by pesticides from nearby farms, lawns, or gardens but also by pollutants emitted thousands of miles away. Air quality in the U.S. is affected by emissions from other countries. The depletion of a natural resource, such as forest cover in one nation, can have environmental and economic consequences in many other countries. To achieve our domestic environmental objectives, it is important to address foreign sources of pollution that impact the U.S. International capacity-building is a key component of efforts to protect human health and the environment.

FY 2008 Activities and Performance Plan:

Clean Air. In FY 2008, EPA will continue to provide technical cooperation to help countries reduce air pollution and better manage air quality. The focus will be on four areas:

- **Partnership for Clean Fuels and Vehicles.** This program will focus on (a) lead phase-out, along with the introduction of catalytic converters in countries that have removed lead from gasoline, (b) introduction of low-sulfur fuels, and (c) retrofits of in-use vehicles. Work will advance the Partnership's goal of global lead phase-out of gasoline, as well as

Partnership efforts to encourage sulfur reductions in transport fuels to 50 ppm and lower globally.

- Reduction of stationary-source pollution. EPA will focus on practical measures to achieve reductions in PM, NO_x and other emissions. For example, EPA will work with China to reduce dioxin and furans from cement kilns and assess and reduce emissions of PM and mercury from coal combustion sources.
- Improved air quality management. EPA will work to transfer appropriate air management tools and techniques to India, China, Mexico, Central America, Russia, Africa, and other key countries and regions. For example, EPA will work with the Indian government to develop a national standard for nitrogen oxides from power plants, and transfer air quality management programs and methods to the countries of Central America.
- Climate change. To help reduce greenhouse gas (GHG) emissions worldwide, EPA will work with China, Mexico, Russia, and India through capacity and technology transfer activities.

Clean Water. In FY 2008, EPA will continue its capacity-building program to address water quality issues worldwide.

- Drinking water. EPA will continue to promote the development and implementation of Water Safety Plans in Latin America and Asia. This work includes strengthening institutional capacity to develop monitoring and surveillance systems for drinking water quality as well as enhancing the performance of drinking water treatment plants. Additionally, EPA will continue working to establish sustainable approaches for financing water system improvement projects at the local, municipal, and national levels.
- Wastewater. EPA is working with national governments in Central America to build regulatory frameworks for wastewater discharges. This effort will focus on building capacity to implement the regional model wastewater discharge regulation, and will include training on inspection of wastewater treatment plants and discharges.
- Marine Protection. EPA will work with the U.S. Coast Guard, Department of State, and other interested agencies to pursue development of more stringent international air emission standards from ships and will seek U.S. ratification of international treaties that are critical to efforts in addressing vessel and land-based marine pollution. EPA also will work to improve the environmental profile of ports and vessels as ports emerge as a nexus of expanding global trade.

Sound management of toxics. In FY 2008, as part of its effort to reduce global sources of persistent bioaccumulative toxics, EPA will continue to give priority to reducing the global use and emission of mercury. EPA is a global leader in the development and implementation of Global Partnerships for Mercury Reduction. EPA's mercury partnership work has focused on

four sectors – chlor-alkali, products, combustion, and artisanal mining – which together account for over 80% of global anthropogenic atmospheric emissions of mercury¹.

In 2008, EPA will demonstrate measurable successes achieved directly and through leveraged contributions of other partners, including chlor-alkali industry pilot demonstration work in Russia and Mexico and small scale gold mining and refining demonstrations in Brazil and West Africa. EPA will publicize successful approaches and corresponding measurable results online in order to disseminate information among Global Mercury Partners. In addition, opportunities for larger reductions in targeted mercury use sectors will be explored in key countries and regions such as Russia, India, China, Brazil, and Africa.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of countries completing phase out of leaded gasoline. (incremental)				7	Countries

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of countries introducing low sulfur in fuels. (incremental)				2	Countries

FY 2008 Change from 2007 President's Budget (Dollars in Thousands):

- (-\$978.4 / -10.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. With the maturation of the ICB program, the opportunity of transferred lessons learned, achieving program implementation savings, and enhanced environmental gains will result in greater efficiencies.
- (-\$92.1) This is part of an Agencywide effort to reduce travel, including international travel.
- (-\$8.8) This reflects a decrease in workforce support associated with the FTE reduction for capacity building activities.

Statutory Authority:

PPA; FIFRA; CAA; TSCA; NEPA; CWA; SDWA; RCRA; CERCLA; NAFTA; OAPCA; MPRSA; CRCA.

¹ UNEP Global Mercury Assessment, 2002: <http://www.chem.unep.ch/mercury/Report/Final%20Assessment%20report.htm>

POPs Implementation

Program Area: International Programs
Goal: Healthy Communities and Ecosystems
Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$1,707.9</i>	<i>\$1,808.7</i>	<i>\$1,831.0</i>	<i>\$22.3</i>
Total Budget Authority / Obligations	\$1,707.9	\$1,808.7	\$1,831.0	\$22.3
Total Workyears	10.1	12.3	11.3	-1.0

Program Project Description:

This program supports EPA's international efforts to reduce Persistent Organic Pollutants (POPs). Domestic POPs-related activities and associated funding are included in the Toxic Substances: Chemical Risk Management program. EPA's international activities under this program focus on reducing POPs under the Stockholm Convention¹. Long-range and transboundary atmospheric transport and deposition of POPs such as polychlorinated biphenyls (PCBs), dioxins, and furans are a continuing threat to human health and ecosystems. After release, these pollutants can be transported far from their sources, enter the ecosystem, and bioaccumulate through the food chain. To reduce the risks posed to the American public, both international and domestic sources must be addressed.

To demonstrate the U.S. commitment to international action on these chemicals, EPA is working to mitigate potential risk from POPs reaching the U.S. by long range transport by: 1) reduction/elimination of sources of POPs in countries of origin, focusing on PCB-containing equipment, obsolete pesticides stockpiles, and dioxins and furans emissions from combustion sources; and 2) better inter- and intra-country coordination on POPs implementation activities through improved access to POPs technical, regulatory and program information from all sources, including the Internet.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue efforts to reduce sources of POPs worldwide. Efforts will focus on regions and countries whose POPs releases are having the most significant impact on U.S. human health and the environment, specifically Russia, China, India, and Central America. EPA will transfer innovative U.S. technologies to these countries and regions, and will help develop regulatory and financial infrastructure for sustainable projects.

In FY 2008, EPA will assist Russia in inventory development, repackaging, laboratory testing, and environmentally-safe storage of up to 700 tons of obsolete pesticides, including pesticides containing POPs and heavy metals. EPA also will continue working with Russia on development of infrastructure for environmentally-safe destruction of PCBs and obsolete pesticides. The pilot demonstration program will include destruction of 100 tons of PCB liquids

¹ For more information on the Stockholm Convention, see <http://www.pops.int>

and 50 tons of obsolete and prohibited pesticides. In addition, EPA will assist China in inventory development and reduction of dioxins/furans emissions from the Chinese cement sector, which produced over half of the world's cement in 2005.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Mean maternal blood levels of chlordane (measured as the metabolites oxychlordane and trans-nonachlor) in indigenous populations in the Arctic. (cumulative)	1.3			1.25	ug / l

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Mean maternal blood levels of polychlorinated biphenyls (PCBs) (measured as Aroclor 1260) in indigenous populations in the Arctic. (cumulative)	6.3			6.15	ug / l

Data for these measures are not available annually because of the long biological residence of the selected congeners of about 3-5 years.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$53.9) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$31.5) This is part of an Agencywide effort to reduce travel, including international travel.
- (-\$0.1) Change due to rounding in the FY 2008 President's Budget.
- (-1.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

PPA; FIFRA; CAA; TSCA; NEPA; CWA; MPRSA.

US Mexico Border

Program Area: International Programs

Goal: Healthy Communities and Ecosystems

Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$8,145.2	\$6,061.0	\$4,646.0	(\$1,415.0)
Total Budget Authority / Obligations	\$8,145.2	\$6,061.0	\$4,646.0	(\$1,415.0)
Total Workyears	27.7	24.2	21.2	-3.0

Program Project Description:

The 2,000 mile border between the U.S. and Mexico is one of the most complex and dynamic regions in the world. This region accounts for 3 of the 10 poorest counties in the U.S., with an unemployment rate 250-300 percent higher than the rest of the United States. 432,000 of the 14 million people in the region live in 1,200 colonias¹, which are unincorporated communities characterized by substandard housing and unsafe drinking water.

The key areas of focus for the Border 2012 Program in FY 2008 will continue to include: (1) improving water quality in the region; (2) improving availability of low sulfur diesel fuel on the border; (3) the stabilization of abandoned hazardous waste sites; (4) removal of used tire piles along the U.S.-Mexico Border; (5) defining baseline and alternative scenarios for air emissions reductions along the border region; and (6) binational emergency preparedness drills and exercises at border sister cities. Note that additional Border efforts are described in the Infrastructure Assistance: Mexico Border Program Project Narrative.

FY 2008 Activities and Performance Plan:

The U.S.-Mexico Border 2012 Program is a joint effort between the U.S. and Mexican governments.² The Border 2012 framework agreement is intended to protect the environment and public health along the U.S.-Mexico Border region, consistent with the principles of sustainable development. Results achieved to date include: (1) drinking water improvements at seven³ Baja California Indigenous Communities; (2) construction of adequate water and wastewater infrastructure for over 6.7 million border residents; (3) cleanup of 62 tons³ of waste associated with undocumented immigration in Tohono O'odham Nation; (4) total cleanup of INNOR site in Mexicali (420,000 tires⁴ removed), total cleanup of CENTINELA site (1,200,000 tires⁴) and Juarez site (one million tires); (5) the removal of 1,976 tons⁴ of hazardous waste and contaminated soil at the Metales y Derivados site; and (6) 13 Sister City plans that

¹ http://www.borderhealth.org/border_region.php

² http://www.epa.gov/border2012/pdf/2012_english.pdf

³ Tribal Accomplishments and Issue Report, Border 2012 National Coordinators Meeting, April 25-27, 2006

⁴ Personal Communication, Emily Pimentel (Project Officer), EPA Region 9

establish cooperative measures and exercises in response to oil and hazardous substance incidents along the border.

Significant advances are being made in bringing cleaner fuels to the border region and demonstrating the use of advanced technologies to control pollution and improve fuel efficiency. Emissions have been reduced and fuel efficiency improved by retrofitting school buses in Laredo and Nogales and vehicle fleets in Tijuana and Las Cruces. Binational participation in the West Coast Clean Diesel and Blue Skyways Collaboratives encourages air pollution reductions from diesel engine retrofits, fuel enhancements, and improvements in efficiency. The Border 2012 Program will continue efforts to define baseline and alternative scenarios for air emissions reductions along the Border and estimate the impact on air quality and human exposure. The target date for achieving full implementation of the reduction strategies to achieve the desired objectives is 2012.

The Border program successfully implemented Phase 1, the stabilization of the Metales y Derivados site, an abandoned, secondary lead smelter in Tijuana, which resulted in the removal of nearly 2,000 tons of hazardous waste. The Metales y Derivados remediation is now in the site characterization, field sampling, and design phases. These actions are consistent with the Border 2012 draft Binational Policy on Clean-Up and Restoration⁵. In FY 2008, incorporating lessons learned, the Border 2012 Program will focus on remediating other hazardous waste sites on the border.

Over 10 million used tires are stockpiled across the U.S.-Mexico Border. These vast tire piles are a major health and environmental hazard. For example, tire piles in Ciudad Juarez (approx. 4 million) and in Mexicali (approx. 1.5 million) pose a significant risk to approximately 400,000 and 800,000 border residents respectively, because of vector-borne diseases such as malaria, dengue fever and acute respiratory illness from uncontrolled tire fires. Realizing the magnitude of the problem, the Border 2012 program will work to reduce the risk of used tire piles by creating markets for used tires, such as road paving and burning in cement kilns.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cleanup waste sites in the United States-Mexico border region. (incremental)				1	sites

FY 2008 Change from 2007 President's Budget (Dollars in Thousands):

- (-\$362.1) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs

⁵ <http://www.epa.gov/border2012>

- (-3.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$33.3) This is part of an Agencywide effort to reduce travel, including international travel.
- (-\$1,020.0) This reduction will delay the removal and clean-up of tire piles and postpone the clean-up of an abandoned secondary lead smelter mine.
- (+\$0.4) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CWA; CAA; TSCA; RCRA; PPA; FIFRA; Annual Appropriation Acts.

Program Area: IT / Data Management / Security

Information Security

Program Area: IT / Data Management / Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$4,198.5</i>	<i>\$5,562.1</i>	<i>\$5,583.0</i>	<i>\$20.9</i>
Hazardous Substance Superfund	\$341.0	\$788.6	\$792.0	\$3.4
Total Budget Authority / Obligations	\$4,539.5	\$6,350.7	\$6,375.0	\$24.3
Total Workyears	8.5	15.8	15.8	0.0

Program Project Description:

The Information Security program protects the confidentiality, availability, and integrity of EPA's information assets. The program establishes a risk-based cyber security program using a defense-in-depth approach that includes partnering with other Federal agencies and the states; implements aggressive efforts to respond to evolving threats and computer security alerts and incidents, and integrates information security into its day-to-day business; manages the Federal Information Security Management Act (FISMA) data collection and reporting requirements; and, supports the development, implementation and operation and maintenance of the Automated Security Self Evaluation and Reporting Tool (ASSERT) documentation system.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue its technical and system analyses evaluations and assessments to maintain the security of EPA's information. The constant system and network monitoring is essential to detect and identify any potential weaknesses or vulnerabilities that might compromise EPA's information assets. These proactive efforts allow EPA to develop cost effective solutions that implement EPA's long-term goal of building analytical capacity. EPA will also coordinate information security activities with the Homeland Security IT, Exchange Network and IT/Data Management program requirements and, where possible, identify and implement more efficient solutions.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of Federal Information Security Management Act	100	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	reportable systems that are certified and accredited.					

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$69.6) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$48.7) The decrease reflects expected efficiencies that will be achieved in infrastructure support.

Statutory Authority:

FISMA; GPRA; GMRA; CCA; PRA; FOIA; PR; EFOIA.

IT / Data Management

Program Area: IT / Data Management / Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$98,871.4</i>	<i>\$96,807.2</i>	<i>\$91,019.0</i>	<i>(\$5,788.2)</i>
Science & Technology	\$4,412.9	\$4,268.0	\$3,499.0	(\$769.0)
Leaking Underground Storage Tanks	\$130.9	\$175.9	\$177.0	\$1.1
Oil Spill Response	\$38.8	\$32.5	\$34.0	\$1.5
Hazardous Substance Superfund	\$16,646.2	\$17,120.4	\$16,338.0	(\$782.4)
Total Budget Authority / Obligations	\$120,100.2	\$118,404.0	\$111,067.0	(\$7,337.0)
Total Workyears	515.5	488.0	488.0	0.0

Program Project Description:

This IT/Data Management program manages and coordinates the Agency's Enterprise Architecture and develops analytical tools (e.g., Environmental Indicators) to ensure sound environmental decision-making. The program 1) implements the Agency's E-Government (E-Gov) responsibilities; designs, develops and manages the Agency's Internet and Intranet resources including the Integrated Portal, 2) supports the development, collection, management, and analysis of environmental data (including both point source and ambient data) to manage statutory programs and to support the Agency in strategic planning at the national, program, and Regional levels, 3) provides a secure, reliable, and capable information infrastructure based on a sound enterprise architecture which includes data standardization, integration, and public access, 4) manages the Agency's Quality System ensuring EPA's processes and data are of quality and adhere to Federal guidelines, and supports Regional information technology infrastructure, administrative and environmental programs, and telecommunications. These functions are integral to the implementation of Agency information technology programs and systems like the Exchange Network, the Central Data Exchange (CDX) and Permit Compliance System (PCS).

Agency offices rely on the IT/Data Management program and its capabilities to develop and implement tools for ready access to accurate and timely data. Recent partnerships include portals projects with the Offices of Research and Development and Air and Radiation to access scientific and program data. The IT/Data Management program also supports the Agency's Capital Planning and Investment Control (CPIC) program. The CPIC program is a structured, integrated approach to managing IT investments, and ensures that all IT investments align with the EPA mission and support business needs while minimizing risks and maximizing returns throughout the investment's lifecycle. The Exhibit 300 is a key tool to summarize the business

cases of EPA's major IT investments. Copies of EPA's Exhibit 300s at the following EPA website: <http://www.epa.gov/oei/cpic>.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's Information Technology community will continue to focus on the Agency's Technology Initiative¹ and fulfilling the Agency's E-Gov commitments. The Agency's IT/Data Management program forms the core of this effort with its focus on building and implementing the Agency's Integrated Portal and Enterprise Content Management System (ECMS), developing improved Environmental Indicators, and deploying enterprise-wide IT infrastructure solutions. The ECMS, and EPA's enterprise-wide IT infrastructure solutions, combined with the Exchange Network and CDX, provide the foundation for improved information, data access and sharing opportunities among the states, the Tribes, the public, the regulated community, and EPA.

Feedback and results received during stakeholder meetings on EPA's FY 2003 "Draft Report on the Environment" identified key areas for data collection, review and analysis. EPA's Technology Initiative and its focus areas work together to advance data analyses and the development of an analytical tool kit, including environmental indicators, to address these information needs. These efforts will be reflected in the next "Report on the Environment" planned for hard-copy and electronic release in calendar year mid December 2007.

In FY 2008 EPA's Integrated Portal activities continue implementing identity and access management solutions, integrating geospatial tools, and linking the CDX. The Portal is the Technology Initiative's link to diverse data sets and systems giving users the ability to perform complex environmental data analyses on data stored at other locations. It provides a single business gateway for people to access, exchange and integrate standardized local, Regional and national environmental and public health data.

Using a collaborative process, the Agency will continue to implement the ECMS project, an enterprise-wide, multi-media solution designed to manage and organize environmental data and documents for EPA, Regions, field offices and laboratories. Previously fragmented data storage approaches will be converted into a single tool on a standard platform which is accessible to everyone, reducing data and document search time and assisting in security and information retention efforts.

EPA's infrastructure program will continue to deliver secure information services to ensure that the Agency and its programs have a full range of information technology infrastructure components (e.g., user equipment, network connectivity, e-mail, application hosting, and remote access) that make information accessible across the spectrum of mission needs at all locations. The program uses performance-based, outsourced services to obtain the best solutions (value for

¹ Office of Environmental Information's (OEI) FY 2006 Technology Initiative has three major components: 1) Building on its Analytical Capacity and Indicators work, OEI will uncover and fill data gaps, and develop response capacity; 2) Using the portal and Exchange Network, OEI will increase the integration of quality data, streamline transactions to foster collaboration, reduce the data entry burden, and improve decision making; and 3) OEI's Readiness to Serve initiative will build capacity and infrastructure to allow more EPA employees to telecommute or work safely and securely in the field.

cost) for the range of program needs. This includes innovative multi-year leasing that sustains and renews technical services in a least-cost, stable manner as technology changes over time (e.g., desktop hardware, software and maintenance).

In addition to supporting key components of EPA's Technology Initiative, IT/Data Management will continue to provide local program offices in the Regions' critical support for hardware requirements, software programming and applications, records management systems, data base services, local area network activities, intranet web design, and desktop support. EPA's environmental information needs require the Agency to ensure that it is keeping pace with the states in the areas of data collection, management and utilization. Additionally, this program will continue to focus on information security and the need for each Region to have an internal IT security capacity. The Regional office will implement Agency information resource management policies in areas such as data and technology standards, central data base services, and telecommunications. The Regional offices will also continue to work on the implementation of cost accounting procedures to capture in detail all IT expenditures for EPA offices. This will enable the Agency to better address OMB's IT reporting requirements.

EPA's E-Gov participation and contributions continue in FY 2008 with the coordination, development and implementation of the Business Gateway, Geospatial One-Stop, and e-Authentication. Key activities ensure that access to critical data (e.g., geospatial information, federal regulations) is increased through the Geospatial One-Stop portal and the Business Gateway and its Business Portal providing opportunities for collaboration and intergovernmental partnerships, reducing duplication of data investments, and offering the public easy access to important federal services for businesses.

IT/Data Management efforts are integral to the Exchange Network and Information Security programs. Together these programs work to design, develop and deploy secure systems and analytical tools to promote sound environmental decision-making.

In FY 2008, EPA expects savings from the first phase of the Network Optimization Project effort of key IT services and solutions. The services included in this effort include email services, access to data files, telephone communications, and Enterprise Content Management System (ECMS). The end result will be changes to the Agency's IT environment including the ability to manage key IT services, use the power of competition to control costs in a highly competitive environment, and hold vendors and contractors accountable for providing consistently excellent services.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$835.1) This reflects an increase for payroll and cost of living for existing FTE.

- (-\$3,150.0) This change reflects the Agency working to streamline IT consolidation. This reduction is an aggregate estimate. The final distribution by program will be determined when the Network Optimization Project is completed.
- (-\$3,000.0) This reduction reflects efficiencies gained through expanded use of electronic tool sets and integrated small systems.
- (-\$473.3) This reduction reflects the continued shift away from building infrastructure and toward adding data flows and Web services.

Statutory Authority:

FACA; GISRA; CERCLA; CAAA; CWA and amendments; ERD & DAA; TSCA; FIFRA; FQPA; SDWA and amendments; FFDCA; EPCRA; RCRA; SARA; GPRA; GMRA; CCA; PRA; FOIA; CSA; PR; EFOIA.

Program Area: Legal / Science / Regulatory / Economic Review

Administrative Law

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$4,289.0</i>	<i>\$4,860.9</i>	<i>\$5,260.0</i>	<i>\$399.1</i>
Total Budget Authority / Obligations	\$4,289.0	\$4,860.9	\$5,260.0	\$399.1
Total Workyears	33.6	34.7	34.7	0.0

Program Project Description:

This program provides support to EPA's Administrative Law Judges (ALJs) and Environmental Appeals Board (EAB). The ALJs preside in hearings and issue decisions in cases initiated by EPA's enforcement program concerning those accused of environmental violations. The EAB issues final decisions in environmental adjudications, primarily enforcement and permit-related, that are on appeal to the Board. ALJs and the EAB issue decisions under the authority delegated by the Administrator. These decisions establish the Agency's legal interpretation on the issues presented. The EAB also makes policy determinations in the matters before it, as necessary and appropriate to resolve disputes. In addition, the EAB serves as the final approving body for proposed settlements of enforcement actions initiated by the Agency's Headquarters Offices.

FY 2008 Activities and Performance Plan:

By adjudicating disputed matters, the ALJs and EAB further the EPA's long-term strategic goals of protecting public health and the environment. The EAB issues final Agency decisions in environmental adjudications on appeal to the Board. These decisions are the end point in the Agency's administrative enforcement and permitting programs. The right of affected persons to appeal these decisions within the Agency is conferred by various statutes, regulations and constitutional due process rights. The ALJs will preside in hearings and issue initial decisions in cases brought by EPA's enforcement program against those accused of environmental violations under various environmental statutes.

The Agency has sought efficiencies in this process. The ALJs have increased their use of alternative dispute resolution techniques to facilitate the settlement of cases and, thereby, avoided more costly litigation. The EAB and ALJs also use videoconferencing technology to reduce expenses for parties involved in the administrative litigation process.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$558.9) This reflects a net increase of an increase for payroll and cost of living for existing FTE.
- (-\$159.8) This decrease represents anticipated savings accomplished through more efficient management and administrative practices, as well as other IT and telecommunication changes that reflect more economically efficient resource utilization.

Statutory Authority:

CERCLA; FIFRA; CWA; CAA; TSCA; RCRA; SDWA; EPCRA; as provided in Appropriations Act funding.

Alternative Dispute Resolution

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$1,004.4</i>	<i>\$1,229.8</i>	<i>\$1,175.0</i>	<i>(\$54.8)</i>
Hazardous Substance Superfund	\$559.4	\$887.2	\$837.0	(\$50.2)
Total Budget Authority / Obligations	\$1,563.8	\$2,117.0	\$2,012.0	(\$105.0)
Total Workyears	8.9	7.6	7.3	-0.3

Program Project Description:

The Agency's General Counsel and Regional Counsel Offices will provide environmental Alternative Dispute Resolution (ADR) services.

FY 2008 Activities and Performance Plan:

In FY 2008, the Agency will provide conflict prevention and ADR services to EPA Headquarters and Regional Offices and external stakeholders on environmental matters. The national ADR program assists in developing effective ways to anticipate, prevent and resolve disputes and makes neutral third parties – such as facilitators and mediators – more readily available for those purposes. Under EPA's ADR Policy, the Agency encourages the use of ADR techniques to prevent and resolve disputes with external parties in many contexts, including adjudications, rulemaking, policy development, administrative and civil judicial enforcement actions, permit issuance, protests of contract awards, administration of contracts and grants, stakeholder involvement, negotiations and litigation.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$56.0) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.

- (+\$1.2) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

EPA's General Authorizing Statutes.

Civil Rights / Title VI Compliance

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$10,674.8</i>	<i>\$11,053.7</i>	<i>\$11,240.0</i>	<i>\$186.3</i>
Total Budget Authority / Obligations	\$10,674.8	\$11,053.7	\$11,240.0	\$186.3
Total Workyears	64.5	71.0	70.0	-1.0

Program Project Description:

EPA's Civil Rights activities provide policy direction and guidance on equal employment opportunity, civil rights, affirmative employment and diversity issues for the Agency's program offices, Regional Offices and laboratories. Programs include Title VI compliance and review; intake and processing of complaints of discrimination from Agency employees, and applicants for employment, under Title VII; implementation of processes and programs in support of reasonable accommodation and Minority Academic Institutions (MAIs); and diversity initiatives, especially those related to issues on ageism and sexual orientation. Program functions include accountability for implementation, program evaluation and compliance monitoring of the Civil Rights Act of 1964 (Titles VI, VII, IX), and legislative requirements and executive orders covering civil rights, affirmative employment, disability, and MAIs. The program also interprets policies and regulations, ensures compliance with Civil Rights laws, Equal Employment Opportunity Commission (EEOC) regulations, and equal employment initiatives, and upholds the civil rights of EPA employees and prospective employees as required by Federal statutes and Executive Orders.

FY 2008 Activities and Performance Plan:

In FY 2008 EPA expects to conduct compliance reviews of five recipients of EPA financial assistance. The Civil Rights External Compliance Program also expects to improve its processing of external complaints. The Agency will:

- Work with the U.S. Department of Justice on the development of non-discrimination regulations, guidance, or findings of discrimination, and the U.S. Department of Health and Human Services on issues regarding age discrimination, the U.S. Department of Education on issues regarding discrimination on the basis of sex, and other Federal agencies that may simultaneously receive discrimination complaints from the same complainant regarding a particular recipient agency.

- Work to reduce employment complaints while completing all new discrimination complaints within required time frames.
- Provide training and guidance to over 100 EEO Counselors in the Agency's Regional Offices. The Agency will train EEO Officers in the Discrimination Complaint Tracking System (DCTS) and provide technical assistance as needed.
- Examine ways to more effectively and efficiently reduce the number of pending complaints, increase the number of compliance reviews conducted, and improve recipient agencies civil rights programs through guidance and/or training.
- Monitor and evaluate the effectiveness of the reasonable accommodation process. Continue to provide technical assistance to managers, supervisors, employees and the designated Local Reasonable Accommodation Coordinators in the form of expert training and consultation by the Northeast Regional Application Center to insure efficient implementation of the policy and procedures.
- Monitor the Agency's compliance with various statutes, EEOC regulations, EPA policy and procedures related to the reasonable accommodation of qualified applicants and employees with disabilities.

The Affirmative Employment and Diversity staff will provide programs that increase the cultural awareness of minorities and women; highlight the accomplishments of EPA employees involved in ensuring equal employment opportunity; develop special emphasis programs and initiatives that involve management, unions, and community groups; develop an annual Affirmative Employment Plan; meet on a regular basis with external and union officials to increase communication and relationships, and coordinate the development of recruitment and retention strategies.

The MAI program will conduct information exchange sessions with Agency managers from each Region and program office; meet with representatives from minority colleges; introduce representatives from minority colleges to appropriate Agency personnel; participate on interagency workgroups that support Federal assistance for minority colleges; and facilitate constructive dialogues that will advance the goals of the MAI program.

As a result of these activities, the Agency's mission and cornerstone themes are supported by a workforce that is motivated, treated in a fair and non-discriminatory manner and produces positive outcomes with respect to the Agency's goals.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$186.7) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$0.4) Change due to rounding in the FY 2008 President's Budget.
- (-1.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities.

Statutory Authority:

CRA VII, as amended; FWPCA amended; Title IX of the Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973; Age Discrimination Act of 1975; Rehabilitation Act of 1974, as amended; ADA as amended; OWBPA as amended; ADEA as amended EEOC Management Directive 715; Executive Orders 13163, 13164, 13078, 13087, 13171, 11478, 13125, 13096, 13230, 13256 February 12, 2002 (HBCUs), 13270 July 3, 2002 (Tribal Colleges), 13339 May 13, 2004 (Asian American Participation in Federal Programs).

Legal Advice: Environmental Program

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$35,237.7</i>	<i>\$37,525.5</i>	<i>\$39,366.0</i>	<i>\$1,840.5</i>
Hazardous Substance Superfund	\$624.6	\$690.8	\$606.0	(\$84.8)
Total Budget Authority / Obligations	\$35,862.3	\$38,216.3	\$39,972.0	\$1,755.7
Total Workyears	238.3	249.8	247.2	-2.6

Program Project Description:

The Agency's General Counsel and Regional Counsel Offices will provide legal representational services, legal counseling and legal support for all Agency environmental activities.

FY 2008 Activities and Performance Plan:

In FY 2008, legal advice to environmental programs will include litigation support representing EPA and providing litigation support in cases where EPA is a defendant, as well as those cases where EPA is not a defendant, but may have an interest in the case. Legal advice, counsel and support are necessary for Agency management and program offices on matters involving environmental issues including, for example, providing interpretations of relevant and applicable laws, regulations, directives, policy and guidance documents and other materials.

Performance Targets:

Work under this program supports multiple objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,845.0) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$5.0) This is part of an Agencywide effort to reduce travel, including international travel.
- (+\$0.5) Change due to rounding in the FY 2008 President's Budget.

- (-2.1 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

EPA's General Authorizing Statutes.

Legal Advice: Support Program

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$13,454.0</i>	<i>\$13,465.9</i>	<i>\$13,986.0</i>	<i>\$520.1</i>
Total Budget Authority / Obligations	\$13,454.0	\$13,465.9	\$13,986.0	\$520.1
Total Workyears	84.7	85.9	85.3	-0.6

Program Project Description:

The General Counsel and the Regional Counsel Offices provide legal representational services, legal counseling and legal support for all activities necessary for the operation of the Agency.

FY 2008 Activities and Performance Plan:

In FY 2008, legal representational services, legal counseling and legal support will be needed for all Agency activities necessary for the operation of the Agency (i.e., contracts, personnel, information law, ethics and financial/monetary issues). Legal services include litigation support representing EPA and providing litigation support in cases where EPA is a defendant as well as those cases where EPA is not a defendant, but may have an interest in the case. Legal advice, counsel and support are necessary for Agency management and administrative offices on matters involving actions affecting the operation of the Agency, including, for example, providing interpretations of relevant and applicable laws, regulations, directives, policy and guidance documents and other materials.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$519.9) This reflects increase for payroll and cost of living for existing FTE.
- (+\$0.2) Change due to rounding in the FY 2008 President's Budget.

- (-0.6 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

EPA's General Authorizing Statutes.

Regional Science and Technology

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$3,772.5	\$3,520.7	\$3,574.0	\$53.3
Total Budget Authority / Obligations	\$3,772.5	\$3,520.7	\$3,574.0	\$53.3
Total Workyears	2.9	3.0	3.0	0.0

Program Project Description:

The Regional Science and Technology (RS&T) program supports the purchase of equipment for use by Regional laboratories, field investigation teams, and mobile laboratory units, as well as that required for laboratory quality assurance and quality control. Regional laboratories provide essential expertise in ambient air monitoring, analytical pollution prevention, and environmental biology, microbiology, and chemistry. Centers of Applied Science for specialty work have been established in these areas as well. In recent years, EPA has made significant strides toward improving data collection and analytical capacity to strengthen science based decision making. Funding for necessary equipment is essential for continued progress.

RS&T activities support all of the Agency's national programs and goals, especially enforcement, by supplying ongoing laboratory analysis, field sampling support, and Agency efforts to build Tribal capacity for environmental monitoring and assessment. The RS&T program provides in-house expertise and technical capabilities in the generation of data for Agency decisions. RS&T organizations support the development of critical and timely environmental data and data review activities in emerging situations.

FY 2008 Activities and Performance Plan:

In FY 2008, RS&T resources will support Regional implementation of the Agency's statutory mandates through: *field operations* for environmental sampling and monitoring; *Regional laboratories* for environmental analytical testing; *quality assurance* oversight and data management support; and *environmental laboratory accreditation*. Direct laboratory support also increases efficiencies in Regional program management and implementation.

The Agency will stay abreast of rapidly changing technologies (i.e., new software, instrumentation, and analytical capability such as Polymerase Chain Reaction Technology) that allow EPA to analyze samples more cost effectively and/or detect lower levels of contaminants, and to assay new and emerging contaminants of concern, like endocrine disrupters, perchlorate, arsenic, mercury, PCB congeners and flame retardants. In accordance with new policy directives,

including those related to Homeland Security, the Agency will enhance laboratory capacity and capability to ensure that its laboratories implement critical environmental monitoring and surveillance systems, develop nationwide laboratory networks, and develop enhanced response, recovery and cleanup procedures.

The Agency recognizes the value of accredited labs and continues to work toward the accreditation of all of its labs. The National Environmental Laboratory Accreditation Conference/Program (NELAC/NELAP) ensures continued confidence that our environmental testing laboratories at the Federal, state, local, private and academic levels are qualified to produce data supporting environmental compliance at all levels within the regulatory community. Regional laboratories will sustain existing accreditations or seek accreditation, according to their approved Implementation Plan under the Agency's Laboratory Competency Policy, established in 2004, that requires all Agency laboratories to seek accreditation or equivalent external assessments, if no suitable accreditation program is available (such as for research activities.) The implementation of this policy is consistent with the closure of the Agency's related 2004 FMFIA weakness.

The Regional laboratories contribute to various aspects of the Agency's PART measures in each of the major Agency programs. The Civil and Criminal Enforcement PART measures are supported through significant technical and analytical activities for civil enforcement cases including the National Pollutant Discharge Elimination System program. The laboratories analyze samples associated with a variety of activities including unpermitted discharges, illegal storage of hazardous wastes, and illegal dumping. Resultant data are then used by the Agency's Criminal Investigation Division and by Assistant U.S. Attorneys to support prosecution cases.

Laboratory equipment such as Standard Reference Photometers is used to ensure that the national network of ozone ambient monitors is accurately measuring ozone concentrations in support of the Mobile Source and Air Toxics PART measures. Nearly 60% of the analyses performed by Regional laboratories support the cleanup of uncontrolled or abandoned hazardous waste sites associated with the Superfund program. Analytical support is also provided for identifying and assessing risks associated with pesticides and other high risk chemicals.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$53.9) This increase is the net effect of increases for payroll and cost of living for existing FTE, combined with a recalculation of base workforce costs.
- (-\$0.6) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CWA; CAA; TSCA; CERCLA; SDWA; PPA; RCRA; FIFRA.

Regulatory Innovation

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Healthy Communities and Ecosystems

Objective(s): Communities

Goal: Compliance and Environmental Stewardship

Objective(s): Improve Environmental Performance through Pollution Prevention and Innovation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$22,671.1</i>	<i>\$25,853.6</i>	<i>\$23,866.0</i>	<i>(\$1,987.6)</i>
Total Budget Authority / Obligations	\$22,671.1	\$25,853.6	\$23,866.0	(\$1,987.6)
Total Workyears	115.7	116.7	106.7	-10.0

Program Project Description:

Innovation, new ideas and creative approaches are critical to continued environmental progress and to building the next generation of environmental protection -- one that focuses on results and less on process; emphasizes environmental protection, not just pollution control; and takes a comprehensive rather than piecemeal approach to environmental problem solving that will lead to sustainable outcomes. Increasingly complex environmental problems -- such as poor water quality, increasing urban smog, and the need for cost effective solutions to national water infrastructure issues -- call for EPA to find new ways to leverage partnership opportunities with states, local communities, and businesses to produce better environmental results at lower costs.

Through public recognition, incentives and help in overcoming regulatory barriers, promotes environmental stewardship in all parts of society, encouraging and enabling companies, communities, individuals, and other governmental organizations to actively take responsibility for their environmental footprint and commit to improving environmental quality and achieving sustainable results. The Agency also supports and encourages efforts to improve environmental performance "beyond compliance" with regulatory requirements as a means to achieve long-term, system-wide environmental protection goals. Through regulatory innovation, EPA is establishing the building blocks for a future, more effective system of environmental protection.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's Regulatory Innovation activities will include:

National Environmental Performance Track: Performance Track recognizes and encourages private and public facilities that demonstrate strong environmental performance, beyond current requirements. In FY2008, the program will focus on meeting its three year leadership goal of reaching 500 members; continue to implement meaningful incentives that encourage facilities to reach higher levels of environmental performance while more effectively utilizing limited agency resources to carry out its mission; and enhance partnerships with other agencies, states,

and NGOs. During FY 2008, the Performance Track program will improve program reporting, develop and implement national and regional challenge commitments, and leverage state environmental leadership programs by aligning Performance Track with 20 state programs.

In addition to its work with industry under the Performance Track program, EPA will continue to provide tools for voluntary programs to improve their ability to deliver effective results, the Agency will work with industry leaders in “lean manufacturing” to integrate environmental improvements and enhance business efficiency and competitiveness; and encourage industrial ecology and sustainable development.

State Innovation Grants (SIG): These competitive grants provide resources to assist states in implementing system-wide innovative environmental protection strategies that are transferable to other states. Examples include the establishment of recognition programs for environmental leaders, promotion of environmental management systems, and implementation of the Environmental Results Program model. The model is an integrated system of multi-media, plain English compliance assistance, self-certification, and statistically-based performance measurement that helps small business sectors improve environmental performance and creates the means for significantly more efficient oversight. In FY 2008, EPA anticipates making up to eight awards. Since 2002, EPA has supported 29 projects through the SIG program.

Environmental Management Systems (EMS) are internal decisional tools used by business and industry to identify their “environmental footprint,” and to reduce their environmental impacts while increasing operating efficiency. EPA will continue to provide leadership and coordination with other agencies, states and industry on promoting the widespread use of EMSs to protect the environment. EMS implementation supports the President’s Management Agenda goal of improved efficiency and performance in the Federal government. EPA will also create national EMS implementation programs in all participating sectors.

Innovative Pilot Testing: While SIGs are a primary mechanism for scaling up strategic innovations, pilot testing of promising new ideas is conducted through a variety of additional mechanisms. Examples of these additional mechanisms include organizing the development and issuance of flexible air permit (in partnership with EPA’s Air and Radiation program and Performance Track); providing technical assistance and information to states that are adopting, or considering, the Environmental Results Program as a means of regulating small sources; providing a forum for information-sharing among states experimenting with the use of environmental management systems (EMSs) in permits; and providing technical assistance to the states in evaluating the results of those experiments. In addition, implementation of legacy pilots under Project XL and the Joint Agreement to Pursue Regulatory Innovation with states continues.

The Sector Strategies Program promotes widespread improvement in environmental performance, with reduced administrative burden, in twelve manufacturing and service sectors: agribusiness, cement manufacturing, chemical manufacturing, colleges and universities, construction, forest products, iron and steel manufacturing, metal casting, metal finishing, paint and coatings, ports, and shipbuilding. Stakeholders will continue to work collaboratively to address performance barriers and prompt industry stewardship initiatives, such as the National

Mercury Switch Removal Program that was launched in 2006. The program will continue to focus on tracking sector-wide performance trends. In FY 2008, EPA will expand its use of this multi-media program by working with more sectors, enhancing sector performance metrics, addressing priority issues such as energy production and efficiency, and developing more performance-based environmental protection strategies.

Program Evaluation and Performance Management: Program evaluation helps to assess whether program outputs are leading to desired outcomes and to promoting continuous program improvement. Through an annual Program Evaluation Competition, managed in partnership with the Agency's Accountability program, resources will be provided to EPA programs and Regional offices in FY 2008 to conduct evaluations of priority programs. Specific consideration is given to evaluations that further Government Performance and Results Act, Program Assessment Rating Tool (PART), and innovation priorities. Program evaluation and performance measurement capacity are also built through performance management training provided to EPA staff and managers.

Under the **Smart Growth** program EPA provides tools, technical assistance, education, research, and environmental data to help states and communities minimize environmental and health impacts and evaluate environmental consequences of various development patterns. The programs help community and government leaders better understand how they can meet environmental standards through innovative community design and supporting environmentally friendly development patterns. EPA helps industry, transportation, architecture, construction, real estate (residential and commercial), and mortgage lending institutions to identify and remove barriers to growth in ways that serve the economy, public health, and environment.

Environmental Stewardship: In 2008, EPA will continue activities that more fully engage all parts of society (businesses, communities, all levels of governments, and individuals) in actions that improve environmental quality and achieve sustainable results. As a follow-up to the White House Conference on Cooperative Conservation, EPA has overall Federal leadership for 1) continued assessment of legal authorities that hinder collaborative approaches, 2) active use of the Federal Advisory Committee Act to gain multi-stakeholder consensus on controversial issues, and 3) improved ways to engage the public in controversial and complex environmental issues that need resolution in a geographic area. EPA plans to continue to improve management of its partnership programs through technical support, training and skill building around program design, measurement and evaluation. Additional support will be provided to Agency stewardship priorities -- for design and operation of site-specific projects in the regions, and for incorporation in national program policies.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	75% of innovation projects completed under the State Innovation Grants program will achieve, on average, 8% or				75	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	greater improvement in environmental results for sectors and facilities involved, or 5 % or greater improvement in cost-effectiveness and efficiency					

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Reduce water use at Performance Track facilities.				3,900,000,000	Gallons

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Reduce hazardous materials use at Performance Track facilities.				10,000	Tons

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Reduce production of greenhouse gases at Performance Track facilities.				175,000	MTCO2E

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Reduce toxic releases to water at Performance Track facilities.				220	Tons

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Reduce combined NOx, SOx, VOC and PM emissions at				4,000	Tons

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	Performance Track facilities.					

* Performance Track facilities collectively will meet 3 of the 5 annual performance improvement targets for reducing, on a normalized basis, water use, hazardous materials use, production of greenhouse gases, toxic discharges to water and combined NO_x, SO_x, VOC and PM emissions

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$432.8) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-\$1,554.8) This change reflects the integration of regulatory innovation and other collaborative partnerships with external stakeholders into existing programs throughout the Agency. In FY 2008, the Agency will also scale back its pilot testing by integrating regulatory efforts with other program projects. .
- (-10.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. The reduction will scale back EPA's outreach efforts to government and industry through Performance Track, Environmental Management Systems, Smart Growth and Cooperative Conservation programs.

Statutory Authority:

As provided in Annual Appropriations Acts; CWA, Section 104(b)(3); CAA, Section 104(b)(3).

Regulatory/Economic-Management and Analysis

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$16,592.7</i>	<i>\$17,554.8</i>	<i>\$20,104.0</i>	<i>\$2,549.2</i>
Total Budget Authority / Obligations	\$16,592.7	\$17,554.8	\$20,104.0	\$2,549.2
Total Workyears	93.0	103.2	104.2	1.0

Program Project Description:

To ensure that the Administrator and other senior EPA leaders have sound analyses for decision-making, this program is designed to strengthen EPA's policy analysis of key regulatory actions, including underlying economic analyses, and maintain and manage Agencywide information technology systems to support EPA's regulatory processes. The Regulatory and Economic program works to fill gaps in EPA's ability to quantify the benefits of environmental regulations and policies. Resources are used to develop and analyze various regulatory and non-regulatory approaches; develop and evaluate policy options; identify priority problem areas; and to target specific areas of concern, such as small businesses. Another area of emphasis is to improve the Agency's internal regulation development tracking system, to ensure better managerial accountability. An increased effort will be placed on ensuring that Agency personnel understand the impact of Executive Orders and Congressional mandates on regulatory and policy development processes.

Objectives of the program include: 1) advancing the theory and practice of quality economics; 2) promoting policy analysis and risk analysis within the Agency; 3) providing information on the full societal impacts of reducing environmental risks, including the costs and benefits of regulatory options; 4) supporting the development of regulatory and policy alternatives, especially economic incentives as an environmental management tool; 5) confirming and maintaining the accuracy and consistency of EPA's economic analyses; and 6) promoting the use of economic and regulatory analysis to facilitate planning and management throughout the Agency. The program also ensures implementation of related Executive Orders.

FY 2008 Activities and Performance Plan:

Program activities planned for FY 2008 include:

- Participate in the development of the Administrator's priority actions, review economic and risk analyses conducted across EPA offices, and provide technical assistance when needed to help meet Agency goals. The Agency will also continue to chair the Small Business Advocacy Panels.
- Continue to conduct and support research on methods to integrate ecological and economic models and improve household surveys to quantify the impacts and value to improvements in ecological services and functions, as called for in EPA's Ecological Benefits Assessment Strategic Plan¹. The Agency also will continue to establish effective management systems in order to improve the quality and consistency of EPA's economic and risk assessment studies.
- Continue support for data collection and dissemination of information on the economic benefits, costs and impacts of environmental regulations, including pollution abatement and control expenditures by US manufacturing industries.²
- Continue to provide training on the Agency's action development process and the Agency's Economic Analysis Guidelines and related requirements (e.g., OMB Circular A-4). EPA will continue to review and revise its own economic guidelines so that they remain current with advancements and reflect best practices in the profession.³
- Continue to organize workshops on priority economic and environmental policy issues, i.e., benefits valuation, market mechanisms and incentives, and treatment of uncertainties in risk and economic analyses.⁴

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,017.2) This increase is the net effect of increases for payroll and cost of living for existing FTE, combined with a recalculation of base workforce costs.
- (+\$1,070.8) This increase is the result of the transfer of the Office of Research and Development's Research: Economics and Decision Science (EDS) program, including 3.0 FTE and associated payroll into the Office of Policy, Economics and Innovation's (OPEI) Regulatory/Economic-Management and Analysis program. Under the new oversight of OPEI, EDS research will be directed at critical applied research needs of EPA. The selection of research areas to be funded will draw on EPA's Environmental

¹ Please refer to: <http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/EcologBenefitsPlan.html>

² Please refer to: <http://www.census.gov/econ/overview/mu1100.html>

³ Please refer to: <http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/Guidelines.html>;

⁴ For more information on these workshops, please refer to:
<http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/WorkshopSeries.html>.

Economics Research Strategy⁵, and will continue to use a collaborative process with EPA's media and research offices to ensure research priorities are addressed, and the products of the research continue to be relevant, rigorous and are high quality.

- (+\$429.2) This represents payroll resources for 3.0 FTE transferred from the Office of Research and Development's Research: Economics and Decision Science (EDS) program.
- (+\$32.0) This increase will support development and review of the Agency's economic and risk analyses, and improvement of the Agency's internal regulation development tracking system.
- (+3.0 FTE) This increase represents the transfer of 3.0 FTE from the Office of Research and Development's Research: Economics and Decision Science (EDS) program.
- (-2.0 FTE) This reduction will eliminate part-time positions supporting economic benefit-cost evaluations of new and existing EPA programs and regulations. The office will utilize alternative approaches to support evaluations, such as additional training for existing staff.

Statutory Authority:

TSCA sections 4, 5, and 6 (15 U.S.C. 2603, 2604, and 2605); CWA sections 304 and 308 (33 U.S.C. 1312, 1314, 1318, 1329-1330, 1443); SDWA section 1412 (42 U.S.C. 210, 300g-1); RCRA/HSWA: (33 USC 40(IV)(2761), 42 USC 82(VIII)(6981-6983)); CAA: 42 USC 85(I)(A)(7403, 7412, 7429, 7545, 7612); CERCLA: 42 USC 103(III)(9651); PPA (42 U.S.C. 13101-13109); FTTA.

⁵ Please refer to: <http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/EEResearchStrategy.html>

Science Advisory Board

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$4,555.8</i>	<i>\$4,615.7</i>	<i>\$4,790.0</i>	<i>\$174.3</i>
Total Budget Authority / Obligations	\$4,555.8	\$4,615.7	\$4,790.0	\$174.3
Total Workyears	25.9	22.3	22.3	0.0

Program Project Description:

To ensure that EPA's scientific and technical products are of the highest quality, the Agency's Science Advisory Board (SAB) provides independent, in-depth peer review of EPA's analyses and methods. The board draws on a balanced range of non-EPA scientists and technical specialists from academia, communities, states, independent research institutions, and industry. This program provides administrative support to the SAB and two other statutorily mandated chartered Federal Advisory Committees, the Clean Air Scientific Advisory Committee, and the Advisory Council on Clean Air Compliance Analysis. These Advisory committees are charged with providing independent advice and peer review on scientific and technical aspects of environmental problems, regulations and research planning to EPA's Administrator.¹

FY 2008 Activities and Performance Plan:

In FY 2008, the SAB will provide scientific and technical advice on nearly 20 key topical areas related to: 1) the technical basis of EPA national standards for air pollutants and water contaminants; 2) risk assessments of major environmental contaminants; 3) economic benefits analyses of EPA's environmental programs; and 4) EPA's research and science programs. The Agency brings all of its important scientific products to the Board as well as emerging and challenging research issues.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

¹ Please refer to: <http://www.epa.gov/sab/>.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$428.0) This increase is the net effect of increases for payroll and cost of living for existing FTE, combined with a recalculation of base workforce costs.
- (-\$253.7) This decrease represents anticipated savings accomplished through more efficient management and administrative practices, as well as other IT and telecommunication changes that reflect more economically efficient resource utilization.

Statutory Authority:

ERDDAA; 42 U.S.C. § 4365; FACA, 5 U.S.C. App. C; CAA Amendments of 1977; 42 U.S.C. 7409(d)(2); CAA Amendments of 1990; 42 U.S.C. 7612.

Program Area: Operations and Administration

Acquisition Management

Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$23,040.8</i>	<i>\$25,418.3</i>	<i>\$29,992.0</i>	<i>\$4,573.7</i>
Leaking Underground Storage Tanks	\$357.3	\$360.8	\$165.0	(\$195.8)
Hazardous Substance Superfund	\$19,577.1	\$23,514.3	\$24,645.0	\$1,130.7
Total Budget Authority / Obligations	\$42,975.2	\$49,293.4	\$54,802.0	\$5,508.6
Total Workyears	351.6	357.2	357.3	0.1

Program Project Description:

EPM resources in this program support contract and acquisition management activities at Headquarters, Regional Offices, Research Triangle Park and Cincinnati offices. Sound contract management fosters efficiency and effectiveness assisting all of EPA's programs. EPA focuses on maintaining a high level of integrity in the management of its procurement activities, and in fostering relationships with state and local governments, to support the implementation of environmental programs.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to implement its new acquisition system, as the current Acquisition Management System has reached the end of its useful life. Staff increasingly spends time making the system work as opposed to using the system to accomplish their work. The system is obsolete; and therefore an upgrade is not feasible. The new system will provide data on contracts that support mission-oriented planning and evaluation. This will allow the Agency to reach President's Management Agenda (PMA) goals, E-Government (E-Gov) requirements, and the needs of Agency personnel resulting in more efficient process implementation. The benefits of the new system are: 1) program offices will be able to track the progress of individual actions; 2) extensive querying and reporting capabilities will allow the Agency to meet internal and external demands and 3) the system will integrate with the Agency's financial systems and government-wide shared services.

In addition, the Agency will utilize the Integrated Acquisition Environment (IAE), an E-Gov initiative to create a secure business model that facilitates and supports cost-effective acquisition of goods and services by Federal agencies, while eliminating inefficiencies in the current acquisition environment.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$2,100.0) This change reflects an increase, over the FY 2007 increase, to support development and deployment of the Agency's new Acquisition Management System. An increase totaling of \$3 million is requested (\$2.1 million EPM and \$900 thousand Superfund) for FY 2008. The new Acquisition Management System is required because the existing system is obsolete and impedes efficiency. The new system will be capable of integrating with the General Services Administration's Integrated Acquisition Environment.
- (+\$1,231.6) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$1,260.0) This change provides extramural funding to support Defense Contract Audit Agency contract services and oversight functions transferred from the Office of the Inspector General. The total provided for this activity is \$1.8 million, of which \$540 thousand is in Superfund Acquisition Management.
- (-\$53.0) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+\$34.0) This increase provides additional funding to support EPA's Acquisition E-Government initiative.
- (+\$1.1) Change due to rounding in the FY 2008 President's Budget.
- (-2.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities in grants management. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (+3.0 FTE) This provides 3.0 FTE to support Defense Contract Audit Agency contract services and oversight functions transferred from the Office of the Inspector General.

Statutory Authority:

EPA's Environmental Statutes; annual Appropriations Acts; FAR.

Central Planning, Budgeting, and Finance
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$70,768.6</i>	<i>\$83,548.1</i>	<i>\$74,960.0</i>	<i>(\$8,588.1)</i>
Leaking Underground Storage Tanks	\$760.9	\$1,014.8	\$1,102.0	\$87.2
Hazardous Substance Superfund	\$21,783.7	\$25,540.8	\$24,306.0	(\$1,234.8)
Total Budget Authority / Obligations	\$93,313.2	\$110,103.7	\$100,368.0	(\$9,735.7)
Total Workyears	515.8	537.7	530.0	-7.7

Program Project Description:

Activities under the Central Planning, Budgeting and Finance program/project support the management of integrated planning, budgeting, financial management, performance and accountability processes and systems to ensure effective stewardship of resources. Also included is EPA's Environmental Finance Program that provides grants to a network of university-based Environmental Finance Centers which deliver financial outreach services, such as technical assistance, training, expert advice, finance education, and full cost pricing analysis to states, local communities and small businesses.

(Refer to <http://www.epa.gov/ocfo/functions.htm> for additional information).

FY 2008 Activities and Performance Plan:

EPA will continue efforts to modernize the Agency's financial systems and business processes. Beginning in FY 2007 and continuing through 2008 and into FY 2009, the Agency will replace its legacy accounting system and related modules with a new system certified to meet the latest government accounting standards. This extensive modernization effort will ensure cost, and comply with Congressional direction and new Federal financial systems requirements. This work is framed by the Agency's Enterprise Architecture and will make maximum use of enabling technologies for e-Gov initiatives including e-Procurement, e-Payroll, and e-Travel.

EPA plans further improvements to its budgeting and planning system, financial data warehouse, business intelligence tools and reporting capabilities. These improvements will support EPA's "green" score in financial performance on the President's Management Agenda (PMA) scorecard by providing more accessible data to support accountability, cost accounting, budget and performance integration, and management decision-making.

In FY 2008, EPA will continue to strengthen its accountability and effectiveness of operations through improved coordination and integration of internal control assessments as required under Revised OMB Circular A-123. Improvements in internal controls will further support EPA's PMA initiatives for improved financial performance.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$1,857.8) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (+\$500.8) This reflects an increase for the Agency's administrative fees associated with employee participation in the Federal Flexible Spending Account program. Section 1127 of the National Defense Authorization Act requires agencies to pay administrative fees for their employees who elect to participate in the Federal Flexible Spending Account programs. This increase reflects increased participation in the program by Agency employees.
- (-\$7,200.0) The funding level required for the Financial Replacement System (FinRS) Capital Investment is expected to be lower in FY 2008, the second year of system implementation. Final costs will not be known until after the contract procurement is completed.
- (-\$10.0) This reduction reflects savings from improvements to the Agency's small administrative IT Systems.
- (+\$50.0) This increase reflects revised estimated costs for migration to e-Travel.
- (-\$73.9) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+\$0.7) This increase reflects a shift from Superfund to adjust regional workforce support resource allocation.
- (+\$2.1) Change due to rounding in the FY 2008 President's Budget.
- (-6.6 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction is the result of ongoing efforts to streamline operations and identify financial, budgeting, and accountability processes. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

Annual Appropriations Act; CCA; CERCLA; CSA; E-Government Act of 2002; EFOIA; EPA's Environmental Statutes, and the FGCAA; FAIR; Federal Acquisition Regulations, contract law and EPA's Assistance Regulations (40 CFR Parts 30, 31, 35, 40,45,46, 47); FMFIA(1982); FOIA; GMRA(1994); IPIA; IGA of 1978 and Amendments of 1988; PRA; PR; CFOA (1990); GPRA (1993); The Prompt Payment Act (1982); Title 5, USC; National Defense Authorization Act.

Facilities Infrastructure and Operations
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$336,980.6</i>	<i>\$294,760.1</i>	<i>\$303,728.0</i>	<i>\$8,967.9</i>
Science & Technology	\$8,841.7	\$70,239.5	\$73,859.0	\$3,619.5
Building and Facilities	\$30,871.3	\$28,430.9	\$26,931.0	(\$1,499.9)
Leaking Underground Storage Tanks	\$769.6	\$916.8	\$901.0	(\$15.8)
Oil Spill Response	\$366.1	\$499.3	\$490.0	(\$9.3)
Hazardous Substance Superfund	\$66,365.6	\$73,944.7	\$74,956.0	\$1,011.3
Total Budget Authority / Obligations	\$444,194.9	\$468,791.3	\$480,865.0	\$12,073.7
Total Workyears	375.1	438.6	415.9	-22.7

Program Project Description:

EPM resources in the Facilities Infrastructure and Operations Program Project are used to fund rent, utilities, and security, and also to manage activities and support services in many centralized administrative areas at EPA. These include health and safety, environmental compliance, occupational health, medical monitoring, fitness/wellness and safety, and environmental management functions. Resources for this program also support a full range of ongoing facilities management services, including facilities maintenance and operations; Headquarters security; space planning; shipping and receiving; property management; printing and reproduction; mail management; and transportation services.

FY 2008 Activities and Performance Plan:

The Agency will continue to manage its lease agreements with GSA and other private landlords by conducting rent reviews and verifying that monthly billing statements are correct. The Agency also reviews space needs on a regular basis.

These resources also help to improve operating efficiency and encourage the use of new, advanced technologies and energy sources. EPA will continue to direct resources towards acquiring alternative fuel vehicles and more fuel-efficient passenger cars and light trucks to meet the goals set by Executive Orders (EO) 13149¹ and 13123², *Greening the Government through*

¹ Information available at <http://www.epa.gov/fedsite/eo13149.htm>

² Information available at <http://www.epa.gov/fedsite/eo13123.htm>

Federal Fleet and Transportation Efficiency and *Greening the Government through Efficient Energy Management* respectively. Additionally, the Agency will attain the Executive Orders' goals through several initiatives, including comprehensive facility energy audits, sustainable building design in Agency construction and alteration projects, energy savings performance contracts to achieve energy efficiencies, the use of off-grid energy equipment, energy load reduction strategies, green power purchases, and the use of Energy Star rated products and buildings.

EPA will provide transit subsidy to eligible applicants as directed by EO 13150³ *Federal Workforce Transportation*. EPA will continue the implementation of the Safety and Health Management Systems to ensure a safe working environment.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percentage reduction in energy consumption.	2	2	5	8	Percent

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$812.8) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$872.6) Provides additional resources for increases in transit subsidy costs.
- (+\$6,843.6) Provides additional resources for increases in rent costs.
- (+\$583.1) Provides additional resources for increases in utility costs.
- (-\$79.2) This decrease represents projected security cost savings in FY 2008.
- (+\$326.9) Provides additional resources for increases in Regional moves.
- (+\$8.8) Provides additional resources for increases in Regional laboratory operations costs.
- (-\$60.0) This change reflects the elimination of EPA's Research Triangle Park, North Carolina, annual physical examination program as part of a management strategy that will help us better align resources and Agency priorities.
- (+\$541.6) Provides additional resources to cover basic facilities management services in EPA's ten Regional offices. These additional resources will go towards supporting environmental compliance, occupational health and safety and fitness/wellness.

³ Additional information available at <http://ceq.eh.doe.gov/nepa/regs/eos/eo13150.html>

- (-\$658.3) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$224.0) This reduction reflects savings from improvements to the Agency's small administrative IT Systems.
- (-21.5 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. Additional reductions were taken by the Regional offices as a means to consolidate inefficiencies associated with facilities infrastructure and operations, and to redistribute resources to those programs that would best help them meet EPA's goals. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

FPASA; PBA; Annual Appropriations Acts; CWA; CAA; D.C. Recycling Act of 1988; Executive Orders 10577 and 12598; United States Marshals Service Vulnerability Assessment of Federal Facilities; Presidential Decision Directive 63 (Critical Infrastructure Protection).

Financial Assistance Grants / IAG Management

Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$22,280.0</i>	<i>\$21,847.0</i>	<i>\$23,439.0</i>	<i>\$1,592.0</i>
Hazardous Substance Superfund	\$2,752.7	\$2,920.8	\$3,049.0	\$128.2
Total Budget Authority / Obligations	\$25,032.7	\$24,767.8	\$26,488.0	\$1,720.2
Total Workyears	186.5	163.3	177.5	14.2

Program Project Description:

Grants and Interagency Agreements comprise over half of the Agency's budget. EPM resources in this program support activities related to the management of Financial Assistance Grants/Interagency Agreements (IAGs), and of suspension and debarment at Headquarters and within Regional offices. The key components of this program are ensuring that EPA's management of grants and IAGs meets the highest fiduciary standards, and that grant funding produces measurable environmental results. This program focuses on maintaining a high level of integrity in the management of EPA's assistance agreements, and fostering relationships with state and local governments to support the implementation of environmental programs.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will achieve key objectives under its long-term Grants Management Plan. These objectives include strengthening accountability, competition and positive, measurable environmental outcomes, and aggressively implementing new and revised policies on at-risk grantees.¹ The Grants Management Plan has provided a framework for extensive improvements in grants management at the technical administrative level, programmatic oversight level and at the executive decision-making level of the Agency. EPA will continue to reform grants management by conducting on-site and pre-award reviews of grant recipients and applicants, improving systems support, performing indirect cost rate reviews, providing Tribal technical assistance, and implementing its Agency-wide training program for project officers, grant specialists, and managers.

¹ US EPA, *EPA Grants Management Plan*. EPA-216-R-03-001, April 2003, <http://www.epa.gov/ogd/EO/finalreport.pdf>.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from the FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,295.0) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$65.0) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$60.5) This reduction reflects savings from improvements to the Agency's small administrative IT systems.
- (+\$422.5) This increase provides FY 2008 funding at the appropriate level for two E-Government initiatives: Grants.Gov, a system that streamlines and automates the grant and interagency agreement processes within EPA, and Grants Line of Business, a government-wide solution to support end-to-end grants management activities that promote citizen access, customer service, and agency financial and technical stewardship.
- (+12.7 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. The increase is also attributed to the need to strengthen accountability in the grants process, and implement new grants management policies in EPA's Regional Offices.

Statutory Authority:

EPA's Environmental Statutes; Annual Appropriations Acts; FGCAA; Section 40 CFR Parts 30, 31, 35, 40, 45, 46, and 47.

Human Resources Management
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$42,966.8	\$40,202.5	\$40,175.0	(\$27.5)
Leaking Underground Storage Tanks	\$3.0	\$3.0	\$3.0	\$0.0
Hazardous Substance Superfund	\$5,282.1	\$5,270.2	\$5,036.0	(\$234.2)
Total Budget Authority / Obligations	\$48,251.9	\$45,475.7	\$45,214.0	(\$261.7)
Total Workyears	323.5	297.6	296.3	-1.3

Program Project Description:

EPM resources in this program support activities related to the provision of human capital and human resources management services to the entire Agency. EPA supports organizational development and management activities through Agencywide and interagency councils and committees and through participation in interagency management improvement initiatives. The Agency continually evaluates and improves human resource and workforce functions, employee development, leadership development, workforce planning, and succession management.

FY 2008 Activities and Highlights:

EPA is committed to fully implementing *Investing in Our People II, EPA's Strategy for Human Capital*¹, which was issued in December 2003 and updated in 2005. As result of that review, the desired outcomes for each strategy were strengthened to focus on measurable results. In FY 2008, the Agency will continue its efforts to implement a Workforce Planning System:

- Closing competency gaps for Toxicology, Information Technology, Human Resources, Grant and Contract specialist positions, as well as leadership positions throughout the Agency.
- Finalizing a Strategic Recruitment Plan, significantly reducing the time to hire for senior executives, and reducing the overall number of vacancies for non-SES positions processed beyond 45 days.
- Implementing innovative recruitment and hiring flexibilities that address personnel shortages in mission-critical occupations.

¹ US EPA, *Investing in Our People II, EPA's Strategy for Human Capital*. Available at <http://www.epa.gov/oarm/strategy.pdf>

EPA also will continue to streamline human resources management by employing the E-Government initiative, Human Resources Line of Business (HR LoB). HR LoB offers government-wide, cost effective, standardized and interoperable HR solutions while providing core functionality to support the strategic management of Human Capital.

In accordance with OMB Circular A-76 *Implementation of the Federal Activities Inventory Reform Act of 1998*² (Public Law 105-270) (FAIR Act), the Agency will also build on competitive sourcing principles to identify the most efficient, cost effective resources for performing functions critical to the EPA mission. Each of these activities will also support the Agency's President's Management Agenda goals and objectives.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent increase in the number of non-SES managers and supervisors at the targeted proficiency level (intermediate) for "Interpersonal Skills and Oral Communication".			25	10	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent increase in the number of non-SES managers and supervisors at the targeted proficiency level (advanced) for "Interpersonal Skills and Oral Communication".			15	15	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Average time to hire non-SES positions from date vacancy closes to date offer is extended, expressed in working days.			45	45	Days

² Available at <http://www.whitehouse.gov/omb/fedreg/fair2002notice4.html>

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	For SES positions, the average time from date vacancy closes to date offer is extended, expressed in working days.			90	73	Days

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,237.6) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$1,499.2) This change reflects a decrease in EPA's Human Capital program and the EPA Intern Program and is part of a management strategy that will help us better align resources and Agency priorities.
- (-\$5.1) This reduction reflects savings from improvements to the Agency's small administrative IT systems.
- (-\$138.3) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+\$350.0) This change reflects an increase for Executive Leadership Development functions. This program prepares the Agency's executive leaders to better manage the environmental challenges of the 21st century, by supporting the Human Capital goals for executive leadership competencies and succession planning.
- (+\$27.5) This provides funding for the Human Resources Line of Business E-Government initiative, a Government-wide, modern, cost effective, standardized, and interoperable Human Resource (HR) solution that provides common core functionality to support the strategic management of Human Capital.
- (+3.0 FTE) This change reflects a staffing increase for Executive Leadership Development functions. This program prepares the Agency's executive leaders to better manage the environmental challenges of the 21st century, by supporting the Human Capital goals for executive leadership competencies and succession planning.
- (-4.3 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities, including reductions taken by Regional offices as a means to consolidate Human Resources Management functions.

These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

Title V United States Code.

Program Area: Pesticides Licensing

Pesticides: Field Programs

Program Area: Pesticides Licensing

Goal: Clean and Safe Water

Objective(s): Protect Human Health

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$24,627.9</i>	<i>\$24,926.3</i>	<i>\$0.0</i>	<i>(\$24,926.3)</i>
Total Budget Authority / Obligations	\$24,627.9	\$24,926.3	\$0.0	(\$24,926.3)
Total Workyears	118.5	122.5	0.0	-122.5

Program Project Description:

The Pesticides Field Program is one of the main components of the integrated National Pesticide Program established by Congress in the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). In combination with the risk assessment and risk management actions of the registration and reregistration of pesticides, field activities are the frontline delivery mechanism to ensure that safeguards, practices and capacity exist to achieve intended risk reduction.

Beginning in FY 2008, these resources will be aligned according to descriptions that better reflect the Agency's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) mandate and align with the Agency Strategic Plan. These description titles are: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability.

FY 2008 Activities and Performance Plan:

Resources previously presented in this program project are now presented within three new program projects and are distributed as outlined in the Explanation of Change section below. Please see the descriptions for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

Performance Targets:

Please see the narratives for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$11,468.3 /-68.6 FTE) This represents a transfer of resources to the Pesticides: Protect Human Health from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Field program's base resources and does not reflect a reduction in that program's resources.
- (-\$8,973.5 /-44.1 FTE) This represents a transfer of resources to the Pesticides: Protect the Environment from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Field program's base resources and does not reflect a reduction in that program's resources.
- (-\$4,484.5 /-9.8 FTE) This represents a transfer of resources to the Pesticides: Realize the Value of Pesticide Availability program. This is the outgoing transfer from the Pesticides: Field program's base resources and does not reflect a reduction in that program's resources.

Statutory Authority:

PRIA; FIFRA; FFDCA; ESA; and FQPA.

Pesticides: Registration of New Pesticides

Program Area: Pesticides Licensing

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$39,406.5	\$39,767.6	\$0.0	(\$39,767.6)
Science & Technology	\$2,631.7	\$2,766.1	\$0.0	(\$2,766.1)
Total Budget Authority / Obligations	\$42,038.2	\$42,533.7	\$0.0	(\$42,533.7)
Total Workyears	380.3	327.8	0.0	-327.8

Program Project Description:

EPA's Pesticide Registration Program registers pesticides for use, ensuring they satisfy a reasonable certainty of no harm to human health and the environment. The Agency registers new pesticides only after extensive review and evaluation of studies and data on human health and ecological effects.¹ As part of the process, the Agency analyzes data and, for food-use pesticides, makes tolerance decisions for each crop or crop grouping (or "use") the registrant requests for the pesticide. The Pesticide Registration program gives priority to accelerated processing of reduced risk pesticides that may substitute for products already on the market, thus giving farmers and other pesticide users new tools that are safer for human health and the environment. The resulting benefits to the nation include worker protection, public health assurance, a safer and abundant food supply, and increased protection of the environment from pesticide risk.

Beginning in FY 2008, these resources will be aligned according to descriptions that better reflect the Agency's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) mandate and align with the Agency Strategic Plan. These description titles are: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability.

FY 2008 Activities and Performance Plan:

Resources previously presented in this program project are now presented within three new program projects and are distributed as outlined in the Explanation of Change section below. Please see the descriptions for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

¹FIFRA Sec 3; FIFRA Sec 4 (i) (5)

Performance Targets:

Please see the narratives for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$22,269.9 /-175.0 FTE) This represents a transfer of resources to the Pesticides: Protect Human Health from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Registration program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.
- (-\$14,009.3 /-110.4 FTE) This represents a transfer of resources to the Pesticides: Protect the Environment from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Registration program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.
- (-\$3,488.4 /-27.1 FTE) This represents a transfer of resources to the Pesticides: Realize the Value of Pesticide Availability program. This is the outgoing transfer from the Pesticides: Registration program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.

Statutory Authority:

PRIA; FIFRA; FFDCA; FQPA; ESA.

Pesticides: Review / Reregistration of Existing Pesticides

Program Area: Pesticides Licensing

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$54,507.5	\$51,814.6	\$0.0	(\$51,814.6)
Science & Technology	\$2,347.0	\$2,820.4	\$0.0	(\$2,820.4)
Total Budget Authority / Obligations	\$56,854.5	\$54,635.0	\$0.0	(\$54,635.0)
Total Workyears	460.5	458.7	0.0	-458.7

Program Project Description:

The Agency ensures that pesticides, when used according to the label, result in a reasonable certainty of no harm to human health and that they do not present an unreasonable adverse effect on the environment. EPA uses various means to provide benefits such as public health safety, safe and abundant food, worker safety, and protection of land and other media from pesticide contamination. These means include regulatory actions (i.e., risk mitigation measures such as label changes and modifications in application of the pesticide), voluntary actions encouraged through partnerships, education, and outreach.

The Food Quality Protection Act of 1996 (FQPA) also requires that EPA establish a process for periodic review of pesticide registrations every 15 years, which will replace the Reregistration process. Registrations will be reviewed to ensure that they include appropriate risk reduction measures and that decisions are based on current scientific data, risk assessment methodologies and program policies. EPA initiated implementation of this program in FY 2007, and is increasing efforts in FY 2008. EPA worked with stakeholders to develop a pilot program which helped to define the program parameters for the Registration Review program.

Beginning in FY 2008, these resources will be aligned according to descriptions that better reflect the Agency's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) mandate and align with the Agency Strategic Plan. These description titles are: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability.

FY 2008 Activities and Performance Plan:

Resources previously presented in this program project are now presented within three new program projects and are distributed as outlined in the Explanation of Change section below. Please see the descriptions for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

Performance Targets:

Please see the narratives for program projects: Protect Human Health from Pesticide Risk, Protect the Environment from Pesticide Risk, and Realize the Value of Pesticide Availability for detailed descriptions of the FY 2008 activities and performance.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$29,016.2 /-230.3 FTE) This represents a transfer of resources to the Pesticides: Protect Human Health from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Review/Reregistration program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.
- (-\$18,653.2 /-159.0 FTE) This represents a transfer of resources to the Pesticides: Protect the Environment from Pesticide Risk program. This is the outgoing transfer from the Pesticides: Review/Reregistration program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.
- (-\$4,145.2 /-52.4 FTE) This represents a transfer of resources to the Pesticides: Realize the Value of Pesticide Availability program. This is the outgoing transfer from the Pesticides: Review/Reregistration program's base resources and does not reflect a change in program resources, activities, or activity levels from what would have otherwise been presented under this program project.

Statutory Authority:

PRIA; FIFRA; FFDCA; FQPA.

Pesticides: Protect Human Health from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Healthy Communities and Ecosystems
Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$62,514.0</i>	<i>\$62,514.0</i>
Science & Technology	\$0.0	\$0.0	\$3,294.0	\$3,294.0
Total Budget Authority / Obligations	\$0.0	\$0.0	\$65,808.0	\$65,808.0
Total Workyears	0.0	0.0	488.5	488.5

Program Project Description:

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), section 3(c)(5), states that the Administrator shall register a pesticide if it is determined that, when used in accordance with labeling and common practices, the product “will not generally cause unreasonable adverse effects on the environment.” Further, FIFRA defines “unreasonable adverse effects on the environment” as “any unreasonable risk to man or the environment.” EPA has restructured its program projects in order to align resource requests and resource presentation with the program’s mandate. This program project 1) links resources with FIFRA’s mandate to protect human health from unreasonable pesticide risks, 2) aligns with EPA’s 2006-2011 Agency Strategic Plan, and 3) comprises the human health activities formerly described in the Pesticides: Field Programs, Pesticides: Review/Reregistration of Existing Pesticides and Pesticides: Registration of New Pesticides program projects, as they relate to human health.

EPA’s Pesticide program evaluates, assesses and reviews new pesticides before they reach the market and ensures that pesticides already in commerce are safe.¹ Under FIFRA, the Federal Food, Drug, and Cosmetic Act (FFDCA), and the Food Quality Act of 1996 that amended FIFRA and FFDCA, EPA is responsible for registration and reregistration of pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations. To make registration and reregistration decisions, EPA must balance the risks and benefits of using the pesticide. In establishing tolerances, or the maximum allowable pesticide residues on food or feed, EPA must consider cumulative and aggregate risks and ensure additional protection for children.

EPA began promoting reduced risk pesticides in 1995 by giving registration priority to pesticides that will have low impact on human health; low toxicity to non-target birds, fish, and plants; low potential for contaminating ground water; lower use rates; low pest resistance potential; and that also comport with Integrated Pest Management (IPM) approaches.² Several countries and

¹ See U.S. Environmental Protection Agency, Pesticides internet site: <http://www.epa.gov/pesticides/>. Washington, DC: Office of Pesticide Programs.

² See U.S. Environmental Protection Agency, Pesticides: Health and Safety, Reducing Pesticide Risk internet site: <http://www.epa.gov/pesticides/health/reducing.htm>.

international organizations have instituted programs to facilitate registering reduced risk pesticides. EPA works with the international scientific community and Organization for Economic Cooperation and Development (OECD) member countries to register 12 new reduced-risk pesticides and to establish related tolerances (maximum residue limits). Through these efforts, EPA can help to reduce risks to Americans from foods imported from other countries.

EPA's regional offices provide frontline risk management that ensures the decisions made during EPA's registration and reregistration processes are implemented in pesticide use. An estimated 1.8 million agricultural workers could be exposed to pesticides, and millions of individuals use pesticides in occupations such as lawn care, healthcare, food preparation, and landscape maintenance.³ Each year, the risk assessments that EPA conducts yield extensive risk-management requirements for hundreds of pesticides and uses. EPA continues to reduce the number and severity of pesticide exposure incidents by promulgating regulations under the Worker Protection Standard, training and certifying pesticide applicators, assessing and managing risks, and developing effective communication and outreach programs

FY 2008 Activities and Performance Plan:

During 2008, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with FQPA standards and Pesticide Registration Improvement Act (PRIA) timeframes. EPA will continue to process these registration requests, with special consideration given to susceptible populations, especially children. Specifically, EPA will focus special attention on the foods commonly eaten by children, to reduce pesticide exposure to children where the science identifies potential concerns.

Also, in 2008, EPA will continue to meet the 2008 FQPA/PRIA statutory deadlines for currently registered pesticides by completing Reregistration Eligibility Decisions (REDs) for the remaining chemicals subject to reregistration. The Agency will continue to ramp-up the Registration Review program and implement RED decisions.

In 2008, EPA will review 45 pesticides through the Registration Review program. As Registration Review is implemented, EPA will continue to maintain the Agency's goal of ensuring that pesticides in the marketplace meet the latest health and safety standards. Registration review will operate continuously, encompassing all registered pesticides.

EPA will continue to address post-RED activities vital to effective "real world" implementation of the RED requirements. These activities include reviewing product label amendments that incorporate the mitigation from the REDs; publishing proposed and final product cancellations; implementing memoranda of agreements designed to provide fast/effective risk reduction; and approving product reregistrations. The Agency also will complete certain proposed and final tolerance rulemakings to implement the changes in tolerances and revocations required in the REDs. The end result of these activities is protecting human health by implementing statutes and

³ U.S. Department of Labor. March 2005. *Findings from the National Agricultural Workers Survey (NAWS) 2001 - 2002. A Demographic and Employment Profile of United States Farm Workers*, Research Report No. 9, Washington, DC: Office of the Assistant Secretary for Policy, Office of Programmatic Policy. Available on the internet at: <http://www.doleta.gov/agworker/naws.cfm>.

taking regulatory actions to ensure pesticides continue to be safe and available when used in accordance with the label.

EPA staff will continue to provide locally based technical assistance and guidance to states and Tribes on implementation of pesticide decisions. Issues addressed will include newer/safer products and improved outreach and education. Technical assistance will include workshops, demonstration projects, briefings, and informational meetings in areas including pesticide safety training and use of lower risk pesticides.

EPA will engage the public, the scientific community and other stakeholders in its policy development and implementation to encourage a reasonable transition for farmers and others from the older, more potentially hazardous pesticides to the newer pesticides that have been registered using the latest available scientific information. The Agency will continue to update the pesticide review and use policies to ensure compliance with the latest scientific methods. EPA also will continue its emphasis on the registration of reduced risk pesticides, including biopesticides, in order to provide farmers and other pesticide users with new alternatives. In FY 2008, the Agency, in collaboration with the United States Department of Agriculture, will continue to work to ensure that minor use registrations receive appropriate support. EPA also will ensure that needs are met for reduced risk pesticides for minor use crops.

Pesticide registration actions will continue to evaluate pesticide products before they enter the market.⁴ EPA will review pesticide data and implement use restrictions and instructions needed to ensure that pesticides used according to label directions will not result in unreasonable risk. During its pre-market review, EPA will consider human health and environmental concerns as well as the pesticide's potential benefits. Through Reregistration and the implementation of Reregistration Eligibility Decisions (REDs), EPA will continue to review existing registrations to ensure they meet current scientific standards and address concerns identified after the original registration.⁵ In addition, EPA initiated a new Registration Review program to review of pesticide registrations once every 15 years to ensure that they meet the most current standards. EPA will assist farmers and other pesticide users in learning about new, safer products and methods of using existing products through workshops, demonstrations, small grants and materials available on the web site and in print.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Incidents per 100,000 potential risk events in population occupationally exposed to pesticides.				<= 3.5	Incidents per 100,000

⁴ See U.S. Environmental Protection Agency, Pesticides: Topical & Chemical Fact Sheets, Pesticide Registration Program internet site: <http://www.epa.gov/pesticides/factsheets/registration.htm>.

⁵ See U.S. Environmental Protection Agency, Pesticide Tolerance Reassessment and Reregistration internet site: www.epa.gov/pesticides/reregistration.

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Reduced cost per pesticide occupational incident avoided.			2	4	Cum. Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent reduction in concentrations of pesticides detected in general population.			10	No Target Established	Percent Reduction

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent reduction in moderate to severe incidents for six acutely toxic agricultural pesticides with the highest incident rate.			10	No Target Established	Percent Reduction

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of agricultural acres treated with reduced-risk pesticides.	Data Available 2007	17	18	18	Percent Acre-Treatments

Measures in the performance table that have “No Target Established” are reported on a bi-annual basis and therefore, do not possess an FY 2008 target.

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (+\$29,016.2 \ +230.3 FTE) This increase is the incoming transfer of the Pesticides: Review/Reregistration of Existing Pesticides program’s base resources, including payroll and FTE, and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$22,269.9 \ +175.0 FTE) This increase is the incoming transfer of the Pesticides: Registration of New Pesticides program’s base resources and does not reflect new

resources, or program activities that would have been presented under the previous program project structure.

- (+\$11,468.3 \ +68.6 FTE) This increase is the incoming transfer of the Pesticides: Field Program's base resources and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$1,436.8) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$16.3) This reduction reflects an Agencywide effort to reduce travel, including international travel.
- (-\$59.5) This reduction reflects savings from improvements to the Agency's small administrative IT systems.
- (-\$452.4) This change reflects a decrease to risk assessment contracts, statistical analysis, and collaborative studies on occupational exposures for Reregistration actions. This decrease may delay Reregistration Eligibility Decisions (REDs) and affects potential outreach activities to states and Tribes including implementation of REDs, implementation of ESA, safer alternatives for pest management, and Registration Review communications. Reductions were used to fund higher priority activities such as development and implementation of the lead rule.
- (-\$328.3) This change reflects a savings from consolidation of education and outreach resources. This reduction will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$820.7) This decrease results in reduced support to the states in implementing the pesticides programs including the Worker Protection and Pesticides Certification programs, Pesticides Environmental Stewardship, the Strategic Agricultural Initiative and the Tribal program. Reductions were used to fund higher priority activities such as development and implementation of the lead rule.
- (-3.5 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. The decrease reflects consolidation of education and outreach and reduced support for implementing pesticides programs. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

PRIA; FIFRA; FFDCA; ESA; and FQPA.

Pesticides: Protect the Environment from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Healthy Communities and Ecosystems
Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$41,750.0</i>	<i>\$41,750.0</i>
Science & Technology	\$0.0	\$0.0	\$2,115.0	\$2,115.0
Total Budget Authority / Obligations	\$0.0	\$0.0	\$43,865.0	\$43,865.0
Total Workyears	0.0	0.0	320.5	320.5

Program Project Description:

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), section 3(c)(5), states that the Administrator shall register a pesticide if it is determined that, when used in accordance with labeling and common practices, the product “will not generally cause unreasonable adverse effects on the environment.” Further, FIFRA defines “unreasonable adverse effects on the environment” as “any unreasonable risk to man or the environment.” EPA has restructured its program projects in order to align resource requests and resource presentation with the program’s mandate. This program project 1) links resources with FIFRA’s mandate to protect the environment from unreasonable pesticide risks, 2) aligns with EPA’s 2006-2011 Agency Strategic Plan, and 3) comprises the environmental protection activities formerly described in the Pesticides: Pesticides: Review/Reregistration of Existing Pesticides and the Pesticides: Registration of New Pesticides program projects.

Along with assessing the risks that pesticides pose to human health, EPA conducts ecological risk assessments to determine potential effects on plants, animals, and ecosystems. In addition to assessing and addressing potential risks to ecosystems and plants and animals that are not targets of the pesticide, the Agency has additional responsibilities under the Endangered Species Act (ESA).¹ Under FIFRA, EPA must determine that a pesticide is not likely to cause unreasonable adverse effects on the environment, taking into account the beneficial uses of a product. To ensure unreasonable risks are avoided, EPA may impose risk mitigation measures such as modifying use rates or application methods, restricting uses, or denying uses. In some regulatory decisions, EPA may determine that uncertainties in the risk determination need to be reduced and may subsequently require monitoring of environmental conditions, such as effects on water sources or the development and submission of additional laboratory or field study data by the pesticide registrant.²

¹ The Endangered Species Act of 1973 sections 7(a)1 and 7 (a)2; Federal Agency Actions and Consultations, as amended (16 U.S.C. 1536(a)). Available at U.S. Fish and Wildlife Service, Endangered Species Act of 1973 internet site: <http://www.fws.gov/endangered/esa.htm#Lnk07>.

² Federal Insecticide, Fungicide and Rodenticide Act, as amended. January 23, 2004. Section 3(a), Requirement of Registration (7 U.S.C. 136a). Available online at www.epa.gov/opp0001/regulating/fifra/pdf.

Under ESA, EPA must ensure that pesticide regulatory decisions will not adversely modify critical habitat or jeopardize the continued existence of species listed by the U.S. Fish and Wildlife Service or National Marine Fisheries Service as threatened or endangered. Given approximately 600 active ingredients in more than 19,000 products—many of which have multiple uses—and approximately 1,200 listed species with diverse biologically-attributed habitat requirements and geographic range, this presents a great challenge. EPA works with the U.S. Fish and Wildlife Service and National Marine Fisheries Service to establish an efficient process for carrying out our ESA obligations.

The United States District Court for the Western District of Washington, as a result of a lawsuit filed against the Services, overturned the most critical aspects of EPA's initial attempt at regulation, including EPA's authority to make certain determinations without further consultation with the Services. EPA will continue to work with the Services to find efficiencies and have made assessing potential risks to endangered species a priority. EPA has also instituted processes to consider endangered species issues routinely in EPA reviews.

FY 2008 Activities and Performance Plan:

Reduced concentrations of pesticides in water sources indicate the efficacy of EPA's risk assessment, management, mitigation, and communication activities. Using sampling data collected under the U.S. Geological Survey (USGS) National Water Quality Assessment Program, EPA will monitor the impact of our regulatory decisions for four pesticides of concern—diazinon, chlorpyrifos, malathion, and azinphos-methyl—and consider whether any additional action is necessary.³ In FY 2008 the Agency will work with USGS to develop sampling plans and refine goals, and we will ask USGS to add additional insecticides to sampling protocols and establish baselines for newer products that are replacing organophosphates, such as synthetic pyrethroids.

The water quality measure tracks reductions of concentrations for four organophosphate insecticides that most consistently exceeded EPA's levels of concerns for aquatic ecosystems during the last ten years of monitoring the US Geological Survey (National-Water-Quality Assessment). EPA's goals for reducing the number of watersheds with exceedences for these pesticides will be met through a combination of programmatic activities. Reregistration decisions, and associated RED implementation, for these four compounds will result in lower use rates and the elimination of certain uses that will directly contribute to reduced concentrations of these materials in the nation's waters.

While the reregistration and RED implementation functions are a necessary aspect of meeting EPA's goals, they are not sufficient in and of themselves. Without having alternative products to these organophosphates available to the consumer, the means to reach the goal would be significantly hampered. Consequently, the success of the registration program in ensuring lower risk and the availability of efficacious alternative products, plays a large role in meeting the environmental outcome of improved aquatic ecosystem protection. EPA will also continue to

³Gilliom, R.J., et al. 2006. *The Quality of Our Nation's Waters: Pesticides in the Nation's Streams and Ground Water, 1992–2001*. Reston, Virginia: U.S. Geological Survey Circular 1291. 171p. Available on the internet at: <http://pubs.usgs.gov/circ/2005/1291/>.

assist pesticide users in learning about new, safer products and methods of using existing products through various means, including workshops, demonstrations, grants, printed materials and the Internet.

Another program focus in FY 2008 will be providing for the continued protection of threatened or endangered species from pesticide use, while minimizing regulatory burdens on pesticide users. EPA will use sound science and best available data to assess the potential risk of pesticide exposure to listed species and will continue efforts with partners and stakeholders to improve complementary information and databases. As pesticides are reviewed throughout the course of the Registration Review cycle, databases that describe the location and characteristics of species, pesticides and crops will continually be refined with new information to help ensure consistent consideration of endangered species.

EPA will continue to implement use limitations through appropriate label statements, referring pesticide users to EPA-developed Endangered Species Protection Bulletins which are available on the Internet via *Bulletins Live!* These bulletins will, as appropriate, contain maps of pesticide use limitation areas necessary to ensure protection of listed species and, therefore, EPA's compliance with the Endangered Species Act. Any such limitations on a pesticide's use will be enforceable under the misuse provisions of FIFRA. Bulletins are a critical mechanism for ensuring protection of endangered and threatened species from pesticide applications while minimizing the burden on agriculture and other pesticide users by limiting pesticide use in the smallest geographic area necessary to protect the species.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Cumulative percent of Reregistration Eligibility Decisions Completed.	91	93.5	97	100	Percent Decisions

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Reduction in time required to issue Reregistration Eligibility Decisions.	62	10	40	60	Percent Reduction

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Average cost and average time to produce or update an Endangered Species Bulletin.			10	19	Percent Reduction

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of urban watersheds that exceeds EPA aquatic life benchmarks for three key pesticides of concern.				25, 25, 30	Percent

Some of the measures for this program are program outputs, which, when finalized, represent the program's statutory requirements to ensure that pesticides entering the marketplace are safe for human health and the environment, and when used in accordance with the packaging label present a reasonable certainty of no harm. While program outputs are not the best measures of risk reduction, they do provide a means for reducing risk in that the program's safety review prevents dangerous pesticides from entering the marketplace.

EPA goals for 2008 through 2010 will be refined when the USGS plan is finalized in late FY 2007 as the USGS plan is, however, still under development. USGS is currently developing sampling plans for 2008 through 2017. Current draft plans call for yearly monitoring in four urban-dominated river/large stream watersheds and eight agricultural watersheds; bi-yearly sampling in twelve additional urban-dominated streams and three agricultural dominated watersheds; and sampling every four years in a second set of twelve urban-dominated stream watersheds and a second set of 25 agricultural watersheds. The sampling frequency for these 28 urban sites and 36 agricultural sites will range from approximately 15 to 35 sites samples per year based on the watershed land-use class.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$18,653.2 \ +159.0 FTE) This increase is the incoming transfer of the Pesticides: Review/Reregistration of Existing Pesticides program's base resources, including payroll and FTE, and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$14,009.3 \ +110.4 FTE) This increase is the incoming transfer of the Pesticides: Registration of New Pesticides program's base resources and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$8,973.5 \ +44.1 FTE) This increase is the incoming transfer of the Pesticides: Field Program's base resources and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$1,149.9) This reflects an increase for payroll and cost of living for existing FTE.

- (-\$5.0) This reduction reflects an Agencywide effort to reduce travel, including international travel.
- (-\$18.5) This reflects a shift of resources to support emergency exemptions and related food security activities.
- (-\$272.7) This change reflects a decrease to risk assessment contracts that support Reregistration actions and may delay Reregistration Eligibility Decisions (REDs). The decrease affects potential outreach activities to states and Tribes including implementation of REDs, implementation of ESA, safer alternatives for pest management, and Registration Review communications. Reductions were used to fund higher priority activities such as development and implementation of the lead rule.
- (-\$211.1) This change reflects a savings from consolidation of education and outreach resources.
- (-\$527.6) This decrease results in reduced support to the states in implementing the pesticides programs including the Worker Protection and Pesticides Certification programs, Pesticides Environmental Stewardship, the Strategic Agricultural Initiative and the Tribal program. This reduction will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$1.0) Change due to rounding in the FY 2008 President's Budget.
- (-4.6 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. The decrease reflects consolidation of education and outreach and reduced support for implementing pesticides programs. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

PRIA; FIFRA; FFDCA; ESA; and FQPA.

Pesticides: Realize the Value of Pesticide Availability

Program Area: Pesticides Licensing

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$12,114.0</i>	<i>\$12,114.0</i>
Science & Technology	\$0.0	\$0.0	\$472.0	\$472.0
Total Budget Authority / Obligations	\$0.0	\$0.0	\$12,586.0	\$12,586.0
Total Workyears	0.0	0.0	90.4	90.4

Program Project Description:

Within the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the definition of “unreasonable adverse effects on the environments” expands upon the concept of protecting against unreasonable risks to man or the environment, by adding “taking into account the economic, social and environmental costs and benefits of the use of any pesticide...” An example of actions that lead to these societal benefits are exemptions granted under FIFRA Section 18. In the event of an emergency, FIFRA Section 18 provides EPA the authority to temporarily exempt certain pesticides uses from registration requirements. We must ensure that, under the very limiting provisions of the exemption, such emergency uses will not present an unreasonable risk to the environment. EPA’s timely review of emergency exemptions has avoided an estimated \$1.5 billion in crop losses per year. In such cases, EPA’s goal is to complete the more detailed and comprehensive unreasonable risk review conducted for pesticide registration within three years. This program project, which aligns with the 2006-2011 Agency Strategic Plan, is restructured for FY 2008 and now comprises the activities formerly described in the Pesticides: Field Programs, Pesticides: Review/Reregistration of Existing Pesticides and Pesticides: Registration of New Pesticides program projects, as they relate to the value of pesticide availability.

The statute clearly recognizes that there will be societal benefits beyond protection of human health and the environment from the pesticide registration process that it establishes. For example, an estimated \$900 million in termite damage is avoided each year through the availability of effective termiticides. While some effective termiticides have been removed from the market due to safety concerns, EPA continues to work with industry to register safe alternatives that meet or exceed all current safety standards and offer a high level of protection. Section 3 of FIFRA also authorizes EPA to register “me-too” products; that is, products that are identical or substantially similar to already-registered products. The entry of these new products, also known as “generics,” into the market can cause price reductions resulting from new competition and broader access to products. These price declines generate competition that provides benefits to farmers and consumers.

EPA’s Pesticide Environmental Stewardship Program’s efforts to increase adoption of Integrated

Pest Management (IPM) in schools has led to a documented 50 percent reduction in pest control costs as well as a 90 percent reduction in both pesticide applications and pest problems. This “Monroe Model” serves as an example of how to implement IPM in school districts across the country.

FY 2008 Activities and Performance Plan:

EPA’s statutory and regulatory functions include registration, reregistration, RED implementation, registration review, stewardship/implementation and program management. During 2008, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with FIFRA and the Federal Food, Drug and Cosmetic Act (FFDCA) standards as well as Pesticide Registration Improvement Act (PRIA) timeframes. Many of these actions will be for reduced-risk pesticides for which, once registered and utilized by pesticide users, will increase benefits to society. Working together with the affected user communities through programs such as the Pesticide Environmental Stewardship Program and the Strategic Agricultural Initiative, the Agency will find ways to accelerate the adoption of these lower-risk products.

Similarly, the Agency will continue its worksharing efforts with its international partners. Through these collaborative activities and resulting international registrations, international trade barriers will be reduced, enabling domestic users to more readily adopt these newer pesticides into their crop protection programs and reduce the costs of registration through work sharing.

The Section 18 program has helped growers when they faced emergency situations that require the use of pesticides that are not registered for their crops. The economic benefits of the Section 18 program to growers are the avoidance of potential losses they could have incurred in the absence of pesticides exempted under FIFRA’s emergency exemption provisions. The economic benefits of the Section 18 program to consumers could include savings in consumer expenditures associated with potential decreases in market prices for the affected crops.

EPA will continue to conduct pre-market evaluations of efficacy claims made for public health pesticides. In addition to reviewing the health and environmental safety from exposure to these products, because these products also make public health claims, it is critical that the Agency determine that, prior to registration, the products will work for their intended purposes. For some of these products, most notably hospital disinfectants through the Antimicrobial Testing Program, the Agency will conduct post-market surveillance to monitor the efficacy of these products.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Billions of dollars in crop loss avoided by ensuring that effective pesticides are available to address pest infestations.	1.5			1.5	Billion dollars loss avoided

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Millions of dollars in termite structural damage avoided annually by ensuring safe and effective pesticides are registered/re-registered and available for termite treatment.	900			900	Million dollars

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Reduced cost per acres using reduced risk management practices compared to the grant and/or contract funds on environmental stewardship.				2.63 (2)	Dollar/Acre (%)

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$4,145.2 \ +52.4 FTE) This increase is the incoming transfer of the Pesticides: Review/Reregistration of Existing Pesticides program's base resources, including payroll and FTE, and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$3,488.4 \ +27.1 FTE) This increase is the incoming transfer of the Pesticides: Registration of New Pesticides program's base resources and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$4,484.5 \ +9.8 FTE) This increase is the incoming transfer of the Pesticides: Field Program's base resources and does not reflect new resources, or program activities that would have been presented under the previous program project structure.
- (+\$284.1) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$30.1) This increase reflects a shift of resources to support emergency exemptions and related food security activities.
- (-\$154.2) This change reflects a decrease to risk assessment contracts that support Reregistration actions and may delay Reregistration Eligibility Decisions (REDs). The

decrease affects potential outreach activities to states and Tribes including implementation of REDs, implementation of ESA, safer alternatives for pest management, and Registration Review communications. Reductions were used to fund higher priority activities such as development and implementation of the lead rule.

- (-\$46.8) This change reflects a savings from consolidation of education and outreach resources.
- (-\$117.2) This decrease results in reduced contract support for outreach and training provided to states and Tribes implementing the Pesticide Safety Program for agricultural workers, pesticides handlers and health providers.
- (-1.5 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. The decrease reflects consolidation of education and outreach and reduced support for implementing pesticides programs. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$0.1) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

PRIA; FIFRA; FFDCA; ESA; and FQPA.

Science Policy and Biotechnology

Program Area: Pesticides Licensing

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$2,035.3	\$1,754.0	\$1,780.0	\$26.0
Total Budget Authority / Obligations	\$2,035.3	\$1,754.0	\$1,780.0	\$26.0
Total Workyears	10.6	6.3	6.3	0.0

Program Project Description:

The Agency provides scientific and policy expertise, coordinates EPA interagency and international efforts, and facilitates the sharing of information related to core science policy issues concerning pesticides and toxic chemicals. Biotechnology is illustrative of the work encompassed by this program. Many offices within EPA regularly deal with biotechnology issues, and the coordination among affected offices allows for coherent and consistent scientific policy from a broad Agency perspective.

Internationally, EPA will continue participating in a variety of activities related to biotechnology and is fully committed to and engaged in international dialogues. The Biotechnology Team assists in formulating EPA and United States positions on biotechnology issues, including representation on United States delegations to international meetings when needed. Such international activity is coordinated with the Department of State.

The Scientific Advisory Panel (SAP), operating under the rules and regulations of the Federal Advisory Committee Act, serves as the primary external independent scientific peer review mechanism for EPA's pesticide programs. The SAP is managed under this program.

FY 2008 Activities and Performance Plan:

EPA will continue to play a lead role in evaluating the scientific and technical issues associated with Plant-Incorporated Protectants (PIPs) based on plant viral coat proteins. EPA will also, in conjunction with an interagency workgroup, continue to maintain and further develop the U.S. Regulatory Agencies Unified Biotechnology website. The site focuses on the laws and regulations governing agricultural products of modern biotechnology and includes a searchable database of genetically engineered crop plants that have completed review for use in the United States.¹

EPA estimates that the SAP will be asked to complete approximately 14 reviews in FY 2008. The specific topics to be placed on the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) SAP agenda are typically confirmed a few months in advance of each session and

¹ <http://usbiotechreg.nbii.gov/>

usually include difficult, new or controversial scientific issues identified in the course of EPA's pesticide program activities. In FY 2008, topics may include issues related to biotechnology, chemical-specific risk assessments, and endocrine disruptors.

In addition, a number of international activities will continue to be supported by EPA. Efforts include representation on the Organization for Economic Cooperation and Development's (OECD) Working Group on the Harmonization of Regulatory Oversight in Biotechnology and OECD's Task Force for the Safety of Novel Foods and Feed.

Performance Targets:

Currently there are no performance measures for this specific program.

Work under this program supports the *Enhance Science and Research* and *Chemical, Organism, and Pesticide Risks* objectives, specifically, work done in EPA's Pesticide and Pollution Prevention and Toxics programs. The activities supported include the registration of new pesticides, and review and reregistration of existing pesticides. Science Policy and Biotechnology activities such as the SAP, a scientific peer review mechanism, assist in meeting its targets for measures under those program/projects including *Endocrine Disruptors* and others.

The work in the Science Policy program also supports efforts in the Toxic Substances: Chemical Risk Review and Reduction program. Science coordination efforts under Science Policy and Biotechnology assist in meeting the 2008 target reduction for the *Number of chemicals or organisms introduced into commerce that pose unreasonable risks to workers, consumers, or the environment* through SAP meetings and letter reviews.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$27.4) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$1.4) This reduction reflects an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

FIFRA; FFDCA; FQPA; TSCA.

Program Area: Resource Conservation and Recovery Act (RCRA)

RCRA: Corrective Action

Program Area: Resource Conservation and Recovery Act (RCRA)

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$38,425.9	\$40,372.3	\$39,573.0	(\$799.3)
Total Budget Authority / Obligations	\$38,425.9	\$40,372.3	\$39,573.0	(\$799.3)
Total Workyears	238.9	266.7	252.7	-14.0

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) authorizes EPA to implement a hazardous waste management program for the purpose of controlling the generation, transportation, treatment, storage and disposal of hazardous wastes. An important element of this program is the requirement that facilities managing hazardous waste clean up past releases. This program, which is largely implemented by authorized states, is known as the Corrective Action program. Although the states¹ are the primary implementers of the Corrective Action program, EPA Regional staff are also the lead at a significant number of facilities undergoing corrective actions. Key program implementation activities include: development of technical and program implementation regulations, policies and guidance, and conducting corrective action activities including assessments, investigations, stabilization measures, remedy selection, and remedy construction/implementation. For more information, refer to <http://www.epa.gov/correctiveaction/>.

FY 2008 Activities and Performance Plan:

In the Agency's FY 2006-FY 2011 Strategic Plan, EPA introduced new long term program goals for corrective action that focus EPA and state efforts on moving facilities from stabilization to final remedies. In FY 2008, EPA will make progress toward achieving its annual corrective action goals by completing construction at 27 percent of facilities, controlling human exposures to contaminants at 95 percent of facilities and controlling the migration of contaminated groundwater at 81 percent of facilities. These annual goals have been set against a universe of 1,968 facilities.

Consistent with EPA's emphasis on land revitalization, ensuring sustainable future uses for RCRA corrective action facilities is considered in remedy selections and in the construction of those remedies. In addition, the Agency will work in partnership with the states to coordinate cleanup program goals and direction. The Agency also will continue to present training to Regional and state RCRA Corrective Action staff that focuses on selecting and completing final remedies.

¹ This includes both those states authorized for corrective action and those not authorized for corrective action through work sharing agreements with their EPA Regional Offices.

In FY 2008, the Agency will be working with its state partners to continue developing and implementing program improvements in order to meet the ambitious 2020 goal. EPA and the states will continue to develop and implement approaches for selecting and constructing final remedies at operating facilities that are protective as long as the facility remains active and will ensure that protective controls are in place if the use changes in the future.

EPA will ensure that polychlorinated biphenyls (PCB) waste and PCB remediation sites are cleaned up correctly. Specific activities include advising the regulated community on PCB remediation and reviewing and acting on disposal applications for PCB remediation waste.

The RCRA Corrective Action program was initially assessed in 2003 and received an overall rating of “adequate.” The assessment found that the program puts decision-making authority close to the actual clean up activity while still ensuring oversight and consistency in protecting human health and the environment. As part of the program’s improvement plan, EPA developed an efficiency measure for the program, which is the number of final remedy components constructed at RCRA corrective action facilities per Federal, state and private sector costs. The intent of the measure is to show, over time, the percent increase of final remedy components constructed per the costs related to the cleanup and oversight of cleanup at RCRA facilities.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of RCRA construction completions using 2008 baseline.	22	13	25	27	percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of RCRA CA facilities with current human exposures under control (using 2008 baseline).	89	82	92	95	percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Percent increase of final remedy components constructed at RCRA corrective action facilities per federal, state, and private sector			3	3	percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	dollars per year.					

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of RCRA CA facilities with migration of contaminated groundwater under control (using 2008 baseline).	74	68	77	81	percent

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-14.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. The program has matured, resulting in a reduced need for FTE resources due to the delegated nature of the program and improvements in program management. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its program. This net reduction includes an increase of 3.1 FTE, which redirected remedial work associated with PCB remediation under the Chemical Risk Management program to the RCRA Corrective Action program.
- (+\$143.3) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$883.0) This reduction reflects decreased need due to program success in addressing stabilization at 95 percent of the highest priority facilities and the program's strategy for proceeding with remaining long-range critical corrective action work at a deliberate pace.
- (-\$55.8) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to program travel expenses in Headquarters and the Regions.
- (-\$3.8) This reduction reflects efficiencies gained in Agency administrative or contract management services.

Statutory Authority:

SWDA, Section 8001 as amended, RCRA of 1976 as amended; Public Law 94-580, 42 U.S.C. 6901 et seq.; TSCA; Department of Veterans Affairs and Housing and Urban Development and Independent Agencies Appropriations Act, Public Law 105-276, 112 Stat. 2461, 2499 (1988).

RCRA: Waste Management

Program Area: Resource Conservation and Recovery Act (RCRA)

Goal: Land Preservation and Restoration

Objective(s): Preserve Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$66,819.2</i>	<i>\$67,887.3</i>	<i>\$69,158.0</i>	<i>\$1,270.7</i>
Total Budget Authority / Obligations	\$66,819.2	\$67,887.3	\$69,158.0	\$1,270.7
Total Workyears	443.4	443.1	416.9	-26.2

Program Project Description:

The Waste Management program's primary focus is to provide national policy directed by the Resource Conservation and Recovery Act (RCRA) to reduce the amount of waste generated and to improve the recovery and conservation of materials by focusing on a hierarchy of waste management options that advocate reduction, reuse, and recycling over treatment and disposal. This program also strives to prevent releases to the environment from both non-hazardous and hazardous waste management facilities, reduce emissions from hazardous waste combustion, and manage waste in more environmentally beneficial and cost-effective ways.

The Waste Management program continues to evolve to address the challenges of the 21st century, including new waste streams from new industrial processes and assessing technological advances and innovative methods of conducting business in the waste management arena. There is an increased focus on reuse and recycling, particularly the safe beneficial use of industrial byproducts as a preference to disposal. Moreover, the program is engaged in regulatory and other reform efforts to improve the efficiency of the program (e.g., e-manifest and e-permitting projects) and to provide incentives for increased recycling. EPA actively participates in waste management and resource conservation efforts internationally.

Through the Resource Conservation Challenge (RCC), the program works with industry, states, and environmental groups to explore new ways to reduce materials and energy use by promoting product and process redesign and increased materials and energy recovery from materials otherwise requiring disposal. However, not all materials can be reduced, reused, or recycled and, therefore, some wastes must be safely treated and disposed. Thus, EPA and the states maintain the critical health and environmental protections provided by the base "cradle to grave" waste management system envisioned by RCRA. For more information, please refer to (<http://www.epa.gov/rcc/>).

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to assist states in getting permits or other approved controls in place at facilities that treat, store, or dispose of hazardous waste. EPA will focus efforts on helping states overcome barriers, particularly with regard to the types of facilities that are

difficult to permit or where emissions are difficult to control, such as boilers and industrial furnaces (BIFs) and large, complex Federal facilities. The Waste Management Program also will continue efforts to improve the implementation of the RCRA financial assurance program in order to ensure that owners and operators of hazardous waste facilities provide proof of their ability to pay for the clean up, closure, and post-closure care of their facilities.

In FY 2008, the program will continue to work in partnership with the states to incorporate e-permitting tools to encourage and help states to expedite and simplify the permitting process as well as provide better public access to permitting information. During FY 2008, the Agency will continue its pursuit to improve and modernize the hazardous waste tracking system by developing an “e-manifest.” This system will allow electronic processing of hazardous waste transactions that will greatly enhance tracking capabilities while significantly reducing administrative burden and costs for governments and the regulated community. The e-manifest will build on the new standardized manifest form that took effect in September 2006, and will ensure the continued safe management of hazardous waste.

In FY 2008, EPA plans to follow up on the issuance of the final rule to allow gasification of oil-bearing hazardous secondary materials from petroleum refining as feedstocks for clean fuels and basic chemicals, thereby expanding the reuse of petroleum residuals currently managed as waste. EPA will work with the Department of Energy and outside stakeholders to explore expanding gasification to additional waste streams using new and emerging technologies along with examining our regulatory structure to see if further changes would encourage the expanded use of these clean energy systems. Gasification of these materials will allow the capture of a significant amount of energy from waste materials that previously were treated and disposed of, thus turning a waste problem into an energy solution.

The Agency will continue its regulatory reform efforts in FY 2008 to encourage safe recycling of hazardous secondary materials by providing streamlined regulatory requirements and minimizing regulatory burden where appropriate. Increased recycling of hazardous secondary materials is an important part of moving toward sustainable industrial production by returning recoverable commodities to the economy, minimizing wasteful disposal of these valuable materials, and minimizing additional raw materials production. Completion of revisions to the definition of solid waste, which will promote recycling of a wide range of spent solvents, spent acids and bases, and metal-containing wastes will be a major project in FY 2008. EPA also will begin implementation activities associated with these rule revisions.

Another important area of reform in FY 2008 will be the continuation of efforts to make the hazardous waste program more cost-effective and easy-to-use for the more than 100,000 generators of hazardous waste. This effort encompasses many projects, for example, the completion of a final regulation specifying alternative requirements for college and university laboratories that generate hazardous waste. In addition, EPA will prepare guidance materials on issues raised by the regulated community and, if determined necessary, propose regulatory changes to improve the program.

The Agency also will work to reduce risks from industrial non-hazardous waste known as Industrial Subtitle D waste. EPA will continue to work with interested parties to apply the

voluntary “Guide for Industrial Waste Management” which provides facility managers, state and Tribal regulators and interested public with recommendations and tools to better address the management of land-disposed non-hazardous industrial waste.

During FY 2008, the Waste Management program will continue working with the Department of Agriculture, the Food and Drug Administration, and the Department of Homeland Security to prepare for possible terrorist or natural disaster events and threats to the food chain. EPA will work to expand information on technologies and tools for use in decontamination/disposal operations related to terrorist events and natural disasters.

EPA will work with the U.S. Navy to address the reefing of ships and will work with the Maritime Administration in order to safely dismantle its fleet of obsolete ships which contain equipment using Polychlorinated Biphenyls (PCBs). In addition, the Agency will work with the Department of Defense to oversee the disposal of PCBs in nerve agent rockets. In FY 2008, EPA will transfer PCB cleanup and disposal activities from the Chemical Risk Management program to the RCRA Waste Management program. This transfer will promote efficiency and consolidate PCB activities into the RCRA program. The focus of activity in FY 2008 will be to continue monitoring compliance with the conditions of the PCB disposal approvals.

Providing grant funds, training, and technical assistance to Tribes and Tribal organizations for the purpose of solving solid waste problems and reducing the risk of exposure to improperly disposed hazardous and solid waste also is a priority in FY 2008. Many of the more than 560 Federally-recognized Tribes have no plan for managing solid and hazardous waste, resulting in large amounts of waste being open-burned or placed in open dumps. The 2011 GPRA goals are to increase the number of Tribal governments with an integrated waste management plan by 25 percent and to close, clean, or upgrade 200 open dumps. For FY 2008, the focus of the program will be on developing training and technical assistance tools for Tribal governments to develop sustainable waste management programs to meet these goals.

This program was included in the PART review of the RCRA Base, Permits and Grants Program for FY 2004 which received an overall rating of “adequate.” During the PART, EPA developed an efficiency measure and the baseline (for FY 2005) that was set in July 2006 is 2,143 facilities under control per \$674 million in costs, or 3.17 facilities per million dollars. Costs include estimates of the permitting costs of the regulated entities plus appropriated dollars for the program, based on a three year rolling average. The 2007 target is a 2 percent improvement from baseline, and the 2008 target is a 3 percent improvement from baseline or 1 percent per year.

During FY 2008, EPA will coordinate efforts with the states to meet program goals. The permits universe was updated for the 2006-2008 cycle. New facilities on the permit track have been added and those not on the permit track have been omitted. For permit renewals, a new universe and reporting system was developed to track updated controls. The Agency has determined that the reporting cycles for permitting and renewals will be consolidated at the end of FY 2008. Each of these targets contributes toward achieving the goals of EPA’s 2006-2011 Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Annual increase in the percentage of RCRA hazardous waste management facilities with permits or other approved controls.	4.3	2.5	2.4	1.8	percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Facilities under control (permitted) per total permitting costs.			2	3	percent

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$4,000.0) This increase will be used for the development of an e-manifest system. EPA will continue to work with Congress to obtain the authority to collect user fees to offset the costs for the development and operation of this system.
- (-\$1,560.3) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-\$1,024.5) This net decrease reflects the completion of several significant rulemakings and the continued overall streamlining of direct operational support to the RCRA program. The reduction includes an increase of \$301.1K for redirected PCB remedial work associated with waste management and disposal from the Chemical Risk Management program to the RCRA Waste Management program. Resources are not included in the FY 2008 budget for a major PCB rulemaking.
- (-\$113.5) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to program travel expenses in Headquarters and the Regions.
- (-\$16.2) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$14.8) This reduction reflects savings from improvements to the Agency's small administrative IT systems.
- (-26.2 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills, and Agency priorities. The program has matured, resulting in a reduced need for federal FTE resources due to the delegated nature of the program and improvements in program management. This net reduction

includes an increase of 9.1 FTE, which redirected remedial work associated with PCB waste management and disposal from the Chemical Risk Management program to the RCRA Waste Management program. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

SWDA, Section 8001, as amended; RCRA of 1976 as amended; Public Law-94-580, 42 U.S.C. 6901 et seq.; TSCA; Department of Veterans Affairs and Housing and Urban Development and Independent Agencies Appropriations Act, Public Law 105-276, 112 Stat. 2461, 2499 (1988).

RCRA: Waste Minimization & Recycling

Program Area: Resource Conservation and Recovery Act (RCRA)

Goal: Land Preservation and Restoration

Objective(s): Preserve Land

Goal: Compliance and Environmental Stewardship

Objective(s): Improve Environmental Performance through Pollution Prevention and Innovation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$12,067.4</i>	<i>\$12,235.1</i>	<i>\$13,666.0</i>	<i>\$1,430.9</i>
Total Budget Authority / Obligations	\$12,067.4	\$12,235.1	\$13,666.0	\$1,430.9
Total Workyears	70.5	74.4	82.2	7.8

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) directs EPA to promote a reduction in the amount of waste generated and to improve recovery and conservation of materials through reducing, reusing, and recycling. The Waste Minimization and Recycling program implemented through the Resource Conservation Challenge (RCC) emphasizes national policy development and leadership to reduce the generation and environmental impacts of materials from businesses, industries, and communities by fostering adoption of more efficient, sustainable, and protective policies, practices, materials, and technologies.

The program focuses its efforts on reduction, reuse, and recycling by building on partnerships with other Federal agencies; state, Tribal, and local governments; business and industry; and non-governmental organizations. These voluntary partnerships provide performance metrics, information sharing, recognition, and assistance to improve practices in both public and private sectors. For more information, please refer to <http://www.epa.gov/rcc>.

The program implements waste minimization activities that diminish chemicals of most concern to human health and the environment. This approach involves relating chemicals to waste streams and seeks to reduce not only the volume of wastes, but also the toxicity of wastes. Reduction of priority chemicals in waste streams eliminates some of the risk when a waste is mismanaged and released to the environment, where it could persist, bio-accumulate, or be toxic to humans or the environment. A goal of reducing chemicals in wastes also will lead to safer chemical substitutions and processes upstream, and eliminate occupational exposures to the chemicals of concern.

FY 2008 Activities and Performance Plan:***Municipal Solid Waste***

Under the RCC, EPA will continue its efforts to motivate, inspire, and provide leadership to industry, Federal, state and local governments, public interest groups, and citizens to reduce,

reuse, and recycle municipal wastes. In the 2006 Strategic Plan, EPA challenges the nation to recycle 40 percent of the US generated municipal waste stream by 2011. EPA has developed and implemented several collaborative partnership programs designed to help the nation reach the 40 percent recycling challenge. During 2007, EPA will be transitioning from the current measures (i.e., tons of municipal solid waste (MSW) recycled and per capita generation rate of MSW) to EPA-specific measures which directly contribute to the 40 percent recycling challenge. To ensure continuity during the transition, EPA will continue to report on our current measures through 2008.

In FY 2008, EPA will lead efforts on three large-volume waste categories with the greatest opportunity for recycling: 1) paper; 2) organics; and 3) packaging and containers. These three commodity streams represent between 60 percent and 70 percent of the municipal solid waste stream and are key areas on which the nation must focus resources to reach the 40 percent recycling challenge.

EPA's WasteWise program is now in its thirteenth year and has over 1,650 partners and 300 endorsers. Between 1994 and 2006, WasteWise partners recycled nearly 231 billion pounds of material and reported diversion of more than 34.7 billion pounds of materials from the waste stream through donation and reuse activities. As part of WasteWise, EPA will provide tools to help communities reduce waste and increase recycling and will promote alliances between businesses and communities that can advance waste reduction and recycling. An example of this is the *Recycle on the Go* initiative that promotes the development of recycling opportunities in key public venues, schools, and offices to increase collection of recyclables as well as public awareness of the importance of recycling.

Through the GreenScapes program, EPA will provide cost-efficient and environmentally friendly solutions for landscape design, construction, and maintenance at large and small developments such as golf courses, parks and industrial parks. The goal is to preserve natural resources and prevent waste and pollution by encouraging organizations and individuals to make environmentally sound decisions regarding their landscape practices and purchases.

Industrial Non-Hazardous Waste

Under the RCC, EPA will continue to pursue collaborative efforts to increase the safe reuse and recycling of industrial byproducts, with resultant benefits of reduced greenhouse gas emissions and energy savings. By working with manufacturers, utilities, government agencies, and transportation and building construction companies, the RCC Industrial Materials Recycling effort is focusing on three industrial non-hazardous waste streams: 1) Coal Combustion Products; 2) Construction and Demolition Debris; and 3) Foundry Sand.

In FY 2008, the program will expand its voluntary Coal Combustion Partnership program (C2P2) to include industrial material recycling. EPA will use C2P2 as a model to foster the safe, beneficial use of other industrial non-hazardous waste streams, such as foundry sands and construction and demolition debris. In the 2006 Strategic Plan, EPA established a new measure to increase the percentage of coal combustion use to 50 percent by 2011, from 32 percent in 2001. The most recent data from the 2004 annual survey show coal combustion products' beneficial use has increased to 40 percent.

EPA also will continue working with Federal, state, and private sector outreach programs to promote environmentally safe and sound recycling of construction and demolition (C&D) debris, which is a larger waste stream than municipal solid waste (approximately 311 million tons in 2003). In FY 2008, EPA will move toward achieving its newly established FY 2011 goal of increasing the recycling rate of C&D materials to 65 percent, from the FY 2003 baseline of 59 percent, by working with persons conducting building and transportation construction projects to encourage the use of C&D materials instead of virgin resources.

Priority Chemicals Reduction

In FY 2008, through the National Partnership for Environmental Priorities (NPEP), the Agency will continue to reduce priority chemicals which are persistent, bioaccumulative, and highly toxic. The NPEP program has established a goal to reduce program priority chemicals by 4 million pounds by FY 2011. As of August 2006, the NPEP program has obtained industry commitments for 2.1 million pounds of priority chemical reductions through 2011. These reductions will be achieved primarily through source reduction made possible by safer chemical substitutes. In FY 2008, EPA will continue to build on the successes achieved by over 100 existing partners and promote the growth of the NPEP through expanded outreach activities, workshops, and enhanced Regional involvement. In addition to enrolling new partners, EPA will seek new commitments from existing partners.

EPA initiated a *Mercury Roundup* in FY 2006 to promote the voluntary early retirement of devices containing mercury. A formal challenge and request was issued to major industrial facilities, urging mercury elimination. Partners commit to the following activities:

- Inventory mercury sources in their facilities and evaluate non-mercury alternatives;
- Establish purchasing policies and educate staff; and
- Collect existing mercury for recycling.

By the end of FY 2006, EPA identified several mercury challenge partners. In FY 2008, EPA expects to identify additional partners and quantify reduction commitments.

Schools Chemical Cleanout Campaign and Prevention Program (SC3)

Since its implementation in FY 2004, SC3 has funded 20 pilots that have demonstrated innovative practices and has worked toward building a national network of industry, teachers' associations, and government partners to raise national awareness and make chemical clean-out and prevention techniques widely available to schools. In FY 2007, EPA is using lessons learned from other programs and demonstration projects to establish a SC3 "infrastructure" that assists K-12 schools in specific communities with their chemical management. In FY 2008, EPA will continue its work toward ensuring that K-12 schools in the United States are free from chemical hazards associated with poor chemical management in schools.

E-Waste

In FY 2008, EPA will continue to address the nation's growing electronics waste stream through partnerships with private and public entities such as Plug-In To eCycling and the Federal

Electronics Challenge (FEC). Since the launch of Plug-In To eCycling in 2003, EPA has agreed to participate with more than 19 members in the manufacturing and retail sectors. Through Plug-In, more than 60.2 million pounds of consumer electronics have been collected. EPA will continue to support an independent certification program for the Electronic Product Environmental Assessment Tool (EPEAT) which was recently launched in FY 2006 with over 100 certified products.

The FEC, established in FY 2005 to advance the Federal government's goals and practices for electronics stewardship, grew beyond the pilot stage and has officially enrolled 114 Challenge partners, representing 16 Federal departments/agencies. Agencies that have committed to the program represent over 80 percent of Federal agency purchasing power for IT equipment. By the end of FY 2008, the goal is to have at least 700,000 Federal employees covered under the FEC.

EPA's Recycling, Waste Minimization, and Waste Management Program assessment was rated "adequate" in 2004. EPA has developed an efficiency measure that will show, over time, the total reduction of priority chemicals contained in industrial waste streams per Federal and private sector cost. In FY 2006, EPA identified and confirmed the quality of data sources produced in the private sector to use with this efficiency measure in FY 2007 and FY 2008. The FY 2006 baseline for the efficiency measure, "number of pounds of priority list chemicals removed from or reduced in waste streams per cost to perform such actions (costs are Federal RCRA program extramural dollars and FTE)," is 1,100,000 lbs / \$2,688,935 or 40.9 lbs reduced per \$100 spent. Targets are set to improve 1.5 percent each year from the baseline.

The new measure for priority chemicals reflects the fact that the National Partnership for Environmental Priorities (NPEP) has quadrupled its members and now counts over 100 partners. As of August 2006, the NPEP program has obtained industry commitments for 2.1 million pounds of priority chemical reductions through the year 2011. Reductions will be achieved primarily through source reduction made possible by safer chemical substitutes. The NPEP program is working on modifying its program measure to reflect actual program achievements.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Millions of tons of municipal solid waste diverted.		83.1	85.2	87.3	million tons

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Daily per capita generation of municipal solid waste.		4.5	4.5	4.5	lbs. MSW

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of pounds (in millions) of priority chemicals reduced, as measured by National Partnership for Environmental Priorities members.			0.5	1	pounds

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Number of pounds (in millions) of priority list chemicals removed from or reduced in waste streams per cost to perform such actions			1.5	1.5	percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of construction and demolition debris that is reused or recycled.			62	62.8	percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of coal combustion ash that is used instead of disposed.			1.8	1.8	percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of tribes covered by an adequate and recently-approved integrated solid waste management plan.			27	26	tribes

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
---------------------	----------------	-----------------------	-----------------------	-----------------------	-----------------------	--------------

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of closed, cleaned up, or upgraded open dumps in Indian Country or on other tribal lands.			30	30	open dumps

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,675.7) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$226.0) This reduction reflects a continuing refinement of the national focus on the three large-volume waste categories: paper, organics, and packaging and containers.
- (-\$14.4) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to program travel expenses in Headquarters and the Regions.
- (-\$4.4) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+7.8 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This change reflects support for increased programmatic goals to be accomplished by 2011, including attaining the national 40 percent recycling challenge, increasing the reuse and/or recycling of construction and demolition debris to 65 percent, and increasing the percentage of coal combustion use to 50 percent.

Statutory Authority:

SWDA; Section 8001 as amended; RCRA of 1976, as amended; Public Law 94-580, 42 U.S.C. 6901 et seq. Veterans Administration (VA) and Housing and Urban Development (HUD) and Independent Agencies Appropriations Act; Public Law 105-276; 112 Stat, 2461, 2499 (1988); Pollution Prevention Act of 1990 (42 U.S.C. 13101).

Program Area: Toxics Risk Review and Prevention

Toxic Substances: Chemical Risk Management

Program Area: Toxics Risk Review and Prevention

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$9,090.4</i>	<i>\$7,736.5</i>	<i>\$5,654.0</i>	<i>(\$2,082.5)</i>
Total Budget Authority / Obligations	\$9,090.4	\$7,736.5	\$5,654.0	(\$2,082.5)
Total Workyears	56.0	52.7	33.4	-19.3

Program Project Description:

EPA has established national programs to promote reductions in use and to ensure safe removal, disposal and containment of certain prevalent, high-risk chemicals some of which were introduced into the environment before their risks were known. These chemicals include polychlorinated biphenyls (PCBs), mercury, and asbestos/fibers. The program focuses on providing assistance to Federal agencies and others with responsibility for ensuring proper disposal of PCBs, eliminating the use of medical devices containing mercury, and implementing statutory requirements to address asbestos risks in schools.

FY 2008 Activities and Performance Plan:

Polychlorinated Biphenyls (PCBs)

In FY 2008, EPA will provide assistance on issues related to PCB use, distribution in commerce, manufacture, processing, and import and/or export for use or management other than disposal. These issues also include excluded manufacturing processes, storage for reuse, and the uncontrolled burning of materials containing PCBs. EPA will also consider regulatory changes to address manufacturing processes that inadvertently generate PCBs. In 2008, the management of the TSCA PCB cleanup and disposal programs will be transferred to the Office of Solid Waste and Emergency Response (OSWER) for consolidation and to promote efficiency.

EPA will provide technical assistance to facilitate the development of legislation for the U.S. ratification of the Stockholm Convention, which was signed by the U.S. on May 23, 2001 and which entered into force without U.S. ratification on May 17, 2004. Upon ratification, EPA will, among other requirements, take action towards the elimination of PCBs in electrical equipment by 2025.

Passing legislation to implement the Persistent Organic Pollutant (POPs) Treaty is a priority for EPA. Recently the Administration expressed full support for two bills which provide domestic authority for the United States to join and implement the POPs Treaty.

Mercury

As described in *EPA's Roadmap for Mercury* (July 2006), EPA continues to work within the Agency and with states and relevant stakeholders to create strategies for addressing the use of mercury in products. The program will continue to use its voluntary, regulatory and educational programs to achieve the Agency's goal of addressing mercury exposure from products in the waste stream. The program continues to update and expand its mercury use and products database that will be made available to the public in late 2007. This database helps the public identify potential products containing mercury and recommends product alternatives. In FY 2008, the program will also be conducting analysis and implementing recommendations from a 2007 stakeholder process to get input on the best approach for the long-term management of non-federal commodity grade mercury. The Agency is working with the States and other stakeholders to examine and implement solutions for the long-term management of excess mercury.

Asbestos/Fibers

The Agency will continue its outreach and technical assistance for the asbestos program for schools, in coordination with other Federal agencies, states, the National Parent-Teachers Association, and the National Education Association.

EPA will also continue to provide oversight and regulatory interpretation to delegated state and local asbestos demolition and renovation programs, respond to tips and complaints regarding the Asbestos-in-Schools Rule, respond to public requests for assistance, and help asbestos training providers to comply with the Model Accreditation Plan requirements. For more information, visit www.epa.gov/oppt.

This program has not yet been reviewed through PART.

Performance Targets:

Work under this program supports EPA's objective to prevent and reduce pesticide, chemical, and genetically engineered biological organism risks to humans, communities, and ecosystems. Currently, there are no performance measures specific to this program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$1,784.0) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs and lower overall FTE levels.
- (-19.3 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. A reduction of 6.3 FTE is the result of the consolidation of education and outreach and a shift in priorities in the EPA regional offices. A reduction of 13.0 FTE redirects staff and transfers PCB remediation, waste management and disposal to the RCRA program.

- (-\$298.5) This change redirects resources to transfer PCB remediation, waste management and disposal to the RCRA program while retaining the product management function in the Chemical Risk Management program.

Statutory Authority:

TSCA; ASHAA; AHERA; AIA.

Toxic Substances: Chemical Risk Review and Reduction

Program Area: Toxics Risk Review and Prevention

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$41,500.9</i>	<i>\$44,637.0</i>	<i>\$45,046.0</i>	<i>\$409.0</i>
Total Budget Authority / Obligations	\$41,500.9	\$44,637.0	\$45,046.0	\$409.0
Total Workyears	232.8	244.1	241.1	-3.0

Program Project Description:

This program spans the full range of EPA activities associated with screening, assessing and reducing risks of new and existing chemicals. Key program efforts include the following:

- Assessment of nanoscale materials,
- The Perfluorooctanoic Acid (PFOA) Stewardship Program launched in January 2006,
- Screening of high production volume chemicals under the High Production Volume Challenge (HPV) Program and the Organization for Economic Cooperation and Development (OECD) Screening Information Data Set (SIDS) Program,
- The Voluntary Children's Chemical Evaluation (VCCEP) Program, and
- The development of Acute Exposure Guideline Levels (AEGLs).

These activities focus on reviewing and, as necessary, reducing the health and environmental risks of new chemicals introduced into the United States marketplace as well as chemicals already in commerce. The program works to prevent unreasonable risks from new chemicals, reduce chronic human health risks from industrial releases, and increase the efficiency of risk reduction efforts.

2008 Activities and Performance Plan:

New Chemicals Program

In FY 2008, EPA will continue its successful record of preventing the entry of chemicals that pose unreasonable risk of injury to human health or the environment into the U.S. market. Each year, the Premanufacture Notice (PMN) Review component of EPA's New Chemicals Program reviews and manages the potential risks from approximately 1,500 new chemicals and 40 products of biotechnology that are prepared to enter the marketplace. To measure performance under this program, EPA adopted a long-term measure establishing a "zero tolerance" performance standard for the number of new chemicals or microorganisms introduced to commerce that pose an unreasonable risk to workers, consumers, or the environment. In response to a PART recommendation, EPA introduced in FY 2007, and will continue in FY 2008, a corresponding annual performance measure that more specifically quantifies the goal of

allowing no chemicals into commerce that pose unreasonable risk. For more information visit www.epa.gov/opptintr/newchems.

Nanoscale Materials

In FY 2008, EPA will continue to implement a stewardship program for new and existing nanoscale materials that are subject to TSCA requirements. Information from this program will enable the public to gain a better understanding of risk-related issues and will allow EPA to obtain further experience in the evaluation of these substances.

Existing Chemicals Program

The Agency's Existing Chemicals program screens, assesses, and manages the human health and environmental risks of chemicals already in commerce. An important example of the Agency's Existing Chemical work is its activities on perfluorooctanoic acid (PFOA). PFOA is an essential processing aid in the manufacture of fluoropolymers, and may also be a breakdown product of other related chemicals. EPA will continue to evaluate and implement PFOA risk management actions, as indicated by the results of ongoing risk assessment and testing under enforceable consent agreements.

In FY 2008, EPA will continue telomer biodegradation testing as well as the testing of consumer articles containing PFOA or telomers that may degrade to PFOA. Also, the Agency launched a global PFOA Stewardship Program in January 2006 for U.S. fluoropolymer and telomer manufacturers. Participating companies have committed to reducing PFOA from emissions and product content by 95 percent no later than 2010, and to work toward eliminating PFOA from emissions and product content no later than 2015. EPA expects significant progress towards these goals in FY 2008. For more information visit www.epa.gov/oppt/pfoa.

High Production Volume (HPV) Challenge Program

In FY 2008, EPA will continue to make basic screening level hazard data on high production volume chemicals available to the public. The data, along with exposure-related data collected during 2007 under the Toxic Substances Control Act (TSCA) Inventory Update Rule (IUR), will be available and searchable using a new set of information tools. EPA will be in the process of screening the data submitted under the HPV Challenge Program and IUR and identifying chemicals of potential risk concern that may require additional work, currently anticipated to involve five to ten percent of screened chemicals. Additionally, EPA will accommodate the submission of health and safety data on chemicals identified through the recently announced industry-led Extended High Production Volume Challenge Program (EHPV). For more information visit www.epa.gov/chemrtk/volchall.htm.

EPA will continue its international participation in the Organization for Economic Cooperation and Development (OECD) Screening Information Data Set (SIDS) program, along with other OECD member countries. EPA plans to complete the review of 50 chemicals and initiate review on at least 15 more.

Voluntary Children's Chemical Evaluation Program (VCCEP)

In FY 2008, EPA will continue its review of chemicals that may pose risks to children. EPA will use the information gathered from an evaluation of the initial pilot of VCCEP and work with stakeholders to adjust and enhance VCCEP's post-pilot operations in FY 2008 and beyond. EPA expects that a significant portion of the operational costs of VCCEP will be shifted from EPA to companies sponsoring chemicals in the program beginning in FY 2008. For more information visit www.epa.gov/chemrtk/vccep/index.htm.

Acute Exposure Guideline Levels (AEGLs)

First responders dealing with chemical emergencies use AEGL values to determine safe exposure levels. In FY 2008, EPA's AEGL program plans to develop proposed AEGL values of 24 additional chemicals. Following September 11, 2001, investment of AEGL extramural funds in the Homeland Security: Preparedness, Response, and Recovery program/project have supported acceleration of AEGLs development, with annual performance targets increasing from 15 to 24 additional chemicals per year. The measure is tied to proposed, rather than final, AEGL data sets for these reasons:

- Proposed values are suitable for many purposes.
- Actions through the proposal stage of the AEGL development process are largely under EPA's control, whereas actions to finalize AEGLs are controlled more by the National Academies of Science.
- The program's annual and long-term outcome measures are based on development of proposed AEGL values.

For more information visit www.epa.gov/oppt/aegl.

EPA's Existing Chemicals underwent PART review in 2002 and was reassessed in 2003. The Existing Chemicals Program received an "Adequate" rating. The PART improvement plan recommended that EPA develop two efficiency measures. The Agency developed a cost efficiency measure for the AEGL program that will be evaluated when this program is PARTed in Spring 2007: total EPA cost per chemical for which a proposed AEGL data set is developed. This efficiency measure will enable EPA to judge whether it is achieving the aims of the AEGLs program at a greater or lesser cost efficiency.

The Agency is in the process of fulfilling the remaining efficiency measure requirement through developing a cost-efficiency measure for management of the TSCA 8(e) Hazard Notification process. This efficiency measure will also be evaluated when this program is PARTed in Spring 2007. The Agency expects this to be completed in time for inclusion in the FY 2009 budget.

EPA's New Chemicals Program underwent PART review in 2002 and was reassessed in 2003. The New Chemicals Program received a "Moderately Effective" rating. The Agency has developed an efficiency measure of the percent change in costs associated with the latter stages of the PMN Review process, reflecting cost savings expected from new chemical prescreening by PMN submittals through EPA's Sustainable Futures Program. This efficiency measure will

be evaluated when this program is PARTed in Spring 2007. For more information, please visit the EPA website: www.epa.gov/oppt.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Cumulative number of chemicals with proposed, interim, and/or final values for Acute Exposure Guidelines Levels (AEGL)	185	145	209	233	Total Chemicals

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Reduction in the current year production-adjusted risk-based score of releases and transfers of toxic chemicals.	Data Available 2008	3	2.5	2.5	Percent RSEI rel risk

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Percent reduction from prior year in total EPA cost per chemical for which proposed AEGL value sets are developed.			34,160 (2)	34,160 (2)	Cost savings (%)

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Percent change from prior year in cost savings due to new chemical prescreening.				6.7	Percent cost savings

Work under the AEGL program also supports the Homeland Security program area. Progress through FY 2006 demonstrates a total of 185 chemicals with proposed, interim and/or final AEGL value sets. The significant increase in the performance target from FY 2007 to FY 2008 reflects significantly greater than expected progress in developing Proposed AEGL values for additional chemicals in FY 2005 and FY 2006, due to the unanticipated opportunities to utilize an approach of

grouping chemicals with similar characteristics into categories, increasing efficiency and saving time and resources.

Reduction in the current year production-adjusted risk-based score of releases and transfers of toxic chemicals measure tracks EPA's progress in reducing existing chemical risks under TSCA. The measure is based on the Risk Screening Environmental Indicator (RSEI) model, which calculates a risk index based on releases of TRI chemicals.

Annual performance targets for the RSEI measure are based on the Agency's long-term strategic target of reducing relative risk to chronic human health associated with environmental releases of industrial chemicals in commerce. Based on a revised performance trend analysis of 2001 through 2003 data, the long-term and annual measures were revised. The Agency's long-term strategic target is by 2011, to achieve a 26 percent cumulative reduction of chronic human health risk from environmental releases of industrial chemicals in commerce since 2001. This target equates to a 2.5 percent annual reduction over 5 years, given a cumulative reduction of 5.8 percent in 2003. TRI data is subject to a two-year data lag, which means this measure has a corresponding delay in reporting on results.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,155.6) This reflects an increase for payroll and cost of living for existing FTE.
- (-3.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills, and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$726.6) This reduction will delay chemical assessment and reviews under the Voluntary Children's Chemical Evaluation Program (VCCEP) by 1, remaining at a cumulative total of 9.
- (-\$20.0) This reduction reflects an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

TSCA.

Endocrine Disruptors

Program Area: Toxics Risk Review and Prevention

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$7,350.1</i>	<i>\$7,985.4</i>	<i>\$5,890.0</i>	<i>(\$2,095.4)</i>
Total Budget Authority / Obligations	\$7,350.1	\$7,985.4	\$5,890.0	(\$2,095.4)
Total Workyears	18.3	14.0	11.0	-3.0

Program Project Description:

The Endocrine Disruptor Screening Program (EDSP) establishes policies, procedures and rules for implementing the endocrine effects screening authorities of the Food Quality Protection Act (FQPA) and Safe Drinking Water Act (SDWA). The program will develop and validate approximately 20 candidate scientific test methods from which a battery of tests will be selected and used for routine, ongoing evaluation of pesticides and other chemicals to determine their potential for adverse health or environmental effects by interfering with endocrine system function.

FY 2008 Activities and Performance Plan:

In FY 2008, the EDSP will validate 13 of the 20 assays that will be used to either screen chemicals to identify those that can interact with the endocrine system (Tier I), or to confirm these findings and provide information that can be used in risk assessment. The Agency will continue to leverage international interest in validation of endocrine disruptor assays where possible to minimize costs incurred by the U.S. and to maximize international harmonization of test guidelines while maintaining scientific integrity.

The Endocrine Disruptor program was assessed in 2004 and received a rating of “adequate.” The assessment found that the program is free of major design flaws, has a clear purpose, and is reasonably well-managed. The Agency is working to improve program performance measures and to better articulate research and development priorities.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Cumulative number of assays validated	2/21	11/20	8/20	13/20	Assays

This program's output performance measure represents the progress toward completing the validation of endocrine test methods that will be used to screen chemicals for their potential to affect the endocrine system, as required by FQPA.

The FY 2006 actual is below the target because the initial assumptions on which this measure was based proved to be invalid. The program experienced scientific and technical problems that could not have been predicted on several assays (e.g., aromatase, steroidogenesis, androgen binding), as well as unanticipated delays in international decisions on assays being validated in coordination with the Organization for Economic Cooperation and Development (e.g., estrogen and androgen binding assays). Data are now available for several of the assays that were delayed because of scientific and technical issues, and the schedule for OECD participation is now better understood. The program has reassessed its performance measures to account for these developments and incorporated these changes in EPA's 2006-2011 Strategic Plan.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$151.2) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-3.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. The affected resources establish policies, procedures and rules for implementing the endocrine effects screening authorities of the Food Quality Protection Act and Safe Drinking Water Act. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (-\$1,944.2) This decrease reflects the historic pace of program research and a shift to other priority areas in the Agency. The cut may postpone the validation of mammal assays, interlaboratory trials and initial screening of the first set of potential endocrine-disrupting chemicals.

Statutory Authority:

RCRA; CERCLA; SARA; OPA; SDWA; CAA; CWA; TSCA; FIFRA; FQPA; EPCRA; ODA; PPA.

Toxic Substances: Lead Risk Reduction Program

Program Area: Toxics Risk Review and Prevention

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$12,087.0</i>	<i>\$11,367.6</i>	<i>\$13,546.0</i>	<i>\$2,178.4</i>
Total Budget Authority / Obligations	\$12,087.0	\$11,367.6	\$13,546.0	\$2,178.4
Total Workyears	76.1	82.9	87.0	4.1

Program Project Description:

EPA's Lead Risk Reduction program alleviates the threat to human health – particularly to young children – posed by exposure to lead-based paint and other sources of lead in the environment. The Agency is working to maintain a national infrastructure of trained and certified lead remediation professionals; establish hazard control methods and standards to ensure that homeowners and others have access to safe, reliable and effective methods to reduce lead exposure; and provide information to housing occupants so they can make informed decisions about lead hazards in their homes.

FY 2008 Activities and Performance Plan:

EPA is developing a comprehensive program to address lead hazards created by renovation, repair, and painting activities in homes with lead-based paint. In FY 2008, EPA will invest in promulgating a final regulation to address lead-safe work practices for renovation, repair, and painting activities. To implement this rule, EPA will develop and disseminate model lead safe work practices training courses, develop brochures and other public education and compliance assistance materials, and coordinate nationally with co-regulating states, territories and Tribes. EPA's budget request for FY 2008 includes a \$1 million investment for the Lead program to support work associated with completion of the Renovation and Remodeling (R&R) Rule, with a corresponding increase in the annual performance target.

The Agency will continue to provide education and outreach to the public on the hazards of lead-contaminated paint, dust, and soil, with particular emphasis on low-income, multi-cultural communities in support of the program's goal to reduce disparities in blood lead levels between low-income children and other children. The program also will implement existing lead hazard reduction regulations and provide technical and policy assistance to states, Tribes, and other Federal agencies. In addition, EPA will continue to provide support for the National Lead Information Center (NLIC) to disseminate information to the public primarily in electronic form. The Lead Risk Reduction program has a companion State and Tribal Assistance Grants (STAG) program, "Lead Categorical Grant." See the *Categorical Grant: Lead* program project narrative for more information. Taken together, these programs contribute to common strategic targets

and annual performance goals. See <http://www.epa.gov/opptintr/lead/index.html> for more information.

The Lead program underwent its first PART in FY 2005, receiving a “moderately effective” rating. Through the PART, EPA introduced a new long-term and annual results measure (percent difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old), and a new efficiency measure (annual percentage of lead-based paint certification and refund applications that require less than 40 days of EPA effort to process) in the FY 2007 Budget Justification and Request. Through the PART Improvement Plan process, EPA improved the consistency of grantee and regional accountability and improved the linkage between program funding and program goals with an emphasis on program grant and contractor funding. In FY 2008, the Agency will implement additional PART-recommended Improvement Plans to enhance program partners’ accountability and results and to target program resources and activities on populations that face a significant risk of being exposed to lead. For more information, visit <http://www.epa.gov/opptintr/lead/index.html>

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Annual percentage of lead-based paint certification and refund applications that require less than 40 days of EPA effort to process.	75	71	72	72	Percent Certif/Refund

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of cases of children (aged 1-5 years) with elevated blood lead levels (>10ug/dl).	Data Available 2009	216,000	199,000	90,000	Children

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old.	Data Available 2009	29	No Target Established	29	Percent

The Lead program's annual efficiency measure tracks improvements in certification application time for lead-based paint professionals and refund applications. Certification work represents a significant portion of the Lead budget and overall efficiencies in management of certification activities will result in numerous opportunities to improve program management effectiveness and efficiency. FY 2006 end-of-year results demonstrate that the Lead program exceeded its end-of-year target for the percentage of lead-based paint certifications and refund applications that require less than 40 days to process by achieving a 75 percent result, compared to the target value of 71 percent. The Lead program's efficiency measure is relatively new and performance trends have not been established. As a result, the Lead program is unable to determine if the FY 2006 end-of-year results are a one time occurrence. Accordingly, performance targets for FY 2007 and FY 2008 were not adjusted.

The program's long-standing annual performance measure tracks the number of children aged 1 to 5 years with elevated blood lead levels (≥ 10 ug/dL). Data are collected from the Centers for Disease Control and Prevention's (CDC) National Health and Nutrition Examination Survey (NHANES). NHANES is recognized as the primary database in the United States for national blood lead statistics. Data are collected on a calendar year basis and released to the public in two-year data sets. In 2005, the CDC updated 1999/2000 estimates released in 2003 using a four-year data set (1999-2002), to provide a larger sample size.

1999-2002 NHANES data, released in May of 2005, estimate 310,000 cases of children with elevated blood lead levels, demonstrating continued progress towards the national goal to eliminate childhood lead poisoning as a public health concern by 2010. However, the revised CDC estimate also showed a slower rate of progress, reflecting increased challenges associated with reaching the remaining vulnerable populations.

The program's new annual performance measure, introduced in FY 2007 and also based on NHANES data, examines the disparities of blood lead levels in low-income children compared to non low-income children. The program uses this performance measure to track progress toward eliminating childhood lead poisoning in harder to reach vulnerable populations. EPA's annual performance targets strive to close the gap between the geometric means of blood lead levels among children of low income families vs. children of non-low-income families, from a baseline percentage difference of 37 percent (1991-1994), to a difference of 29 percent by the year 2008.

EPA's draft 2006-2011 Strategic Plan includes two strategic targets for the Lead program:

- By 2010, eliminate childhood lead poisoning as a public health concern by reducing to zero the number of cases of children (aged 1-5 years) with elevated blood lead levels (>10 ug/dl).
- By 2010, reduce to 28 percent the percent difference in the geometric mean blood lead levels in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,168.9) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$1,009.5) This increase supports development and implementation of the lead rule.
- (+4.1 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. The increase redirects resources to address lead program implementation and assistance priorities in EPA's regional offices.

Statutory Authority:

TSCA.

Pollution Prevention Program

Program Area: Toxics Risk Review and Prevention

Goal: Compliance and Environmental Stewardship

Objective(s): Improve Environmental Performance through Pollution Prevention and Innovation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$17,744.8</i>	<i>\$21,292.4</i>	<i>\$19,935.0</i>	<i>(\$1,357.4)</i>
Total Budget Authority / Obligations	\$17,744.8	\$21,292.4	\$19,935.0	(\$1,357.4)
Total Workyears	89.0	86.8	88.6	1.8

Program Project Description:

The Pollution Prevention Program is one of EPA's primary tools for encouraging environmental stewardship by the Federal government, industry, communities, and individuals, both domestically and globally. The program employs a combination of collaborative efforts, innovative programs, and technical assistance and education to support stakeholder efforts to minimize and prevent adverse environmental impacts by preventing the generation of pollution at the source. For more information, please visit <http://www.epa.gov/p2/>.

FY 2008 Activities and Performance Plan:

Environmentally Preferable Purchasing (EPP) Program:

The goal of this program is for the Federal government to serve as a model to others for environmental stewardship through incorporating environmental considerations into routine purchasing decisions. In FY 2008, EPA will continue to provide leadership to implement EPP efforts in partnership with other Federal agencies, notably to continue to implement and measure benefits of the Federal Electronics Challenge and to promote the use of the Electronics Products Environmental Assessment Tool (EPEAT), a procurement tool designed to help institutional purchasers compare and select desktop computers, laptops and monitors based on environmental attributes. The program also will enhance guidance to the Federal building community on model green construction specifications; provide tools and guidance to Federal purchasers on green janitorial products and services; and implement a partnership with the General Services Administration (GSA) to "green" government meetings. See <http://www.epa.gov/oppt/epp/pubs/about/about.htm> for more information.

Green Suppliers Network:

Through this program, EPA partners with large manufacturers to help small suppliers identify opportunities to "lean and green" their operations, thus saving money and preventing pollution. The Green Suppliers Network will continue to partner with the National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership program, expanding the service offerings for the participating suppliers to include health and safety and energy efficiency

assistance. The Green Suppliers Network also will intensify and institutionalize state pollution prevention involvement. The GSN infrastructure developments completed in 2006 and 2007 will be the platform for establishing the GSN “franchises” at the state and local level. The Green Suppliers Network will continue to strengthen focus on emerging issues and chemicals of national concern within the Green Suppliers Network. For more information, visit <http://www.greensuppliers.gov/gsn/home.gsn>

Green Chemistry:

This program emphasizes the development of new chemistries that cost less, eliminate or reduce hazardous chemical usage and waste, and eliminate the need for potentially dangerous processes, and end-of-pipe controls. The Green Chemistry Program (GCP) will continue to administer the Presidential Green Chemistry Challenge and will focus on the development of environmentally preferable substitutes for chemicals of concern such as brominated flame retardants used in flexible foam, perfluorinated acids, and other chemicals which are persistent in the environment and capable of accumulating in animal, fish, and human tissue. For more information, visit <http://www.epa.gov/opptintr/greenchemistry/>.

Design for the Environment (DfE)//Green Engineering:

DfE will continue collaborating with industry and non-governmental organizations in three focus areas to reduce risk from chemicals. First, the DfE Formulator Program promotes opportunities for pollution prevention and stewardship in creating safer chemical products. Second, DfE collaborates with the EPA Office of Air Quality Planning and Standards (OAQPS) to encourage the use of voluntary DfE Best Work Place Practices for Auto Refinishing to reduce risks to workers and communities. The program will also work to modify and enhance DfE Best Practices, which were developed in partnership with stakeholders as a practical solution, so that they can be used in developing OAQPS area source regulations.

DfE will leverage partnerships with the electronics, wire and cable, polyurethane foam, chemical product formulation, and furniture industries to help move these industries toward the manufacture, processing and use of safer chemicals, to reduce the potential product liabilities that these industries face, and to reduce the potential for risk to human health and the environment. DfE partnerships will help these industries move away from substances that are considered health and environmental hazards, including lead, chromium, diisocyanates, and certain flame retardants, and to ensure the transition to alternative chemical substances that are safer for human health and the environment. Third, DfE will inform substitution to safer chemicals through partnerships with the electronics, wire and cable, polyurethane foam, and furniture industries to help them choose safer chemicals. This work will reduce the potential product liabilities that these industries face, while promoting a positive industry image and reducing the potential for risk to human health and the environment. DfE partnerships will help these industries move away from substances that are considered health and environmental hazards, including lead, chromium, diisocyanates, and certain flame retardants. DfE partnerships will also reassure these industries that alternatives will be safer for human health and the environment.

EPA expects these new partnerships to produce measurable results, such as the replacement of approximately 18.7 million pounds of flame retardants (a fully-realized result of the DfE partnership with the furniture industry to find safer flame retardants for furniture foam) and as much as 176 million pounds of lead per year with safer alternatives. In FY 2008, the related Green Engineering Program will continue partnerships with industries, states, regions and other interested parties to apply green engineering approaches on specific industrial projects and continue to identify and leverage resources with other interested organizations. For more information, visit <http://www.epa.gov/dfe/> and <http://www.epa.gov/opptintr/greenengineering/>.

Hospitals for Healthy Environment (H2E) Program:

This voluntary program, with more than 1,200 Hospital Partners, became an independent non-profit organization in 2006, the first to do so in the history of EPA voluntary programs, significantly reducing EPA's costs for administering the program. EPA's continuing roles in support of this program include providing technical expertise and facilitating cooperative working relationships with other programs such as Energy Star, Green Suppliers Network and EPEAT. In addition, EPA is directing a series of pilot healthcare mercury reduction programs on an international scale including programs in China, Argentina, and Central America. For more information, visit <http://www.epa.gov/oppt/pollutionprevention/pubs/h2e.htm>.

EPA's Pollution Prevention Program underwent PART review in 2006 and received a "moderately effective" rating, confirming that the program produces important environmental results in a well-managed and efficient manner. The PART improvement plan recommended that EPA evaluate and implement Science Advisory Board Report recommendations for improving performance measures to better demonstrate Pollution Prevention results, work to reduce barriers confronted by industry and others in attempting to implement source reduction, fully implement Grant Track and the P2 State Reporting System, and develop additional efficiency measures in time for inclusion in the FY 2009 budget submission. The Pollution Prevention Program has already developed one efficiency measure focusing on the Design for the Environment Program's formulators effort.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Business, institutional and government costs reduced by P2 program participants.				45.9M	Dollars

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Pounds of hazardous materials reduced by P2 program participants.				429.4M	Pounds

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Reductions of hazardous chemicals per federal dollar spent.				136	lbs/\$

The Pollution Prevention Program has two GPRA performance measures that are directly linked to its own interventions. OPPT has engaged the SAB in reviewing all of its P2 measures and measurement approaches to assist in making further improvements in the program's ability to demonstrate valuable results. These measures target and document a broad range of the program's environmental benefits and integrate performance results contributions from all components of the program. The program has demonstrated substantial progress in achieving its established targets for its annual and long term goals. Data currently available indicate two billion pounds of hazardous materials were reduced since FY 2000 and \$108 million of cost savings realized by businesses, institutions and governments since 2002.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1,239.2) This reflects an increase for payroll and cost of living for existing FTE and increases associated with repositioning 1.8 FTE in the regions to address regional priorities.
- (-\$2,279.1) This reflects a reduction in voluntary program development and support for Environmental Purchasing, Green Suppliers Network, Design for the Environment, Green Engineering and Hospitals for a Healthy Environment programs.
- (-\$315.0) This change reflects savings from the consolidation of education and outreach in EPA's regional offices.
- (+1.8 FTE) This increase represents the net shift of regional resources to support their pollution prevention priorities.
- (-\$2.5) This reduction reflects an Agencywide effort to reduce travel, including international travel.

Statutory Authority:

PPA and TSCA.

Program Area: Underground Storage Tanks (LUST / UST)

LUST / UST

Program Area: Underground Storage Tanks (LUST / UST)

Goal: Land Preservation and Restoration

Objective(s): Preserve Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$9,042.3</i>	<i>\$11,713.7</i>	<i>\$11,719.0</i>	<i>\$5.3</i>
Leaking Underground Storage Tanks	\$11,889.1	\$10,590.1	\$10,558.0	(\$32.1)
Total Budget Authority / Obligations	\$20,931.4	\$22,303.8	\$22,277.0	(\$26.8)
Total Workyears	111.7	131.3	131.3	0.0

Program Project Description:

EPA works with states, Tribes and Intertribal Consortia to prevent, detect, and correct leaks into the environment from Federally-regulated underground storage tanks (USTs) containing petroleum and hazardous substances. Achieving significant improvements in release prevention and detection requires a sustained emphasis by both EPA and its partners. Potential adverse effects from the use of contaminants of concern (e.g., methyl-tertiary-butyl-ether, or MTBE) in gasoline further underscores EPA's and the states' emphasis on promoting compliance with all UST requirements, including new requirements described in the Energy Policy Act (EPA) of 2005. EPA provides technical information, forums for information exchanges and training opportunities to states, Tribes and Intertribal Consortia to encourage program development and/or implementation of the UST program (refer to <http://www.epa.gov/OUST/20comply.htm> and <http://www.epa.gov/OUST/20tnkprf.htm> for more information).

The states are the primary enforcers of the UST program requirements. EPA has adopted a decentralized approach to UST program implementation by building and supporting strong state and local programs. Although EPA is responsible for implementing the UST program in Indian country, the Agency is working with Tribes to strengthen their own UST programs. EPA uses its EPM funding primarily to improve compliance, but also to coordinate with the Brownfields program to encourage more state tanks programs to apply for available petroleum brownfields grants to help foster the oversight and integration of "relatively low risk petroleum sites" into their respective voluntary cleanup programs. EPA will use EPM funds to carry out EPA's responsibilities under Title XV, Subtitle B of the EPA of 2005. Appropriations from the Leaking Underground Storage Tank (LUST) Trust Fund will not be used to implement the release prevention and detection provisions in the EPA in FY 2008.

FY 2008 Activities and Performance Plan:

The EPA¹ contains numerous provisions that significantly affect Federal and state underground storage tank (UST) programs. The EPA requires that EPA and states strengthen tank release

¹ http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ058.109.pdf
Energy Policy Act of 2005.; Title XV - Ethanol And Motor Fuels, Subtitle B – Underground Storage Tank Compliance, on pages 500-513.

and prevention programs, through such activities as: mandatory inspections every three years for all underground storage tanks, operator training, and prohibition of delivery for non-complying facilities², secondary containment³ or financial responsibility for tank manufacturers and installers, and various compliance reports. In FY 2008, EPA will continue to focus attention on the need to bring all UST systems into compliance and keep them in compliance with the release detection and release prevention requirements. These activities include assisting states in conducting inspections, conducting inspections in Idaho (where EPA is the lead agency), and assisting other Federal agencies to improve their compliance at UST facilities.

In FY 2008, EPA will continue promoting cross-media opportunities, e.g., targeted public health protection through the UST and Source Water Protection Programs, support for core development and implementation of state and Tribal UST programs; strengthening partnerships among stakeholders; and providing technical assistance, compliance assistance, and training to promote and enforce UST facilities' compliance. To help states and Tribes implement the UST prevention program, EPA will continue to provide web-based training modules that address topics such as cathodic protection, leak detection, spill containment, and overfill protection components of the UST system. The training modules at <http://www.epa.gov/swerust1/virtual.htm> provide UST inspectors with core and advanced knowledge on how to inspect an UST system.

EPA will also continue to monitor and address the impact of releases from USTs including specific contaminants that can cause concern (e.g., MTBE). In FY 2008, the UST program will continue to coordinate with the Brownfields program to encourage states to move low risk petroleum sites toward cleanup completion as part of the Brownfields' overall initiative to move all sites toward cleanup completion.

EPA has the primary responsibility for implementation of the UST Program in Indian country. Grants under Public Law (P.L.) 105-276 will continue to help Tribes develop the capacity to administer UST programs. For example, funding is used to support training for Tribal staff, educate owners and operators in Indian country about UST requirements, and maintain information on USTs located in Indian country. EPA also will implement the UST Tribal strategy⁴ developed in FY 2006 in Indian country.

The Agency and states also will continue to use innovative compliance approaches, along with outreach and education tools, to bring more tanks into compliance and to prevent releases, saving over \$100 thousand in cleanup costs for each release prevented. For example, the presence of MTBE in gasoline increases the importance of preventing and rapidly detecting releases, since MTBE contamination can increase cleanup costs by more than 100 percent.

² Refer to *Grant Guidelines to States for Implementing the Delivery Prohibition Provision of the Energy Policy Act of 2005*, August 2006, EPA-510-R-06-003, http://www.epa.gov/oust/fedlaws/Delivery%20Prohibition_080706.pdf.

³ Refer to *Grant Guidelines to States for Implementing the Secondary Containment Provisions of the Energy Policy Act of 2005*, November 2006, EPA-501-R-06-001, <http://www.epa.gov/swerust1/fedlaws/Final%20Sec%20Cont%20GLs%2011-15-06.pdf>.

⁴ Refer to *Strategy For An EPA/Tribal Partnership To Implement Section 1529 Of The EPACT Of 2005*, August 2006, EPA-510-F-06-005, http://www.epa.gov/swerust1/fedlaws/Tribal%20Strategy_080706r.pdf

The UST (prevention) program received an overall rating of “moderately effective” in 2006. As a component of a PART improvement plan, the program will be working with its state partners to consider various options to measure efficiency and consider various options to measure the activities associated with the 2005 Energy Policy Act.

The program has set a goal of increasing significant operational compliance (SOC) by one percent (1%) per year from the 2004 baseline of 64 percent. As states continue to inspect previously uninspected facilities, SOC rates may decline as states find more facilities that are not in compliance leaving EPA with challenging and ambitious targets for FYs 21007 and 2008.

The program also measures confirmed releases reported each year, with a goal of fewer than 10,000 releases each year. Between FYs 1999 and 2006, confirmed UST releases averaged 10,534.

Performance goals and measures for the LUST/UST EPM program are currently a component of the overall LUST/UST Program’s measures. As a result, the UST Categorical Grant program also contributes to the achievement of these performance measures.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	No more than 10,000 confirmed releases per year.	8,361	<10,000	<10,000	<10,000	UST releases

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Increase the rate of significant operational compliance by 1% over the previous year's rate (target).	62	66	67	68	percent

FY 2008 Change from FY 2007 President’s Request (Dollars in Thousands):

- (+\$20.7) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$14.5) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to program travel expenses in Headquarters and the Regions.
- (-\$1.1) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+\$.2) Change due to rounding in the FY 2008 President’s Budget.

Statutory Authority:

SWDA of 1976, as amended by the Superfund Reauthorization Amendments of 1986 (Subtitle I), Section 8001(a) and (b) as amended by the Hazardous and Solid Waste Amendments of 1984 (P.L. 98-616); EPCRA, Title XV - Ethanol And Motor Fuels, Subtitle B - Underground Storage Tank Compliance, Sections 1521 - 1533, P.L. 109-58, 42 U.S.C. 15801; RCRA of 1976; Tribal Grants, P.L. 105-276.

Program Area: Water: Ecosystems

Great Lakes Legacy Act

Program Area: Water: Ecosystems

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$26,771.7	\$49,600.0	\$35,000.0	(\$14,600.0)
Total Budget Authority / Obligations	\$26,771.7	\$49,600.0	\$35,000.0	(\$14,600.0)
Total Workyears	0.5	0.0	0.0	0.0

Program Project Description:

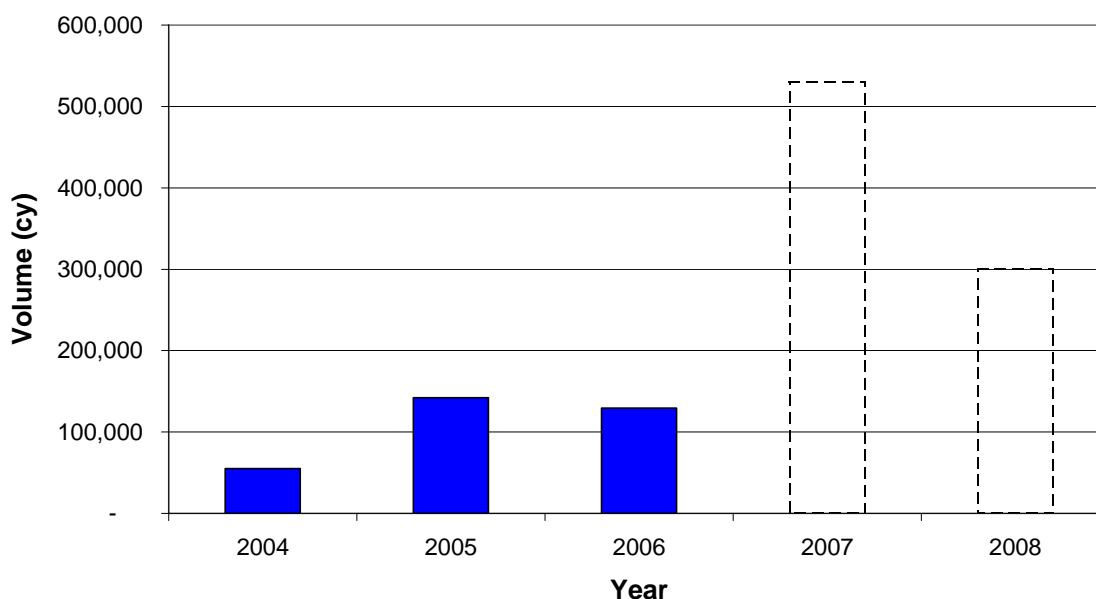
The Great Lakes Legacy Act Program cleans up contaminated sediments in the 31 U.S. or bi-national Great Lakes Areas of Concern (AOCs). The Great Lakes Legacy Act targets resources to clean up contaminated sediments, a significant source of Great Lakes toxic pollutants that can impact human health via the bio-accumulation of toxic substances through the food chain. Contaminated sediments are the cause of or significantly contribute to as many as 11 of the 14 impairments to beneficial uses (including restrictions on fish consumption due to high contaminant levels in fish tissue) in AOCs.¹ A quantitative estimate of the impact on fish tissue contamination is not available, however sediment remediation activities will contribute to the reduction of Polychlorinated Biphenyls (PCBs) and other contaminants by removing significant quantities of contaminants (or by capping to reduce the biological availability of contaminants).

FY 2008 Activities and Performance Plan:

The FY 2008 projects will result in cleaning up of some three hundred thousand cubic yards of contaminated sediments over the expected 6 month to 2 year project lifetime. The Great Lakes Legacy Act rule outlines how projects are prioritized to remediate contaminated sediments in the Great Lakes AOCs. In FY 2008, EPA expects to support two to four projects for remediation. (See <http://www.epa.gov/glnpo/sediment/legacy/index.html> for more information.)

¹ International Joint Commission – Sediment Priority Action Committee, Great Lakes Water Quality Board. 1997. *OVERCOMING OBSTACLES TO SEDIMENT REMEDIATION in the Great Lakes Basin*. <http://www.ijc.org/php/publications/html/sedrem.html>.

**Volume of Sediment Remediated
via the Great Lakes Legacy Act Program
(as of 12/19/06)**



² Source: USEPA – Great Lakes National Program Office, December 2006.

Reporting in 2008 is expected to show that EPA and its partners will have remediated a cumulative total of 5 million cubic yards of contaminated sediments since tracking began in 1997. Remediation from Legacy Act projects will contribute to this growing total. EPA estimates that in 2007 and 2008, Legacy Act projects will remediate a total of over 800,000 cubic yards of contaminated sediments. The total contaminated sediment remediation need in the Great Lakes as of 1997 is estimated to have been about 46 million cubic yards.³

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cubic yards (in millions) of contaminated sediment remediated in the Great Lakes. (cumulative from 1997)	4.1	3.2	4.5	5.0	Cubic yards/M

²*Volume of Sediment Remediated in the Great Lakes Legacy Act Program, December 2006.* Available from Great Lakes National Program Office Sediment Files. Projections are based on best available information – signed project agreements for 2007 and a cost-based formula for 2008. Some of the remediation expected to occur in 2006 was delayed, resulting in a higher projection for 2007.

³ USEPA-Great Lakes National Program Office. December 2006. *Unpublished Report in Great Lakes National Program Office Sediment Files.*

Sediment remediation in the U.S. portion of the Great Lakes in recent years has varied from 134,000 cubic yards in 1997 to 975,000 cubic yards in 2003, with year-to-year variances of 3,000 cubic yards to 800,000 cubic yards.⁴ The amount of remediation in a given year has been largely dependent on the possibility of enforcement actions in various EPA programs. With the Great Lakes Legacy Act, EPA now has a program in place that can make steadier progress toward addressing the remaining 42 million cubic yards of contaminated sediments in Great Lakes AOCs.

This program has not been reviewed under the PART process.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$14,600.0) This reduction brings the request in line with appropriated levels.

Statutory Authority:

2002 Great Lakes and Lake Champlain Act (Great Lakes Legacy Act); CWA; Coastal Wetlands Planning, Protection, and Restoration Act of 1990; Estuaries and Clean Waters Act of 2000; North American Wetlands Conservation Act; WRDA; 1990 Great Lakes Critical Programs Act; 1909 The Boundary Waters Treaty; 1978 GLWQA; 1987 GLWQA; 1987 Montreal Protocol on Ozone Depleting Substances; 1996 Habitat Agenda; 1997 Canada-U.S. Great Lakes Bi-national Toxics Strategy; and the U.S.-Canada Agreements.

⁴ USEPA-Great Lakes National Program Office. *Sediment Remediation*. Available from <http://www.epa.gov/glnpo/glindicators/sediments/remediateb.html>.

National Estuary Program / Coastal Waterways

Program Area: Water: Ecosystems

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$26,294.4	\$18,417.2	\$17,203.0	(\$1,214.2)
Total Budget Authority / Obligations	\$26,294.4	\$18,417.2	\$17,203.0	(\$1,214.2)
Total Workyears	48.6	57.1	53.1	-4.0

Program Project Description:

The goal of this program is to restore the physical, chemical, and biological integrity of the nation's estuaries and coastal watersheds by protecting and enhancing water quality and living resources. Major areas of effort include: supporting coastal watersheds to enhance their efforts to address threats to the health of estuary/coastal waters and coastal watersheds; supporting continued implementation of Comprehensive Conservation and Management Plans (CCMPs) for the 28 National Estuary Programs (NEPs); supporting NEP implementation of Clean Water Act core programs to enhance protection and restoration of estuarine/coastal ecosystems, including development and implementation of coastal ecosystem protection/restoration strategies and action plans; supporting monitoring of estuarine, coastal, and marine waters; and partnering with Federal/non-Federal entities to efficiently and effectively advance a wide range of estuary protection/restoration efforts.

(See <http://www.epa.gov/owow/estuaries/> for more information.)

FY 2008 Activities and Performance Plan:

The resources in FY 2008 will support EPA's goal of improving the aquatic ecosystem health of our national estuaries and coastal watersheds, and protecting and restoring additional acres of habitat. Estuarine and coastal waters are among the most environmentally and economically valuable resources in the nation. To protect and improve coastal water quality on a watershed basis, EPA will focus its work with states, Tribes, coastal communities, and others on improving the quality of our valuable estuarine and coastal resources. The health of coastal waters and progress in meeting NEP/Coastal Watershed strategic targets will be tracked through periodic issuance of a National Coastal Condition Report (NCCR). The NCCR is a collaborative effort involving EPA and other Federal and state agencies.

EPA, working with state and local partners, will continue to develop the third NCCR, which is due in 2008. The NCCR is the only statistically-significant measure of U.S. coastal water quality on a nationwide scale and includes measures of coastal water quality, sediment quality, benthic condition, and fish tissue contamination. The PART improvement plan calls for a long-term improvement in the national score for aquatic ecosystem health of coastal waters of 0.2 points by

2008. This is expected to result in an overall improvement in the quality of the coastal environment based on indicators such as increased dissolved oxygen, reduction in nitrogen and phosphorus, greater water clarity, reduction in sediment contaminants, healthier benthic communities, increased acres of habitat, and reduced contamination in targeted fish and shellfish species.

In addition, EPA will support monitoring of coastal and estuarine waters using such tools as the Ocean Survey Vessel (OSV) *Bold*. In FY 2008, the OSV *Bold* will continue to support monitoring and assessment needs in EPA Regions and coastal states. It is available to support monitoring and assessment needs on the Atlantic, Pacific, and Gulf Coasts and in the Caribbean.

EPA will continue partnership opportunities to assist local land-use decision-makers by providing information necessary to plan for growth and minimize the adverse impacts of development. The Agency also will emphasize the need to anticipate the cumulative environmental impacts of growth in coastal watersheds.

EPA has a lead role in the five-year reassessment of the Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico, which will continue in FY 2008. EPA will support a limited number of activities to implement the Action Plan, potentially including sub-basin teams and/or special studies to identify highest opportunity watersheds for nutrient reductions.

Within the NEP, EPA plans to continue to support¹ its flagship watershed protection effort to help address the growing threats to the nation's estuarine resources. These activities include:

- Supporting continuing efforts of all 28 NEP estuaries to implement their CCMPs to protect and restore estuarine resources, including conducting fiscal and programmatic oversight.
- Supporting efforts to achieve the EPA habitat restoration and protection goal of 250,000 additional acres by 2012.
- Providing targeted support to special ecosystems, including those with statutorily-authorized protection programs such as the Long Island Sound.

Despite the likelihood that future opportunities for habitat restoration and protection will be more limited than they have been thus far, the PART improvement plan calls for EPA to set ambitious long-term and annual acreage targets for the NEPs and their partners. EPA has done this by raising the target for the next few years. Population growth and increased pressure on coastal resources present significant challenges to habitat improvements.

¹ The means and strategies outlined here for achieving Sub-objective 4.3.1 must be viewed in tandem with the means and strategies outlined under Goal 2, Objective 2, Sub-objective 2.2.2, Improve Ocean and Coastal Waters. Sub-objective 2.2.2 contains strategic measures for EPA's vessel discharge, dredged material management, ocean disposal, and other ocean and coastal programs, which are integral to the Agency's efforts to facilitating the ecosystem scale protection and restoration of natural areas.

Information on coastal ecological condition generated by the NCCR can be used by resource managers to efficiently and effectively target water quality actions and manage those actions to maximize benefits. We are moving toward a national and Regional set of measures to make the data more useful to managers. The NCCR is based on data gathered by various Federal, state, and local sources using a probability design that allows extrapolation to represent all coastal waters of a state, region, and the entire U.S. NCCR ratings or scores are based on an evaluation of a number of indicators of coastal condition in each region of the country, including water quality, coastal habitat loss, and fish tissue contaminants.

We have improved our NEP implementation review program to make it more objective and consistent. This will make it more useful in future funding decisions as well as future PART evaluations.

This program was included in OMB's PART assessment, Ocean, Coastal, and Estuary Protection, completed in 2005 and was rated "adequate." The National Estuary Program/Coastal Watersheds and the Marine Pollution Control programs were combined and reviewed under this PART review. As a result of the PART evaluation, the program has improved its NEP data reporting and tracking system. The program will be testing the system in FY 2006 and 2007, and will revise it as necessary in FY 2008. The program will also be developing more ambitious targets for its annual and long-term measures regarding the number of acres protected and restored.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Program dollars per acre of habitat protected or restored.			505	500	Dollars

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Acres protected or restored in NEP study areas.	140,033	25,000	75,000	50,000	Acres

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$1,533.6) This will reduce funding for grants to the NEPs by 18 percent, representing a reduction of support for NEP Plan implementation, including monitoring, outreach and convening stakeholders. This level of funding will allow the NEP program to continue protecting and improving coastal waters and achieving performance targets.
- (+\$238.7) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$80.0) EPA will undertake an independent evaluation of the implementation of the National Estuary Program.

- (-\$0.5) This is part of an Agencywide effort to reduce travel, including international travel.
- (+\$1.2) Change due to rounding in the FY 2008 President's Budget.
- (-4.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This will reduce EPA technical support to the NEPs at the local level. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

1990 Great Lakes Critical Programs Act; 2002 Great Lakes and Lake Champlain Act; Clean Water Act; Estuaries and Clean Waters Act of 2000; Protection, and Restoration Act of 1990; North American Wetlands Conservation Act; Water Resources Development Act (WRDA); 1909 The Boundary Waters Treaty; 1978 Great Lakes Water Quality Agreement (GLWQA); 1987 Great Lakes Water Quality Agreement; 1987 Montreal Protocol on Ozone Depleting Substances; 1996 Habitat Agenda; 1997 Canada-U.S. Great Lakes Bi-national Toxics Strategy; Coastal Wetlands Planning; and U.S.-Canada Agreements.

Wetlands

Program Area: Water: Ecosystems

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$19,842.5</i>	<i>\$20,992.2</i>	<i>\$21,518.0</i>	<i>\$525.8</i>
Total Budget Authority / Obligations	\$19,842.5	\$20,992.2	\$21,518.0	\$525.8
Total Workyears	140.4	147.6	147.0	-0.6

Program Project Description:

Wetlands improve water quality, recharge water supplies, reduce flood risks, provide fish and wildlife habitat, offer sites for research and education, and support valuable fishing and shellfish industries. EPA's Wetlands Protection Program relies on partnerships with other programs within EPA, other Federal agencies, state, Tribal, and, local governments, private landowners, and the general public to improve protection of our nation's valuable wetland resources. Working with our partners, EPA ensures a sound and consistent approach to wetlands protection.

Major activities of the Wetlands Protection Program include administration of EPA's role in the Clean Water Act (CWA) Section 404 Wetlands Regulatory Program; development and dissemination of rules, guidance, informational materials, and scientific tools to improve management and public understanding of wetland programs and legal requirements; and managing financial assistance to states and Tribes to support development of strong wetland protection programs. EPA works with other Federal agencies to implement the provisions of Section 404 of the CWA to protect wetlands, free-flowing streams, and shallow waters. EPA also works in partnership with state, Tribal, and local agencies and non-governmental organizations to conserve and restore wetlands and associated river corridors through watershed planning approaches, voluntary and incentive-based programs, improved scientific methods, information and education, and building the capacity of state and local programs. (See <http://www.epa.gov/owow/wetlands/> for more information.)

FY 2008 Activities and Performance Plan:

The Administration has set the stage for a growing commitment to a regulatory program aimed at no net loss of wetlands and voluntary programs to increase wetland acreage. Approaches include public, private, regulatory, and non-regulatory initiatives and partnerships to restore, improve, and protect the nation's wetlands. In his 2004 Earth Day address, the President announced a renewed effort to move beyond a policy of no net loss to achieve an overall increase in the nation's wetland resources over the next five years. To achieve this goal, the Administration will work through six Federal agencies to restore, improve, and protect at least three million acres of wetlands by 2009.

In FY 2008, EPA will work with its state and Tribal partners to develop and implement broad-based and integrated monitoring and assessment programs that improve data for decision-making on wetlands within watersheds, address significant stressors, and report on condition as well as geo-locating wetlands on the landscape. EPA will work to achieve national gains in wetland acreage by implementing an innovative partner-based wetland and stream corridor restoration program. The Agency, working with the Army Corps of Engineers and other partners, will continue to implement the Administration's Mitigation Action Plan and the joint Corps-EPA Mitigation Rule and to build our capacity to measure wetland condition, in addition to measuring wetland acreage. EPA's support will help avoid or minimize wetland losses and provide for full compensation for unavoidable losses of wetland functions, through wetlands restoration and enhancement using tools such as mitigation banking. EPA will continue to focus on wetland and stream corridor restoration to regain lost aquatic resources, and strengthening state and Tribal wetland programs to protect vulnerable wetland resources. EPA will continue to administer Wetland Program Development Grants, with a continued focus in FY 2008 on state/Tribal wetlands environmental outcomes.

Two recent reports document progress in reducing wetland loss and increasing wetland restoration in the U.S. The 2006 National Wetlands Inventory Status and Trends Report, released by the U.S. Fish and Wildlife Service (FWS), reports the quantity and type of wetlands in the conterminous United States. The report shows that overall gains in wetland acres exceeded overall losses from 1998 through 2004 at a rate of 32,000 acres per year. This gain is primarily attributable to an increase in unvegetated freshwater ponds, which may have varying functional value. Additionally, wetland data provided in a report titled Preserving America's Wetlands, Implementing the President's Goal (CEQ, April 2005), indicates that 1,797,000 acres have been restored, created, protected or improved since April 2004.

Performance Targets:

This program has not been reviewed under the PART process.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$524.1) This reflects an increase for payroll and cost of living for existing FTE and recalculation of base workforce costs.
- (-\$0.7) This is part of an Agencywide effort to reduce travel, including international travel.
- (+\$2.4) Change due to rounding in the FY 2008 President's Budget.
- (-0.6 FTE) Redirection to support for Chesapeake Bay nutrient reduction, which includes wetlands and riparian restoration and collaboration.

Statutory Authority:

1990 Great Lakes Critical Programs Act; Great Lakes and Lake Champlain Act; CWA; 2002 Coastal Wetlands Planning, Protection, and Restoration Act of 1990; Estuaries and Clean Waters Act of 2000; North American Wetlands Conservation Act; WRDA; 1909 The Boundary Waters Treaty; 1978 GLWQA; 1987 GLWQA; 1996 Habitat Agenda; 1997 Canada-U.S. Great Lakes Bi-national Toxics Strategy; and U.S.-Canada Agreements.

Program Area: Water: Human Health Protection

Beach / Fish Programs

Program Area: Water: Human Health Protection

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	\$3,593.8	\$2,653.9	\$2,830.0	\$176.1
Total Budget Authority / Obligations	\$3,593.8	\$2,653.9	\$2,830.0	\$176.1
Total Workyears	8.0	7.7	7.7	0.0

Program Project Description:

This program supports the Agency's efforts to protect people from contaminated recreational waters and contaminated fish and shellfish. Recreational waters, especially beaches in coastal areas and the Great Lakes, provide recreational opportunities for millions of Americans. However, swimming in some recreational waters, or eating locally caught fish or shellfish, can pose a risk of illness as a result of exposure to microbial pathogens or other pollutants.

Beaches Program

The Beaches Program protects human health by reducing exposure to contaminated recreational waters. Agency activities include: 1) issuing guidance to improve beach monitoring and public notification programs, including effective strategies to communicate public health risks to the public; 2) developing and disseminating sound scientific risk assessment methods and criteria for use in evaluating recreational water quality, prioritizing beach waters for monitoring, and warning beach users of health risks or closure of beaches; 3) promulgating Federal water quality standards where a state or Tribe fails to adopt appropriate standards to protect coastal and Great Lakes recreational waters; and 4) providing publicly accessible Internet-based information about local beach conditions and closures. (See <http://www.epa.gov/waterscience/> for more information.)

Fish & Shellfish Programs

The Fish and Shellfish Programs provide sound science, guidance, technical assistance, and nationwide information to state, Tribal, and Federal agencies on the human health risks associated with eating locally caught fish/shellfish with excessive levels of contaminants. The Agency pursues the following activities to support this program: 1) publishing criteria guidance that states and Tribes can use to adopt health-based water quality standards, assess their waters, and establish permit limits; 2) developing and disseminating sound scientific risk assessment methodologies and guidance that states and Tribes can use to sample, analyze, and assess fish tissue in support of waterbody-specific or regional consumption advisories, or a determination that no consumption advice is necessary; 3) developing and disseminating guidance that states and Tribes can use to communicate the risks of consuming chemically contaminated fish; and 4)

gathering, analyzing, and disseminating information to the public and health professionals that enable informed decisions on when and where to fish, and how to prepare fish caught for recreation and subsistence.

Mercury contamination in fish and shellfish is a special concern, and the EPA and the Food and Drug Administration (FDA) have issued a joint advisory concerning eating fish and shellfish. Mercury contamination of fish and shellfish occurs locally, as well as in ocean-caught fish, and at higher levels causes adverse health effects, especially in children and infants.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will:

Beaches Program:

- Work with states and Tribes to implement the latest, scientifically defensible pathogen criteria for freshwaters.
- Continue to work with coastal and Great Lakes states, territories, and Tribes to adopt water quality standards that are as protective of human health as EPA's most current water quality criteria for pathogens.

Fish/Shellfish Programs:

- Continue to work with the FDA and public health agencies to develop and distribute outreach materials related to the joint guidance issued by the EPA and the FDA for mercury in fish and shellfish and assess the public's understanding of the guidance.
- Continue to work with the FDA to investigate the extent and risks of contaminants in fish, including the potential need for advisories for other pollutants, and to distribute outreach materials.
- Continue to strengthen its technical support to states in the operation of their monitoring programs and on acceptable levels of contaminant concentrations, and in states' development and management of fish advisories.
- Continue to release the summary of information on locally issued fish advisories and safe-eating guidelines. This information is provided to EPA annually by states and Tribes.
- Continue to reduce total blood mercury concentrations through ongoing work with FDA on joint guidance issued to the public, and by encouraging and supporting the states' implementation of their fish advisory programs through such measures as the National Forum on Contaminants in Fish and publishing the National Listing of Fish Advisories.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of women of childbearing age having mercury levels in blood above the level of concern.				5.5	Percent Women

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of state-monitored shellfish-growing acres impacted by anthropogenic sources that are approved or conditionally approved for use.				65-85	Percent Areas

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Maintain the number of waterborne disease outbreaks attributable to swimming in or other recreational contact with coastal and Great Lakes waters measured as a 5-year average.				2	Outbreaks

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Days (of beach season) that coastal and Great Lakes beaches monitored by State beach safety programs are open and safe for swimming.	97	94	95	96	Percent Days/Season

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$79.8) This increase provides funds for a program evaluation of state implementation of the BEACHES grants.
- (+\$96.5) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$0.2) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CWA and the BEACH Act of 2000.

Drinking Water Programs

Program Area: Water: Human Health Protection

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$90,252.9</i>	<i>\$99,121.0</i>	<i>\$96,967.0</i>	<i>(\$2,154.0)</i>
Science & Technology	\$3,101.9	\$3,243.1	\$3,416.0	\$172.9
Total Budget Authority / Obligations	\$93,354.8	\$102,364.1	\$100,383.0	(\$1,981.1)
Total Workyears	581.5	583.9	584.1	0.2

Program Project Description:

EPA's Drinking Water program is based on the multiple-barrier approach to protecting public health from unsafe drinking water. Under this approach, EPA protects public health through: source water assessment and protection programs; promulgation of new or revised, scientifically sound and risk-based National Primary Drinking Water Regulations (NPDWRs); training, technical assistance, and financial assistance programs to enhance public water systems' capacity to comply with existing and new regulations; and the national implementation of NPDWRs by state and Tribal drinking water programs through regulatory, non-regulatory, and voluntary programs and policies to ensure safe drinking water. (See <http://www.epa.gov/safewater/> for more information.

FY 2008 Activities and Performance Plan:

Safe drinking water and clean surface waters are critical to protecting human health. More than 280 million Americans rely on the safety of tap water provided by public water systems that are subject to national drinking water standards.¹ In FY 2008, EPA will continue to protect sources of drinking water from contamination; develop new and revise existing drinking water standards; support states, Tribes, and water systems in implementing standards; and promote sustainable management of drinking water infrastructure. As a result of these efforts, the Agency will ensure that 90 percent of the population served by community water systems will receive drinking water that meets all applicable health-based standards.

Drinking Water Implementation:

In FY 2008, the Agency will continue implementing requirements for the newly promulgated Cryptosporidium (Long Term 2 Enhanced Surface Water Treatment Rule or "LT2"), Disinfection (Stage 2 Disinfectants and Disinfection Byproducts Rule or "Stage 2"), and Ground Water rules. EPA will work with States as they begin to apply for primacy for the LT2 and Stage 2 rules in FY 2008. EPA also will assist states in implementing public health requirements

¹ U.S. Environmental Protection Agency Safe Drinking Water Information System (SDWIS/FED), <http://www.epa.gov/safewater/data/getdata.html>.

for high-priority drinking water contaminants including the Arsenic Rule and revised Lead and Copper Rule. The expected number of Arsenic Rule non-compliers was reduced by half within one year of the compliance deadline. The Agency will build on this success by continuing collaboration with our state partners and focusing on simultaneous compliance strategies. In order to facilitate compliance with these new rules, as well as existing rules, EPA will:

- Carry out the drinking water program where EPA has primacy (e.g., Wyoming, the District of Columbia, and Tribal lands), and where states have not yet adopted new regulations.
- Continue to provide guidance, training (including webcasts), and technical assistance to states, Tribes, laboratories and utilities on the implementation of drinking water regulations, especially the Ground Water Rule and revised Lead and Copper Rule. EPA will promote operation and maintenance best practices to small systems in support of long term compliance success with existing regulations.
- Support states with technical reviews of public water system submissions required for the Stage 2 rule in 2008. EPA will work directly with systems in states that are not conducting early implementation of the LT2/Stage 2 rules (a subset of a universe of over 4,000 systems).
- Support states in their efforts to provide technical, managerial, and financial assistance to small systems to improve their capacity to consistently meet regulatory requirements through the use of cost-effective treatment technologies, proper disposal of treatment residuals, and compliance with contaminant requirements, including monitoring under the arsenic and radionuclides rules and rules controlling microbial pathogens and disinfection byproducts.
- Improve the quality of data in the Safe Drinking Water Information System (SDWIS) by continuing to work with states to improve data completeness, accuracy, timeliness, and consistency through: training on data entry, error correction, and regulatory reporting; conducting data verifications and analyses; and implementing quality assurance and quality control procedures. Also, the Agency will support a database for the Underground Injection Control program.
- Carry out on-going oversight programs for categorical grants (e.g., Public Water System Supervision (PWSS), Drinking Water State Revolving Fund (DWSRF), Underground Injection Control (UIC)).

Drinking Water Standards:

In FY 2008, the Agency will continue to collect and evaluate information on drinking water contaminants and their health risks. The Agency will use this information to make risk management decisions based upon sound science to address public health threats posed by these contaminants. The Agency will continue to implement the Safe Drinking Water Act and other processes to evaluate and address drinking water risks including:

- Development of the third Contaminant Candidate List (CCL) identifying drinking water contaminants which may require regulation. This list will be the first developed using a comprehensive, risk based, reproducible methodology recommended by the National Academies of Science and the National Drinking Water Advisory Council.
- Completing the decisions to regulate (or not regulate) at least five of the contaminants on the second CCL.
- Collecting data on the frequency and level of occurrence of 25 unregulated contaminants in public water systems through implementation of the second Unregulated Contaminant Monitoring Rule.
- Developing analytical methods that can be utilized by laboratories across the U.S. to test for the presence of new and emerging contaminants in drinking water.
- Collaborating with the Centers for Disease Control and Prevention to determine public health protection effects of risk management strategies for drinking water contamination, including waterborne disease.
- Evaluating new information on health effects, occurrence, and other information for regulated contaminants to determine what if any revisions are appropriate under the National Primary Drinking Water Rule Six Year Review.
- Consulting with stakeholders to develop revisions to the Total Coliform Rule and additional requirements for water distribution systems as appropriate to maintain or provide for greater public health protection.
- Identify and implement the appropriate actions to address the long term issues identified in the national review of the Lead and Copper Rule. Long term issues that could be addressed include the effectiveness of partial lead service line replacement and effectiveness of lead and copper sampling requirements.

Sustainable Infrastructure:

EPA's sustainable infrastructure initiative is based on four pillars – better management, full-cost pricing, water efficiency and the watershed approach -- which support the Administrator's priorities. EPA's DWSRF provides states with funds for low-interest loans to assist utilities with financing drinking water infrastructure needs. EPA will work with states to encourage targeting this affordable, flexible financial assistance to support utility compliance with safe drinking water standards and also will work with utilities to promote full-cost pricing as a critical means to meet infrastructure needs and ensure compliance. The Agency continues to implement a multi-faceted DWSRF management strategy to ensure effective oversight of these funds and optimization of program outcomes. The Agency also will be producing in 2008 the Drinking Water Infrastructure Needs Survey report to Congress. EPA conducted the third Drinking Water Needs Survey in 2003. The survey documents 20-year capital investment needs of public water systems that are eligible to receive Drinking Water State Revolving Fund (DWSRF) monies — approximately 53,000 community water systems and 21,400 not-for-profit non-community water systems. The survey reports infrastructure needs that are required to protect public health, such as projects to ensure compliance with the Safe Drinking Water Act (SDWA). As directed by the SDWA, EPA uses the results of the survey to allocate DWSRF funds to the states and Tribes.

EPA will further contribute to sustainable infrastructure initiative through partnership-building activities, including the Agency's capacity development and operator certification work with states and efforts with leaders in the drinking water utility industry to promote asset management and the use of watershed-based approaches to manage water resources. The Agency also will engage states and other stakeholders to facilitate the voluntary adoption of best practices by drinking water utilities.

Source Water Protection:

EPA will continue supporting state and local efforts to identify and address potential sources of drinking water contamination. These efforts are integral to the utility efforts in the sustainable infrastructure leadership initiative because source water protection can reduce the need for expensive drinking water treatment, which, in turn, can reduce the demand side for sustainable infrastructure.

In FY 2008, the Agency will:

- Continue to work across EPA and with other Federal agencies to increase awareness of source water protection for better management of significant sources of contamination.
- Continue to work with national, state, and local stakeholder organizations and the multi-partner Source Water Collaborative to encourage broad-based efforts directed at encouraging actions at the state and local level to address sources of contamination identified in source water assessments.
- Continue to support source water protection efforts by: providing training, technical assistance, and technology transfer capabilities to states and localities; and facilitating the adoption of Geographic Information System (GIS) databases to support local decision-making.
- Direct National UIC Program efforts to protect underground sources of drinking water by establishing priorities, developing guidance, measuring program results,, and administering the state and Tribal assistance grants.
- Manage, through the UIC program, potential new waste streams that will use underground injection, including residual waste from desalination and other drinking water treatment processes.
- Work in concert with resources from the EPA Air and Radiation program and with the Department of Energy to support the safe deployment of carbon capture and storage (geologic sequestration) as a climate mitigation strategy; develop technical guidance and/or regulations to ensure that wells injecting carbon dioxide do not endanger underground sources of drinking water.
- Carry out responsibilities in permitting current and future geologic carbon sequestration projects. Activities planned for FY 2008 include:

- More targeted data collection through Department of Energy pilot projects and industry efforts to demonstrate and commercialize geologic sequestration technology;
- Engaging states and stakeholders through meetings, workshops, and other avenues, as appropriate; and
- Research on key issues and gaps. There are many complex technical questions that must be answered in order to develop an appropriate regulatory framework that is fully protective of human health and the environment, and ensures that underground sources of drinking water are not placed at risk.

This program completed a PART review in 2006 and achieved an adequate rating. The measures and targets below were modified through the PART process in FY 2008. The PART's improvement plan requires that EPA continue to work towards developing a long-term outcome performance measure to assess the public health impacts of improvements in drinking water compliance, continue to improve the overall quality of the data in EPA's drinking water compliance reporting system, and revise the current drinking water small system affordability methodology to address negative distributional impacts.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent population served by CWS that receive drinking water that meets all applicable health-based DW standards through approaches including effective treatment and source water protection.	89	93	94	90	Percent Population

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of community water systems that have undergone a sanitary survey within the past three years (five years for outstanding performance.)	94	98	98	95	Percent Systems

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of person months during which community water systems provide drinking water that meets all applicable health-based standards.				95	Percent Person Months

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent community water systems that provide drinking water that meets all applicable health-based drinking water standards.	89.4	93	94	89.5	Percent Systems

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$3,117.8) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$34.3) This is an administrative correction to travel funds, redirecting resources from the Surface Water Protection program.
- (-\$85.0) This request redirects \$85.0 to the same program within the S&T appropriation. This change is an administrative correction for fixed costs associated with the Cincinnati Technical Support Center.
- (-\$112.5) This reduction reflects savings from improvements to the Agency's small administrative systems.
- (-\$107.8) This reduction reflects efficiencies gained in Agency administrative or contracts management services.
- (-\$5,000.0) This change reflects the completion of major drinking water system modernization efforts. In addition, the program plans to reduce development and implementation of assistance tools, updated cost models and analytic methods in order to fund higher priority activities.
- (-\$3.1) This is part of an Agencywide effort to reduce travel, including international travel.

- (+\$2.3) Change due to rounding in the FY 2008 President's Budget.
- (+0.2 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This increase is for direct implementation of the PWSS program in order to maintain the existing levels of performance for systems that meet drinking water standards.

Statutory Authority:

SDWA; CWA.

Program Area: Water Quality Protection

Marine Pollution

Program Area: Water Quality Protection

Goal: Clean and Safe Water

Objective(s): Protect Water Quality

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$10,846.3</i>	<i>\$12,462.4</i>	<i>\$12,851.0</i>	<i>\$388.6</i>
Total Budget Authority / Obligations	\$10,846.3	\$12,462.4	\$12,851.0	\$388.6
Total Workyears	46.1	43.7	43.7	0.0

Program Project Description:

The goals of the marine pollution programs are to ensure marine ecosystem protection by controlling point-source and vessel discharges, managing dredged material and ocean dumping, developing regional and international collaborations, monitoring ocean and coastal waters, and managing other sources of pollution, such as marine debris and invasive species.

Major areas of effort include:

- Developing and implementing regulations and technical guidance to control pollutants from vessels and issuing permits for materials to be dumped in ocean waters.
- Designating, monitoring, and managing ocean dumping sites and implementing provisions of the National Dredging Policy.
- Monitoring coastal and ocean waters for baseline and trends assessment (e.g., Gulf of Mexico hypoxic zone).
- Supporting international marine pollution control with other Federal agencies through negotiations of international standards that address invasive aquatic species, harmful antifoulants, bilge water, and marine debris.
- Working with a wide variety of stakeholders to develop, provide, and implement watershed management tools, strategies and plans for coastal ecosystems, including dredged material management plans for coastal ports, in order to restore and maintain the health of coastal aquatic communities on a priority basis.

(See <http://www.epa.gov/owow/oceans/regulatory/index.html> for more information.)

FY 2008 Activities and Performance Plan:

Coastal and ocean waters are environmentally and economically valuable to the nation. To protect and improve water quality on a watershed basis, EPA will work with states, Tribes, interstate agencies, and others on improving the quality of our valuable ocean resources. The

health of ocean and coastal waters and progress in meeting the strategic targets will be tracked through periodic issuance of a National Coastal Condition Report, a cooperative project with other Federal agencies.

In FY 2008 the Ocean Survey Vessel (OSV) *Bold* will continue to support monitoring and assessment needs in EPA Regional office and coastal states. It is available to support monitoring and assessment needs on the Atlantic, Pacific, and Gulf Coasts and in the Caribbean. During 2008, the *Bold* is expected to support the following types of activities: collection of environmental data from several offshore areas for use in their designation of dredged material disposal sites (such as in Long Island Sound); periodic environmental monitoring of 10 to 20 of the 64 active ocean disposal sites; the monitoring of 5 to 10 offshore waste disposal sites or wastewater outfalls; and monitoring of significantly impacted or important coastal waters such as the Gulf of Mexico hypoxic zone and Florida coral reefs.

Key marine pollution program efforts in 2008 that focus on ocean and coastal waters and are critical to improving these waters are:

Reducing Vessel Discharges

- Enhance controls of pollutant discharges from vessels.
- EPA is assessing the need for additional standards for sewage and graywater discharges from large cruise ships operating in Alaska.
- Work with the Department of Defense (DoD) to finalize discharge standards for Armed Forces vessels (i.e., complete development of the seven discharge standards for the first phase of the project and continue development of standards for the remaining discharges).
- Continue assessing program success in reducing sewage discharges from vessels.

Managing the Marine Protection, Research, and Sanctuaries Act (MPRSA) / Ocean Dumping Program (including Dredged Material)

- Monitor active dredged material ocean dump sites to ensure achievement of environmentally acceptable conditions reflected in Site Management Plans.
- Continue managing the ocean dumping vessels database.
- As co-chair of the National Dredging Team (NDT), in conjunction with the Army Corps of Engineers and EPA Regions, create a tracking system for beneficial use of dredged materials (as an alternative to dumping in ocean or coastal waters).

Managing Invasive Species

- Work with the U.S. Coast Guard to develop a Programmatic Environmental Impact Statement (EIS) that supports a proposed USCG rule for ballast water discharge standards.
- Work with the USCG in the development of guidelines under the International Maritime Organization's Ballast Water Management Convention.

Reducing Marine Debris

- Work with other members of the Interagency Marine Debris Coordinating Committee to implement an action plan for assessing and reducing marine debris.

Vessels Used as Artificial Reefs

- Continue to participate in the review of clean-up plans for individual Navy and Maritime Administration vessel-to-reef projects.

Contributing to the Health of Coral Reefs

- Participate on the U.S. Coral Reef Task Force.
- Assist in the development of biological assessment methods and biological criteria for use in evaluating coral reef health and associated water quality.

Supporting International Marine Pollution Control

- Continue working to ensure that U.S. policy and procedures are consistent with the London Convention of 1972 and its 1996 Protocol.
- Participate on the Marine Environment Protection Committee (MEPC) of MARPOL (The Protocol of 1978 Relating to the International Convention for the Prevention of Pollution From Ships, 1973) to develop international standards and guidance within the MARPOL Convention.

This program was included in OMB's PART assessment, Ocean, Coastal, and Estuary Protection, completed in 2005 and was rated "adequate."

A key effort of the Marine Pollution Program is managing the ocean dumping program. As a follow-up action to the Oceans and Coastal Protection Program PART review in 2005 and to improve the performance of the Marine Pollution Program, a new strategic plan measure was developed for the ocean dumping program for FY 2008. On an annual basis, EPA Regional offices will determine whether dredged material ocean dump sites are achieving environmentally acceptable conditions, as defined by each the individual Site Management Plan. Should a site not achieve acceptable conditions, corrective actions will be taken by the appropriate parties.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	National Coastal Condition Report (NCCR) score for overall aquatic ecosystem health of coastal waters nationally (1-5 scale).	Data Available in 2008	2.7	2.8	2.8	Scale Score

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	By 2011, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Northeast Region.				1.8	Scale Score

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	By 2011, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Southeast Region.				3.8	Scale Score

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	By 2011, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the West Coast Region.				2	Scale Score

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	By 2011, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Puerto Rico Region.				1.7	Scale Score

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Active dredged material ocean dumping sites will have achieved environmentally acceptable conditions (as reflected in each site's management plans.)				95	Percent Sites

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$391.0) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$0.5) This is part of an Agencywide effort to reduce travel, including international travel.
- (-\$1.9) Change due to rounding in the FY 2008 President's Budget Request.

Statutory Authority:

Certain Alaskan Cruise Ship Operations Act (PL 106-554); Clean Vessel Act; CWA; CZARA of 1990; FIFRA; MPPRCA of 1987; MPRSA; National Defense Authorization Act for Fiscal Year 2004, Section 3516; NEPA, Section 102; NISA of 1996; NAFTA; Ocean Dumping Ban Act of 1988; OAPCA; PPA; RCRA; SDWA; Shore Protection Act of 1988; TSCA; WRDA; and the Wet Weather Water Quality Act of 2000

Surface Water Protection

Program Area: Water Quality Protection

Goal: Clean and Safe Water

Objective(s): Protect Water Quality; Enhance Research to Support Clean and Safe Water

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Environmental Program & Management</i>	<i>\$188,306.1</i>	<i>\$191,587.2</i>	<i>\$196,092.0</i>	<i>\$4,504.8</i>
Total Budget Authority / Obligations	\$188,306.1	\$191,587.2	\$196,092.0	\$4,504.8
Total Workyears	1,104.5	1,103.1	1,101.1	-2.0

Program Project Description:

The EPA Surface Water Protection Program, under the Clean Water Act (CWA), directly supports efforts to protect, improve and restore the quality of rivers, lakes, and streams. EPA works with states to make continued progress toward the clean water goals identified in EPA's Strategic Plan by implementing core clean water programs, including innovations that apply programs on a watershed basis, and accelerating efforts to improve water quality on a watershed basis.

EPA focuses its work with states, interstate agencies, Tribes and others in key areas, including: water quality criteria and standards, effluent guidelines, cooling water intake regulations, analytical methods, water quality assessment and monitoring, national water quality data systems, watershed management planning, Total Maximum Daily Loads (TMDLs), National Pollutant Discharge Elimination System (NPDES), nonpoint source pollution programs, and effectively managing infrastructure assistance programs. EPA also is responsible for producing the Clean Watersheds Needs Survey (CWNS), and for management and oversight of the Clean Water State Revolving Fund (CWSRF).

FY 2008 Activities and Performance Plan:

Water quality criteria and standards provide the scientific and regulatory foundation for water quality protection programs under the CWA. They are used to define what waters are clean and what waters are impaired, and thereby, serve as benchmarks for decisions about allowable pollutant loadings into waterways. (See <http://www.epa.gov/waterscience/> for more information.) In FY 2008, EPA will continue to support state and Tribal programs by providing scientific water quality criteria information, including developing or improving criteria for nutrients and pathogens in ambient water. EPA will work with state and Tribal partners to help them develop standards that are "approvable" under the Act, including providing advance guidance and technical assistance where appropriate before the standards are formally submitted to EPA. EPA expects that 87 percent of state submissions will be approvable in FY 2008.

In FY 2008, EPA will continue the monitoring initiative that began in 2005. EPA will provide technical support to states, Tribes, and other partners participating in national statistically valid

surveys of lakes and rivers. In FY 2008, lakes data analysis will be completed. A report on baseline conditions in lakes will be issued in 2009. Sampling for a statistically-valid survey of river conditions will begin in FY 2008. EPA will support states and Tribes in implementing their comprehensive monitoring strategies, including development of efficient scientifically valid tools to assist in monitoring and assessing their waters. These efforts will help provide the data and information needed for sound management of the nation's waters.

In FY 2008, EPA will continue working with states, interstate agencies, and Tribes to foster a "watershed approach" as the guiding principle of clean water programs. In watersheds where water quality standards are not attained, states will be developing TMDLs, which are critical tools for meeting water restoration goals. Watershed plans and TMDLs will focus control and restoration efforts on pollutants from point sources and runoff from nonpoint sources. States and EPA have made significant progress in the development and approval of TMDLs (cumulatively over 20,000 completed through FY 2006) and expect to develop over 2,500 TMDLs in 2008.

Protection of water quality on a watershed basis requires a careful assessment of the nature and sources of pollution, their location and setting within the watershed, their relative influence on water quality, and their amenability to preventive or control methods. In FY 2008 EPA will support efforts of states, Tribes, other Federal agencies, and local communities to develop and implement watershed-based plans that successfully address all of these factors to enable impaired waters to be restored by implementing the national nonpoint source program. The nonpoint source program is key to addressing most of the remaining water quality problems. In FY 2008, EPA will provide program leadership and technical support by:

- Creating, supporting, and promoting technical tools that states need to accurately assess water quality problems; analyze and implement solutions.
- Implementing a new web-based tool to support watershed planning.
- Enhancing accountability for results through the use of a newly-released nonpoint source program tracking system which will continue to track all pollutant load reductions achieved by each project. The system also will allow EPA to better track waters fully restored by 319-funded projects by relating Section 319 project information to other data management systems.
- Focusing on the development and dissemination of tools to promote Low Impact Development (LID), thereby preventing new nonpoint sources of pollution. LID is a new, comprehensive land planning and engineering design approach with a goal of maintaining and enhancing the pre-development water quality and flow in urban and developing watersheds.
- Continuing coordination with the U.S. Department of Agriculture to ensure that Federal resources, including grants under Section 319 and Farm Bill funds, are managed in a coordinated way to maximize water quality improvement in impaired waters and protection in all others.

In FY 2008, EPA will continue to implement and support the core water quality programs that control point source discharges. The NPDES program requires point source dischargers to be permitted and requires pretreatment programs to control discharges from industrial and other facilities to the nation's wastewater treatment plants. This program provides a management framework for the protection of the nation's waters through the control of billions of pounds of pollutants. In 2008 EPA will focus on several key strategic objectives for the NPDES and effluent guideline programs:

- Use the results of the “*Permitting for Environmental Results Strategy*” to ensure the health of the NPDES program; continue to address workload concerns in permit issuance; and focus limited resources on priority permits that have the greatest benefit for water quality. (See <http://cfpub.epa.gov/npdes/per.cfm> for more information.)
- Advance program innovations, such as watershed permitting and trading.
- Implement strategies to improve management of pretreatment programs.
- Issue a plan that describes the CWA-mandated annual review of industrial categories to determine if new or revised effluent guidelines are warranted.
- Develop effluent regulations for discharges from airport deicing facilities and from construction and development activities.

New Concentrated Animal Feeding Operation (CAFO) rules were developed in 2003 and were finalized in 2007 in response to the 2nd Circuit Court ruling. EPA will work with states and Tribes to implement the final rule to assure that CAFOs that discharge are covered by an NPDES permit, and that CAFOs have the tools and information needed to prevent discharges. In addition, EPA will monitor the number of facilities covered by stormwater and CAFO permits. EPA will work with NPDES authorities to ensure that 90 percent of all permits and 95 percent of priority permits are current.

EPA will continue to implement a Sustainable Infrastructure Strategy focused around four key principals or “pillars” – Better Management, Water Efficiency, Full Cost Pricing, and the Watershed Approach. The Agency will work with its partners to facilitate the voluntary adoption of best management practices in wastewater asset management, innovations, and efficiency. The long-term goal of these partnerships is focused on improving water quality and supporting sustainable wastewater utilities that are able to maximize the value of clean water infrastructure support by improving system performance at the lowest possible cost. Water use efforts include the water-efficiency market enhancement program, WaterSense, announced in April 2006, which will give consumers a reference tool to identify and select water-efficient products with the intent of reducing national water and wastewater infrastructure needs by reducing demands and flows, allowing for deferred or downsized capital projects. In April 2006, EPA issued draft specifications for three water-efficient service categories (certification programs for irrigation system auditors, certification programs for irrigation system designers, and certification programs for irrigation system installation and maintenance professionals) and one product category (residential High-Efficiency Toilets or HETs).

In FY 2008, EPA will continue to assess the viability of specification development for additional product and service categories including faucets, showerheads, irrigation controllers, soil moisture sensors, medical devices (e.g., steam sterilizers), landscape management, and drip irrigation. EPA is developing criteria for water-efficient new homes to serve as a benchmark and spur water-efficiency in construction of new homes. EPA also plans to pilot test a promotional campaign for HETs with a major retailer and utility partners in a targeted geographical area. In addition, the Agency plans to work with the Alliance for Water Efficiency to promote water conservation and efficiency.

The Clean Water State Revolving Fund (CWSRFs) (see the CWSRF program/project narrative) provides low interest loans to help finance wastewater treatment facilities and other water quality projects. Policy and oversight of the fund is supported by this program. In managing this program, EPA continues to work with states to meet several key objectives:

- Funding projects designed as part of an integrated watershed approach.
- Linking projects to environmental results through the use of water quality and public health data.
- Maintaining the excellent fiduciary condition of the funds.
- Continuing to support states efforts in developing integrated priority lists to address nonpoint source pollution, and estuary protection and wastewater projects.

In FY 2008, the Agency will conduct the CWNS. The CWNS reports on publicly-owned wastewater collection and treatment facilities, facilities for control of sanitary sewer overflows (SSOs), combined sewer overflows (CSOs), and other activities. The information is used to produce a Report to Congress which provides an estimate of clean water needs for the United States. The Agency also will provide oversight and support for over 3,000 congressionally mandated projects related to water and wastewater infrastructure as well as management and oversight of grant programs, such as the Section 106 grants, the U.S-Mexico Border, and Alaska Native Village programs.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of waterbody segments identified by States in 2002 as not attaining standards, where water quality standards are now fully attained (cumulative).				1,100	Number of Segments

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of submissions of new or revised water quality standards from States and Territories that are approved by EPA.	89	90.9	85	87	Percent Submissions

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of high priority EPA and state NPDES permits that are reissued on schedule.	98.5	95	95	95	Percent Permits

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Loading (pounds) of pollutants removed per program dollar expended.	233	233	285	366	Pounds

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Number of TMDL's required that are established or approved by EPA on a schedule consistent with national policy (cummulative).	23,185	20,501	25,811	28,401	TMDLs

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of waters assessed using statistically valid surveys.	54	54	54	54	Percent Waters

This program was included in OMB's PART assessment, Surface Water Protection, completed in 2005 and was rated "moderately effective." This program is working on followup actions to: (1) develop state grant templates for reporting state performance; (2) assess 100% of river, lakes,

and streams; and (3) develop water quality reports on statistically-valid surveys of wadeable streams.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$6,317.1) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$190.0) EPA will conduct a program evaluation of the Nonpoint Source Grant programs implemented by the States.
- (+\$268.6) This increase reflects a redirection of workforce support from the Great Lakes National Program Office.
- (-\$112.5) This reduction reflects savings from improvements to the Agency's small administrative systems.
- (-\$130.4) This reduction reflects efficiencies gained in Agency administrative or contracts management services.
- (-\$3.8) This is part of an Agencywide effort to reduce travel, including international travel.
- (-\$34.3) This is an administrative correction to travel funds, redirecting resources to the Drinking Water Protection program.
- (-\$2,000.0) This reduction reflects completion of key deliverables for chemical data flow in transition from the existing STORET data management system to the Exchange Network-based data warehouse called the Water Quality Exchange (WQX). It also reflects a decision to delay development of data entry tools for small users, of data extraction and analysis tools, and of data standards for biological and toxicity data.
- (+\$10.1) Change due to rounding in the FY 2008 President's Budget.
- (-2.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

CWA.

**Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification**

Table of Contents - Inspector General

Resource Summary Table	1
Program Projects in IG	1
Program Area: Audits, Evaluations And Investigations.....	2
Audits, Evaluations, and Investigations.....	3

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Inspector General
Resource Summary Table
(Dollars in Thousands)**

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Inspector General				
Budget Authority	\$36,501.5	\$35,100.0	\$38,008.0	\$2,908.0
Total Workyears	247.5	267.7	287.7	20.0

**Program Projects in IG
(Dollars in Thousands)**

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$36,501.5	\$35,100.0	\$38,008.0	\$2,908.0
Subtotal, Audits, Evaluations, and Investigations	\$36,501.5	\$35,100.0	\$38,008.0	\$2,908.0
Subtotal, Audits, Evaluations, and Investigations	\$36,501.5	\$35,100.0	\$38,008.0	\$2,908.0

Program Area: Audits, Evaluations and Investigations

Audits, Evaluations, and Investigations

Program Area: Audits, Evaluations, and Investigations

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Inspector General</i>	<i>\$36,501.5</i>	<i>\$35,100.0</i>	<i>\$38,008.0</i>	<i>\$2,908.0</i>
Hazardous Substance Superfund	\$13,243.5	\$13,316.0	\$7,149.0	(\$6,167.0)
Total Budget Authority / Obligations	\$49,745.0	\$48,416.0	\$45,157.0	(\$3,259.0)
Total Workyears	335.9	361.8	331.8	-30.0

Program Project Description:

EPA's Office of the Inspector General (OIG) provides audit, evaluation, investigative, inspection, and public liaison services that fulfill the requirements of the Inspector General Act, as amended, by promoting economy, efficiency, and effectiveness in the operations of the Agency's programs. OIG activities add value and enhance public trust by providing the Agency and Congress with independent analyses and recommendations that help resolve management challenges and identify best practices for efficiently and effectively accomplishing EPA's environmental goals and safeguarding resources. They also result in the prevention, detection, and prosecution of financial fraud, laboratory fraud, and cyber crime. The EPA IG also serves as the Inspector General for the U.S. Chemical Safety and Hazard Investigation Board.

FY 2008 Activities and Performance Plan:

The EPA OIG will assist the Agency in its efforts to reduce environmental and human health risks by helping to improve program operations, save taxpayer dollars, and resolve major management challenges. In FY 2008, the OIG will identify high risk areas and make recommendations to mitigate those risks, leading to positive environmental impacts and the cost effective attainment of EPA's strategic goals. Issues relating to voluntary programs, protection of drinking water, clean air technologies, healthy communities, environmental compliance and enforcement, information technology investments, and grants and contracts will increasingly become integrative elements of OIG work.

Audits and Evaluations

Air

Evaluations will focus on areas such as the development of cost-effective strategies for controlling fine particulate matter (PM_{2.5}) in non-attainment areas, and the use of partnerships and voluntary programs and initiatives to more efficiently achieve clean air goals, leverage other available resources, and ensure healthy communities and ecosystems. The OIG will also evaluate the Agency's efforts to address risks to the public from indoor air pollution, such as radon.

Water

Evaluations will determine how EPA can cost effectively achieve water quality goals, including the extent that the Clean Water Act and Safe Drinking Water Act programs are integrated and working together toward EPA's strategic Clean and Safe Water goal and the National Estuary Program's (NEP) effectiveness in improving the overall aquatic health of the 28 estuaries in the NEP. Additional efforts will seek to determine the effectiveness of the Agency's efforts to protect human health from exposure to contaminants in beach water and to evaluate methodologies for identifying emerging water contaminants that pose a threat to health and the environment.

Land

Land evaluations will include efforts to assess the outcomes and effects of EPA's voluntary approaches for product stewardship, infrastructure development and encouragement of environmentally responsible behaviors designed to lead to waste or chemical reduction and increased recycling

Cross-Media

EPA has taken steps to use partnership programs and innovative approaches to encourage voluntary actions as a complement to regulation. The OIG will critique these approaches so that the Agency can do more of what does work and avoid what is ineffective. Such evaluations may include how well EPA utilizes the results of its research and development activities, protects its personnel and infrastructure that are critical to ensuring its ability to respond to terrorist incidents, and implements management innovations to enhance the efficiency and effectiveness of its various regulatory compliance tools.

Good Government

Audits will focus on whether EPA: 1) human capital, assistance agreements and contracts are efficiently and effectively administered to accomplish the Agency's mission; 2) information technology projects are being effectively planned and managed and systems have cost-effective controls to provide timely, accurate, complete, useful, and secure financial and performance data for decision making and accountability; and 3) financial statements are fairly presented. A

significant portion of audit resources will be devoted to mandated work involving the financial statements of EPA, the information security practices of EPA required by the Federal Information Security Management Act, and financial audits of costs claimed by recipients of EPA assistance agreements conducted pursuant to the Single Audit Act. Discretionary work will involve audits of: 1) costs claimed by assistance agreement recipients; 2) grant and contract administration, including whether such funding instruments result in cost effective products and services supporting EPA's strategic goals; and 3) the usefulness, accuracy, and reliability of EPA's data and performance measures.

Investigations

The OIG will conduct investigations and seek prosecution of criminal activity and serious misconduct in EPA programs and operations that undermine Agency integrity and create imminent environmental risks. Investigations focus on: 1) fraudulent activities in the awarding, performance, and payment of funds under EPA contracts, grants, and other assistance agreements to individuals, companies, and organizations; 2) criminal activity or serious misconduct affecting EPA programs or involving EPA personnel (such as false certifications for asbestos removal and fraudulent use of the Agency seal), which could undermine or erode the public trust; 3) laboratory fraud relating to payments made by EPA for erroneous environmental testing data and results that could undermine the bases for EPA decision-making, regulatory compliance, and enforcement actions; 4) intrusions into and attacks against EPA's network, as well as incidents of computer misuse and theft of intellectual property; and 5) release of or unauthorized access to sensitive or proprietary information. In addition, the OIG assists EPA in testing its network infrastructure to provide a threat and vulnerability assessment used to minimize or mitigate hostile infrastructure attacks. In response to an actual attack, the OIG would initiate the appropriate investigative response to identify the intruder; coordinate with state, local, and other Federal law enforcement authorities; coordinate with the Agency to protect information and resources; increase awareness of fraud indicators; and create a network of potential resources.

Public Liaison

Public liaison work will continue to address critical public and governmental concerns. This activity involves responding to requests from the public, Congress, EPA employees, or other government entities for information and responses to complaints or allegations of fraud, waste, abuse, or mismanagement in EPA programs. To accomplish this work, the OIG initiates reviews and if needed contracts with subject matter experts to assist with such reviews, and coordinates these efforts with ongoing audits, evaluations, or investigations.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Criminal, civil, administrative, and fraud prevention actions.	121	80	80	70	Actions

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Environmental and business actions taken for improved performance or risk reduction.	407	303	318	291	Actions

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Return on the annual dollar investment, as a percentage of the OIG budget, from audits and investigations.	1,100	150	150	100	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Environmental and business recommendations or risks identified for corrective action.	1,024	925	955	805	Recommendations

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$2,424.9) This reflects: 1) a transfer of payroll resources from the OIG's Superfund resources to increase the range of issues on which the OIG can focus its audits, investigations, and evaluations; and 2) an increase for cost of living for existing FTE.
- (+\$623.8) This reflects an increase to account for inflation related to non-payroll resources, such as travel, contracts, and Working Capital Fund.
- (-\$140.7) This decrease reflects the transfer of oversight of Defense Contract Audit Agency services to OARM.
- (+20.0 FTE) This increase reflects a transfer of resources from the OIG's Superfund resources, to increase the range of issues on which the OIG can focus its audits, investigations, and evaluations.

Statutory Authority:

Inspector General Act, as amended; Government Management Reform Act; Reports Consolidation Act; Single Audit Act; and Pesticides Registration Improvement Act; CFO Act; RCRA; FFMIA; FISMA; FQPA.

**Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification**

Table of Contents - Buildings and Facilities

Resource Summary Table	1
Program Projects in B&F	1
Program Area: Homeland Security	2
Homeland Security: Protection of EPA Personnel and Infrastructure	3
Program Area: Operations and Administration.....	5
Facilities Infrastructure and Operations.....	6

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Building and Facilities
Resource Summary Table
(Dollars in Thousands)**

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Building and Facilities				
Budget Authority	\$41,672.2	\$39,816.0	\$34,801.0	(\$5,015.0)
Total Workyears	0.0	0.0	0.0	0.0

**Program Projects in B&F
(Dollars in Thousands)**

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	\$10,800.9	\$11,385.1	\$7,870.0	(\$3,515.1)
Operations and Administration				
Facilities Infrastructure and Operations	\$30,871.3	\$28,430.9	\$26,931.0	(\$1,499.9)
Subtotal, Facilities Infrastructure and Operations	\$30,871.3	\$28,430.9	\$26,931.0	(\$1,499.9)

Program Area: Homeland Security

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$8,845.1	\$6,268.9	\$6,345.0	\$76.1
Science & Technology	\$3,013.8	\$2,079.0	\$594.0	(\$1,485.0)
<i>Building and Facilities</i>	<i>\$10,800.9</i>	<i>\$11,385.1</i>	<i>\$7,870.0</i>	<i>(\$3,515.1)</i>
Hazardous Substance Superfund	\$534.7	\$594.2	\$594.0	(\$0.2)
Total Budget Authority / Obligations	\$23,194.5	\$20,327.2	\$15,403.0	(\$4,924.2)
Total Workyears	3.0	3.0	3.0	0.0

Program Project Description:

This program involves activities to ensure that EPA's physical structures and assets are secure and that certain physical security measures are in place to help safeguard staff in the event of an emergency, protecting the capability of EPA's vital infrastructure assets. The program also includes protecting national security information (NSI) through construction and build-out of secure access facilities (SAFs) and sensitive compartmented information facilities (SCIFs), protecting the personnel security clearance process, and protecting any classified information. The work under the Building and Facilities appropriation supports larger physical security improvements to leased and owned space.

FY 2008 Activities and Performance Plan:

In FY 2008, the Agency will continue to implement Homeland Security Presidential Directive (HSPD) 12 (i.e., the Smart Card Directive) through upgrading or replacing physical access control systems and the ancillary infrastructure at five to eight EPA facilities nationwide. Additionally, we will continue installing blast resistant glass materials or procuring and installing laminated glass windows at our Security Level 3 and 4 facilities, as well as facilities housing critical infrastructures. The EPA will also continue to mitigate vulnerabilities in accordance with the *Department of Justice, United States Marshals Service, Vulnerability Assessment of Federal Facilities* guidelines at its 191 facilities nationwide. Finally, the Agency will ensure new construction, new leased, and major modernization projects meet Federal physical security requirements; expand or realign existing laboratories for homeland security support activities; and protect critical infrastructures under HSPD 7.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program.

FY 2008 Changes from FY 2007 President's Budget (Dollars in Thousands):

- (-\$3,515.1) This reduction reflects substantial progress in completing initial vulnerability mitigations at EPA's most vulnerable facilities, allowing for a reduction in the pace of physical security upgrades and vulnerability assessments.

Statutory Authority:

Public Health Security and Bioterrorism Emergency and Response Act of 2002; and Secure Embassy Construction and Counterterrorism Act (Sections 604 and 629).

Program Area: Operations and Administration

Facilities Infrastructure and Operations
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$336,980.6	\$294,760.1	\$303,728.0	\$8,967.9
Science & Technology	\$8,841.7	\$70,239.5	\$73,859.0	\$3,619.5
<i>Building and Facilities</i>	<i>\$30,871.3</i>	<i>\$28,430.9</i>	<i>\$26,931.0</i>	<i>(\$1,499.9)</i>
Leaking Underground Storage Tanks	\$769.6	\$916.8	\$901.0	(\$15.8)
Oil Spill Response	\$366.1	\$499.3	\$490.0	(\$9.3)
Hazardous Substance Superfund	\$66,365.6	\$73,944.7	\$74,956.0	\$1,011.3
Total Budget Authority / Obligations	\$444,194.9	\$468,791.3	\$480,865.0	\$12,073.7
Total Workyears	375.1	438.6	415.9	-22.7

Program Project Description:

Facilities activities in the Buildings and Facilities Appropriation include design, construction, repair and improvement projects costing over \$85 thousand. Funds may be used for buildings occupied by EPA, whether federally owned or leased.

FY 2008 Activities and Performance Plan:

These resources help to improve operating efficiency and encourage the use of new, advanced technologies and advanced energy sources. Additionally, the Agency will meet the Federal Facility environmental objectives of Executive Orders related to efficient building management practices. Efforts will include implementing the findings of comprehensive facility energy audits, sustainable building design in Agency construction and alteration projects, and the use of off-grid energy equipment, energy load reduction strategies, and Energy Star rated buildings.

Performance Targets:

Work under this program supports multiple performance objectives. Performance information is included in the Program Performance and Assessment section.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$1,499.9) This reduction reflects efficiencies gained as a result of improved building management practices.

Statutory Authority:

FPASA; PBA; Annual Appropriations Act; CWA; CAA; D.C. Recycling Act of 1988; Executive Orders 10577 and 12598; Homeland Security Presidential Decision Directive 63 (Critical Infrastructure Protection).

**Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification**

Table of Contents - Superfund

Resource Summary Table	1
Program Projects in Superfund.....	1
Program Area: Air Toxics And Quality	4
Radiation: Protection	5
Program Area: Audits, Evaluations And Investigations.....	7
Audits, Evaluations, and Investigations.....	8
Program Area: Compliance	11
Compliance Assistance and Centers	12
Compliance Incentives.....	14
Compliance Monitoring.....	16
Program Area: Enforcement	19
Civil Enforcement.....	20
Criminal Enforcement.....	22
Enforcement Training	25
Environmental Justice.....	27
Forensics Support.....	29
Superfund: Enforcement	32
Superfund: Federal Facilities Enforcement	37
Program Area: Homeland Security	39
Homeland Security: Communication and Information.....	40
Homeland Security: Critical Infrastructure Protection	41
Homeland Security: Preparedness, Response, and Recovery	43
Homeland Security: Protection of EPA Personnel and Infrastructure.....	46
Program Area: Information Exchange / Outreach.....	48
Congressional, Intergovernmental, External Relations	49
Exchange Network.....	51
Program Area: IT / Data Management / Security	53
Information Security	54
IT / Data Management	56
Program Area: Legal / Science / Regulatory / Economic Review	60
Alternative Dispute Resolution.....	61
Legal Advice: Environmental Program	63
Program Area: Operations and Administration.....	65
Financial Assistance Grants / IAG Management.....	66
Facilities Infrastructure and Operations.....	68
Acquisition Management	71
FY 2008 Activities and Performance Plan:	71
Human Resources Management	73
Central Planning, Budgeting, and Finance	75
Program Area: Research: Human Health And Ecosystems	77
Human Health Risk Assessment.....	78

Program Area: Research: Land Protection	81
Research: Land Protection and Restoration	82
Program Area: Research: Sustainability	86
Research: Sustainability	87
Program Area: Superfund Cleanup.....	88
Superfund: Emergency Response and Removal	89
Superfund: EPA Emergency Preparedness	92
Superfund: Federal Facilities	94
Superfund: Remedial	99
Superfund: Support to Other Federal Agencies	103

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Hazardous Substance Superfund
Resource Summary Table
(Dollars in Thousands)**

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Hazardous Substance Superfund				
Budget Authority	\$1,340,168.4	\$1,258,955.0	\$1,244,706.0	(\$14,249.0)
Total Workyears	3,164.4	3,297.4	3,205.9	-91.5

**Program Projects in Superfund
(Dollars in Thousands)**

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Air Toxics and Quality				
Radiation: Protection	\$1,938.3	\$2,323.3	\$2,373.0	\$49.7
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$13,243.5	\$13,316.0	\$7,149.0	(\$6,167.0)
Compliance				
Compliance Assistance and Centers	\$11.0	\$22.2	\$22.0	(\$0.2)
Compliance Incentives	\$156.5	\$142.7	\$144.0	\$1.3
Compliance Monitoring	\$914.4	\$1,144.1	\$1,182.0	\$37.9
Subtotal, Compliance	\$1,081.9	\$1,309.0	\$1,348.0	\$39.0
Enforcement				
Civil Enforcement	\$785.4	\$883.0	\$884.0	\$1.0
Criminal Enforcement	\$8,611.7	\$8,502.2	\$9,167.0	\$664.8
Enforcement Training	\$568.9	\$621.9	\$840.0	\$218.1
Environmental Justice	\$638.6	\$756.7	\$757.0	\$0.3
Forensics Support	\$3,600.9	\$4,184.2	\$2,310.0	(\$1,874.2)
Superfund: Enforcement	\$161,995.4	\$163,650.5	\$161,610.0	(\$2,040.5)
Superfund: Federal Facilities Enforcement	\$9,117.9	\$10,196.9	\$9,843.0	(\$353.9)
Subtotal, Enforcement	\$185,318.8	\$188,795.4	\$185,411.0	(\$3,384.4)
Homeland Security				

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Homeland Security: Communication and Information				
Laboratory Preparedness and Response	\$100.4	\$300.0	\$0.0	(\$300.0)
Subtotal, Homeland Security: Communication and Information	\$100.4	\$300.0	\$0.0	(\$300.0)
Homeland Security: Critical Infrastructure Protection				
Decontamination	\$77.7	\$198.0	\$198.0	\$0.0
Homeland Security: Critical Infrastructure Protection (other activities)	\$907.4	\$1,373.6	\$1,659.0	\$285.4
Subtotal, Homeland Security: Critical Infrastructure Protection	\$985.1	\$1,571.6	\$1,857.0	\$285.4
Homeland Security: Preparedness, Response, and Recovery				
Decontamination	\$39.2	\$12,271.3	\$10,527.0	(\$1,744.3)
Laboratory Preparedness and Response	\$0.0	\$9,500.0	\$6,064.0	(\$3,436.0)
Homeland Security: Preparedness, Response, and Recovery (other activities)	\$40,360.8	\$28,003.6	\$28,689.0	\$685.4
Subtotal, Homeland Security: Preparedness, Response, and Recovery	\$40,400.0	\$49,774.9	\$45,280.0	(\$4,494.9)
Homeland Security: Protection of EPA Personnel and Infrastructure	\$534.7	\$594.2	\$594.0	(\$0.2)
Subtotal, Homeland Security	\$42,020.2	\$52,240.7	\$47,731.0	(\$4,509.7)
Information Exchange / Outreach				
Congressional, Intergovernmental, External Relations	\$35.4	\$130.4	\$155.0	\$24.6
Exchange Network	\$1,883.6	\$1,432.4	\$1,433.0	\$0.6
Subtotal, Information Exchange / Outreach	\$1,919.0	\$1,562.8	\$1,588.0	\$25.2
IT / Data Management / Security				
Information Security	\$341.0	\$788.6	\$792.0	\$3.4
IT / Data Management	\$16,646.2	\$17,120.4	\$16,338.0	(\$782.4)
Subtotal, IT / Data Management / Security	\$16,987.2	\$17,909.0	\$17,130.0	(\$779.0)
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	\$559.4	\$887.2	\$837.0	(\$50.2)
Legal Advice: Environmental Program	\$624.6	\$690.8	\$606.0	(\$84.8)
Subtotal, Legal / Science / Regulatory / Economic Review	\$1,184.0	\$1,578.0	\$1,443.0	(\$135.0)

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Operations and Administration				
Financial Assistance Grants / IAG Management	\$2,752.7	\$2,920.8	\$3,049.0	\$128.2
Facilities Infrastructure and Operations	\$66,365.6	\$73,944.7	\$74,956.0	\$1,011.3
Acquisition Management	\$19,577.1	\$23,514.3	\$24,645.0	\$1,130.7
Human Resources Management	\$5,282.1	\$5,270.2	\$5,036.0	(\$234.2)
Central Planning, Budgeting, and Finance	\$21,783.7	\$25,540.8	\$24,306.0	(\$1,234.8)
Subtotal, Operations and Administration	\$115,761.2	\$131,190.8	\$131,992.0	\$801.2
Research: Human Health and Ecosystems				
Human Health Risk Assessment	\$3,604.4	\$3,847.2	\$3,972.0	\$124.8
Research: Land Protection				
Research: Land Protection and Restoration	\$22,210.2	\$21,963.9	\$20,081.0	(\$1,882.9)
Research: SITE Program	\$4,628.0	\$0.0	\$0.0	\$0.0
Subtotal, Research: Land Protection	\$26,838.2	\$21,963.9	\$20,081.0	(\$1,882.9)
Research: Sustainability				
Research: Sustainability	\$292.0	\$0.0	\$0.0	\$0.0
Superfund Cleanup				
Superfund: Emergency Response and Removal	\$205,038.7	\$192,398.9	\$191,880.0	(\$518.9)
Superfund: EPA Emergency Preparedness	\$11,115.1	\$8,863.1	\$9,318.0	\$454.9
Superfund: Federal Facilities	\$32,461.2	\$31,486.6	\$31,879.0	\$392.4
Superfund: Remedial	\$667,056.2	\$581,594.9	\$584,836.0	\$3,241.1
Superfund: Support to Other Federal Agencies	\$4,989.0	\$8,575.4	\$6,575.0	(\$2,000.4)
Brownfields Projects	\$9,319.5	\$0.0	\$0.0	\$0.0
Subtotal, Brownfields Projects	\$9,319.5	\$0.0	\$0.0	\$0.0
Subtotal, Superfund Cleanup	\$929,979.7	\$822,918.9	\$824,488.0	\$1,569.1

Program Area: Air Toxics And Quality

Radiation: Protection

Program Area: Air Toxics and Quality
Goal: Clean Air and Global Climate Change
Objective(s): Radiation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$11,301.6	\$10,648.6	\$10,186.0	(\$462.6)
Science & Technology	\$2,311.9	\$2,054.3	\$2,120.0	\$65.7
<i>Hazardous Substance Superfund</i>	<i>\$1,938.3</i>	<i>\$2,323.3</i>	<i>\$2,373.0</i>	<i>\$49.7</i>
Total Budget Authority / Obligations	\$15,551.8	\$15,026.2	\$14,679.0	(\$347.2)
Total Workyears	95.7	96.6	88.6	-8.0

Program Project Description:

This program addresses potential radiation risks found at some Superfund sites. Through this program, EPA ensures that Superfund site clean-up activities reduce and/or mitigate the health and environmental risk of radiation to safe levels. In addition, the program makes certain that appropriate clean up technologies and methods are adopted to effectively and efficiently reduce the health and environmental hazards associated with radiation problems encountered at the sites. Finally, the program ensures that appropriate technical assistance is provided on remediation approaches for National Priority List (NPL) and non-NPL sites.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's National Air and Radiation Environmental Laboratory (NAREL) and Radiation and Indoor Environments National Laboratory (R&IE) will continue to provide analytical support to manage and mitigate radioactive releases and exposures. Both labs routinely provide analytical and technical support for the characterization and cleanup of Superfund and Federal Facility sites. Laboratory support focuses on providing high quality data to support Agency decisions at sites across the country. In addition, both labs provide data evaluation and assessment, document review and field support through on-going fixed and mobile capability. Thousands of radiochemical and mixed waste analyses (NAREL is EPA's only laboratory with in-house mixed waste analytical capability) are performed annually at NAREL on a variety of matrices from contaminated sites. R&IE also provides field-based analytical capability for screening and identifying radiological contaminants at NPL and non-NPL sites across the country, including mobile scanner van and air sampling equipment and personnel.

Performance Targets:

EPA is on track through its ongoing work to meet its 2011 strategic plan goal of protecting public health and the environment from unwanted releases of EPA regulated radioactive waste and to minimize impacts to public health from radiation exposure. EPA is developing new outcome-oriented strategic and annual performance measures for this program in preparation for

a 2007 PART assessment. The program will have new performance measures to report in FY 2009. EPA will continue to track progress on routine program indicators such as preparedness and response capability for radiological incidents.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$49.0) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$0.7) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CERCLA, as amended by the SARA of 1986.

Program Area: Audits, Evaluations And Investigations

Audits, Evaluations, and Investigations

Program Area: Audits, Evaluations, and Investigations

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Inspector General	\$36,501.5	\$35,100.0	\$38,008.0	\$2,908.0
<i>Hazardous Substance Superfund</i>	<i>\$13,243.5</i>	<i>\$13,316.0</i>	<i>\$7,149.0</i>	<i>(\$6,167.0)</i>
Total Budget Authority / Obligations	\$49,745.0	\$48,416.0	\$45,157.0	(\$3,259.0)
Total Workyears	335.9	361.8	331.8	-30.0

Program Project Description:

EPA's Office of Inspector General (OIG) provides audit, evaluation, investigative, inspection, and public liaison services that fulfill the requirements of the Inspector General Act, as amended, by promoting economy, efficiency, and effectiveness in the operations of the Agency's Superfund program. OIG activities add value and enhance public trust by providing the Agency and Congress with independent analyses and recommendations that help resolve management challenges and identify best practices for efficiently and effectively accomplishing EPA's environmental goals and safeguarding resources. They also result in the prevention, detection, and prosecution of financial fraud, laboratory fraud, and cyber crime.

FY 2008 Activities and Performance Plan:

The EPA OIG will assist the Agency in its efforts to reduce environmental and human health risks by helping to improve Superfund program operations, save taxpayer dollars, and resolve major management challenges. In FY 2008, the OIG will emphasize the themes of accountability, risk reduction, data integrity, leveraging resources, and land preservation, restoration and reuse, leading to positive results and the attainment of EPA's strategic goals.

Audits and Evaluations

OIG audits and evaluations will determine if EPA is making progress toward efficiently and effectively reducing human health risks; taking effective enforcement actions; cleaning up hazardous waste; restoring previously polluted sites to appropriate uses; and ensuring long-term stewardship of polluted sites. The OIG will evaluate how effective EPA and other Federal agencies have been at addressing and resolving human health and environmental risks at facilities on the National Priorities List and other sites that are supported by Superfund resources.

The OIG will continue to review: 1) EPA's management of Superfund special accounts, actions on closing accounts, and other actions to improve management of these accounts; 2) progress and challenges in achieving new GPRA goals for "sites ready for reuse" and ensuring long-term stewardship at sites; 3) prevention of future Superfund sites through effective implementation of prevention programs such as RCRA and other EPA authorities; 4) the basis for needs determinations and allocation of Superfund resources; and 5) cost recoveries from responsible parties. The OIG will also evaluate ways to maximize results achieved from its Superfund contracts and assistance agreements.

Investigations

OIG investigations include efforts to uncover criminal activity pertaining to the Superfund program. The OIG will conduct investigations into allegations or indications, and seek prosecution, of: 1) fraudulent practices in awarding, performance, charging, and payment on EPA Superfund contracts, grants, or other assistance agreements; 2) program fraud or other acts that undermine the integrity of or confidence in the Superfund program and create imminent environmental or human health risks; 3) false claims for erroneous laboratory results that undermine the basis for Superfund decision-making, regulatory compliance, or enforcement actions; and 4) intrusions into EPA's computer systems as well as incidents of computer misuse. Further, the OIG will assist EPA in testing environmental information technology infrastructure and information networks against threats of intrusion or destruction.

Public Liaison

Public liaison work will continue to address critical public and governmental concerns related to the Superfund program. This activity involves responding to requests from the public, Congress, EPA employees, or other government entities for information and responses to complaints or allegations of fraud, waste, abuse, or mismanagement in EPA's Superfund program. To accomplish this work, the Inspector General (IG) initiates reviews and if needed contracts with subject matter experts to assist with such reviews, and coordinates these efforts with ongoing audits, evaluations, or investigations.

Performance Targets:

Work under this program supports multiple strategic objectives. Performance information is included in the Program Performance and Assessment section.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$2,424.9) This reflects a transfer of payroll resources to the IG appropriation in order to increase the range of issues on which the OIG can focus its audits, investigations, and evaluations.
- (-\$2,882.8) This reflects a decreased emphasis on Superfund-related activities based on historical work trends.

- (-\$859.3) This decrease reflects the transfer of Defense Contract Audit Agency services and oversight to OARM.
- (-20.0 FTE) This reflects a transfer of resources from the OIG's Superfund resources to increase the range of issues on which the OIG can focus its audits, investigations, and evaluations.
- (-30.0 FTE) This reflects a decreased emphasis on Superfund-related activities based on historical work trends.

Statutory Authority:

Inspector General Act, as amended; SARA; CERCLA; TSCA.

Program Area: Compliance

Compliance Assistance and Centers

Program Area: Compliance

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$27,774.3	\$28,890.7	\$29,547.0	\$656.3
Leaking Underground Storage Tanks	\$481.3	\$839.1	\$688.0	(\$151.1)
Oil Spill Response	\$257.8	\$280.2	\$291.0	\$10.8
<i>Hazardous Substance Superfund</i>	<i>\$11.0</i>	<i>\$22.2</i>	<i>\$22.0</i>	<i>(\$0.2)</i>
Total Budget Authority / Obligations	\$28,524.4	\$30,032.2	\$30,548.0	\$515.8
Total Workyears	197.9	212.1	208.4	-3.7

Program Project Description:

The Compliance Assistance and Centers program includes a range of activities and tools designed to improve compliance with Superfund-related environmental laws. Regulated entities, Federal agencies, and the public benefit from easy access to tools that help them understand these laws and find effective, efficient means for putting them into practice. To achieve these goals, the Compliance Assistance and Centers (CAC) program provides information, training and technical assistance to the regulated community to increase its understanding of statutory and regulatory environmental requirements, thereby gaining measurable improvements in compliance and reducing risks to human health and the environment. The program also provides tools and information to other compliance assistance providers in order to help the regulated community comply with environmental requirements.¹

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to provide general and targeted compliance assistance to the regulated community and integrate assistance into its enforcement and compliance assurance efforts. Superfund-related compliance assistance activities are mainly reported and tracked through the Agency's Integrated Compliance Information System (ICIS). In FY 2008, the Compliance Assistance program will provide Superfund support for ICIS and the ongoing enhancements to ICIS for continued support of the federal enforcement and compliance program. EPA will continue to ensure the security and integrity of these systems, and will use ICIS data to support Superfund-related regulatory enforcement program activities.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states,

¹ For more information, refer to: www.epa.gov/compliance/assistance/index.html; www.epa.gov/clearinghouse; and www.assistancecenters.net.

other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

EPA's Compliance Assistance Program achieves pollutant reductions, improves regulated entities' environmental management practices, and increases regulated entities understanding of environmental requirements through direct compliance assistance provided by EPA personnel, and through on-line compliance assistance centers and the clearinghouse.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$0.2) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

RCRA; CERCLA; CWA; SDWA; CAA; TSCA; EPCRA; RLBPHRA; FIFRA; ODA; NAAEC; LPA-US/MX-BR; NEPA.

Compliance Incentives

Program Area: Compliance

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$8,338.9	\$9,702.2	\$9,786.0	\$83.8
<i>Hazardous Substance Superfund</i>	<i>\$156.5</i>	<i>\$142.7</i>	<i>\$144.0</i>	<i>\$1.3</i>
Total Budget Authority / Obligations	\$8,495.4	\$9,844.9	\$9,930.0	\$85.1
Total Workyears	68.3	76.6	74.6	-2.0

Program Project Description:

To improve compliance with Superfund-related environmental laws, EPA actively encourages business owners and operators that run similar operations at multiple facilities to disclose their violations to the Agency. These disclosures allow entities to review their operations holistically, and often nationally, which more effectively benefits the environment. Under the Audit Policy, when companies voluntarily discover and promptly correct environmental violations, EPA may waive or substantially reduce civil penalties. Activities are tracked and reported using the Integrated Compliance Information System (ICIS).¹

FY 2008 Activities and Performance Plan:

In FY 2008, the Compliance Incentives program (CIP) will provide Superfund support for ICIS and ongoing enhancements to continue support of the Federal enforcement and compliance program. EPA will continue to ensure the security and integrity of these systems, and will use ICIS data to support Superfund-related regulatory enforcement program activities.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

¹ For more information, refer to: www.epa.gov/compliance/incentives/programs/index.html.

Performance Targets:

EPA's Compliance Incentive programs encourage regulated entities to monitor and quickly correct environmental violations to achieve pollutant reductions, and improvements in regulated entities environmental management practices. One of the key Civil Enforcement PART program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions². For more information on measures and results pertaining to reduction in pollution from enforcement actions, please see the Civil Enforcement and Compliance Incentives program projects in the Environmental Programs & Management section of this report. The Agency is exploring methodologies to strengthen the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$0.4) This reflects a minor reduction to compliance incentives program.
- (+\$1.7) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

RCRA; CWA; SDWA; CAA; TSCA; EPCRA; RLBPHRA; FIFRA; ODA; NEPA; NAAEC; LPA-US/MX-BR.

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Compliance Monitoring

Program Area: Compliance

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$86,635.1	\$93,018.8	\$93,428.0	\$409.2
<i>Hazardous Substance Superfund</i>	<i>\$914.4</i>	<i>\$1,144.1</i>	<i>\$1,182.0</i>	<i>\$37.9</i>
Total Budget Authority / Obligations	\$87,549.5	\$94,162.9	\$94,610.0	\$447.1
Total Workyears	614.4	632.0	629.5	-2.5

Program Project Description:

The Compliance Monitoring program reviews and evaluates the activities of the regulated community to determine compliance with applicable laws, regulations, permit conditions, and settlement agreements by conducting compliance inspections/evaluations, investigations, record reviews, and information requests, and by responding to tips and complaints from the public. The program conducts these activities to determine whether conditions that exist may present imminent and substantial endangerment to human health or the environment and to verify whether regulated sites are in compliance with environmental laws and regulations.

The Superfund portion of the Compliance Monitoring program focuses on providing information system support for monitoring compliance with Superfund-related environmental regulations and contaminated site clean-up agreements. The program will also ensure the security and integrity of its compliance information systems.

FY 2008 Activities and Performance Plan:

Superfund-related compliance monitoring activities are mainly reported and tracked through the Agency's Integrated Compliance Information System (ICIS). In FY 2008, the Compliance Monitoring program will provide Superfund support for ICIS and the ongoing enhancements to ICIS for continued support of the Federal enforcement and compliance program. EPA will continue to ensure the security and integrity of these systems, and will use ICIS data to support Superfund-related regulatory enforcement program activities.

EPA will continue to make Superfund-related compliance monitoring information available to the public through the Enforcement and Compliance History On-line (ECHO) Internet website in FY 2008. This site provides communities with information on compliance status. EPA will continue to develop additional tools and data for public use. ECHO is a valuable tool, averaging about 65,000 queries per month.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's

direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. (civil enf)	890	450	500	550	Million pounds

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of concluded enforcement cases requiring that pollution be reduced, treated, or eliminated.	Data Available FY 2008	30	30	30	Percentage

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percentage of concluded enforcement cases requiring implementation of improved environmental management practices.	82	65	70	70	Percentage

EPA's Monitoring and Enforcement Program achieves pollutant reductions, and improvements in regulated entities environmental management practices through the settlement of enforcement cases. One of the key Civil Enforcement PART program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions¹. The Agency is exploring methodologies to extend the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

¹ With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Although the estimated pollution reductions, resulting from enforcement actions taken by EPA have grown over the past five years, these pollutant reductions are projections based on the settlement agreements entered during each specific fiscal year. One or two cases can have a significant effect on the end-of-year results.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$3.8) The enforcement program has invested effort to re-host the Integrated Data Enforcement Analysis (IDEA) system on a less costly mainframe platform, which the program expects will allow reductions in the cost of IDEA operations.
- (+\$39.7) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$2.0) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

RCRA; CWA; SDWA; CAA; TSCA; EPCRA; RLBPHRA; FIFRA; ODA; NAAEC; LPA-US/MX-BR; NEPA.

Program Area: Enforcement

Civil Enforcement

Program Area: Enforcement

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$118,560.9	\$120,777.7	\$126,645.0	\$5,867.3
Oil Spill Response	\$1,759.1	\$1,826.3	\$2,065.0	\$238.7
<i>Hazardous Substance Superfund</i>	<i>\$785.4</i>	<i>\$883.0</i>	<i>\$884.0</i>	<i>\$1.0</i>
Total Budget Authority / Obligations	\$121,105.4	\$123,487.0	\$129,594.0	\$6,107.0
Total Workyears	936.4	958.5	969.1	10.6

Program Project Description:

The overarching goal of the Civil Enforcement program is to protect human health and the environment, targeting Superfund-related enforcement actions according to degree of health and environmental risk posed by environmental violations. The program works with the Department of Justice to ensure consistent and fair enforcement of Superfund-related environmental laws and regulations. The program aims to level the economic playing field by ensuring that violators do not realize an economic benefit from noncompliance and seeks to deter future violations. The Civil Enforcement program develops, litigates, and settles administrative and civil judicial cases against serious violators of environmental laws.¹

FY 2008 Activities and Performance Plan:

Financial assurance requirements are intended to ensure that adequate funds are available to address closure and clean up of facilities that handle hazardous wastes, hazardous substances, toxic materials, or other pollutants. EPA selected financial responsibility under both the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as an enforcement program priority beginning in FY 2006. Placing more emphasis on financial responsibility will facilitate timely cleanup at contaminated sites, and closure of waste management units that are no longer being actively used, and will also keep closure and remediation costs from being shifted to the public.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and

¹ For more information refer to: www.epa.gov/compliance/civil/index.html;
www.epa.gov/epaoswer/hazwaste/ca/backgnd.htm.

Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

EPA's Monitoring and Enforcement Program achieves pollutant reductions and improvements in regulated entities' environmental management practices through the settlement of enforcement cases. One of the key Civil Enforcement PART program measures, pounds of pollutant reduced, looks at the overall reduction in pollution as a result of enforcement actions². The Agency is exploring methodologies to strengthen the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

Although the estimated pollution reductions as a result of the enforcement actions taken by EPA have grown over the past five years, these pollutant reductions are projections based on settlement agreements entered each fiscal year. One or two cases can have a significant affect on the end-of-year results. Work under this program supports the compliance and environmental stewardship objective to improve compliance.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$0.1) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (+\$1.1) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

RCRA; CERCLA; CWA; SDWA; CAA; TSCA; EPCRA; RLBPHRA; FIFRA; ODA; NAAEC; LPA-US/MX-BR; NEPA; SBLRBRERA; PPA; CERFA; AEA; UMTRLWA.

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Criminal Enforcement

Program Area: Enforcement

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$41,595.6	\$37,793.5	\$39,688.0	\$1,894.5
<i>Hazardous Substance Superfund</i>	<i>\$8,611.7</i>	<i>\$8,502.2</i>	<i>\$9,167.0</i>	<i>\$664.8</i>
Total Budget Authority / Obligations	\$50,207.3	\$46,295.7	\$48,855.0	\$2,559.3
Total Workyears	270.6	270.8	268.9	-1.9

Program Project Description:

The Criminal Enforcement program investigates and helps prosecute violations of Superfund and Superfund-related laws which seriously threaten public health and the environment and which involve intentional, deliberate or criminal behavior on the part of the violator. The Criminal Enforcement program deters violations of Superfund and Superfund related laws by demonstrating that the regulated community will be held accountable, through jail sentences and criminal fines for such violations. The program thus serves as a deterrent for potential violators, thereby enhancing aggregate compliance with laws and regulations.

The Criminal Enforcement Program conducts investigations and requests that cases be prosecuted. Where appropriate, it helps secure plea agreements or sentencing conditions that will require defendants to undertake projects to improve environmental conditions or develop environmental management systems to enhance performance. The Agency is involved in all phases of the investigative process and works with other law enforcement agencies to present a highly visible and effective force in the Agency's overall enforcement strategy. Cases are referred to the Department of Justice for prosecution, with EPA special agents serving as key witnesses in the proceedings.

The program also participates in task forces with state and local law enforcement, and provides specialized training at the Federal Law Enforcement Training Center (FLETC) in Glynco, GA. FLETC provides one of the few opportunities for state, local, and Tribal environmental enforcement professionals to obtain criminal investigation training.¹

FY 2008 Activities and Performance Plan:

In FY 2008, the Criminal Enforcement program will continue implementing its strategic approach by emphasizing investigations and prosecutions of national and regional CERCLA-related enforcement priorities as well as other types of "high impact" cases that affect human health, the environment, and enhance compliance and deterrence. The Criminal Enforcement

¹ For more information refer to: www.epa.gov/compliance/criminal/index.html.

program will continue to enhance its collaboration and coordination with the Civil Enforcement program to ensure that the enforcement program as a whole responds to violations as effectively as possible. That is effectuated by co-locating key criminal and civil enforcement managers, establishing a more effective regional case screening process to identify the most appropriate civil or criminal enforcement responses for a particular violation, and by taking criminal enforcement actions against long-term, or repeat significant non-compliers where appropriate. Coordination will also be facilitated by focusing on parallel proceedings and other mechanisms allowing us to use the most appropriate tools to address environmental violations and crimes.

EPA's Criminal Enforcement program is committed to fair and consistent enforcement of Federal laws and regulations as balanced with the flexibility to respond to region-specific environmental problems. Criminal enforcement has in place management oversight controls and national policies to ensure that violators in similar circumstances receive similar treatment under Federal environmental laws. Consistency is promoted by 1) evaluating all investigations from the national perspective; 2) overseeing all investigations to ensure compliance with national priorities; 3) conducting regular "docket reviews" (detailed review of all open investigations in each EPA Regional office) to ensure consistency with investigatory discretion guidance and enforcement priorities, and 4) developing, implementing, and periodically reviewing and revising policies and programs.

In FY 2008, the program will use data from the Criminal Case Reporting System made available through enhancements to be completed in FY 2007. Information associated with all closed criminal enforcement cases will be used to systematically compile a profile of criminal cases, including the extent to which the cases support Agency-wide, program-specific, or Regional enforcement priorities. The profile also will describe the impact of the cases in terms of pollution released into the environment and resulting environmental harm such as the degradation of drinking water wells, human populations injured or made ill, and aquatic or animal life harmed.

In FY 2008, the program also will seek to deter environmental crime by increasing the volume and quality of leads reported to EPA by the public through the tips and complaints link. The web link was established on EPA's homepage in FY 2006.

The EPA Enforcement of Environmental Laws (criminal) PART program received an "adequate" rating in 2004 with the addition of new outcome measures and the development of measure implementation plans that set targets and milestones for these measures. Subsequently, the program revised its Case Conclusion Data Sheet, conducted training, and issued the form to begin collecting new data for the Criminal Enforcement PART measures. In FY 2006, EPA established a performance baseline and target for the Pollution Reduction measure. In FY 2007, the target for the Recidivism measure will be developed when the required information from the separate criminal and civil enforcement data bases will be merged. In FY 2008, a baseline and target for the Pollutant Impact measure will be developed using three years of collected data.

Performance Targets:

In FY 2008, the Criminal Enforcement program's Pollution Reduction measure will be reported against the baseline and target set in FY 2006, which uses an average of pollutant reduction data from three fiscal years (FY 2003-2005). The results of this measure are likely to fluctuate annually due to the specific characteristics of the enforcement cases concluded during a given fiscal year. However, long-term trend analysis of this information will help the program to identify and prioritize cases that present the most serious threats to public health and the environment.

In addition, in FY 2007 the Criminal Enforcement Program will report its PART-approved measures on "improved environmental management" and "recidivism" (the targets and baselines were developed in FY 2006). The program will also develop the targets and baselines for its "pollutant impact" measure (i.e., the amount of illegal pollution released into the environment that cannot be treated, remediated or otherwise reduced) in order to begin external reporting of that measure in FY 2008. Work under this program supports the compliance and environmental stewardship objective. Currently, there are no performance measures specific to this program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$35.7 / -0.4 FTE) This reflects the consolidation of enforcement training resources that will be moved to the National Enforcement Training Institute under the enforcement training program/project.
- (+\$700.5) This reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

CERCLA; EPCRA; Pollution Prosecution Act; Title 18 General Federal Crimes (e.g., false statements, conspiracy); Power of Environmental Protection Agency (18 U.S.C. 3063).

Enforcement Training

Program Area: Enforcement

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$2,655.2	\$2,503.7	\$3,145.0	\$641.3
<i>Hazardous Substance Superfund</i>	<i>\$568.9</i>	<i>\$621.9</i>	<i>\$840.0</i>	<i>\$218.1</i>
Total Budget Authority / Obligations	\$3,224.1	\$3,125.6	\$3,985.0	\$859.4
Total Workyears	15.5	16.9	20.9	4.0

Program Project Description:

The Pollution Prosecution Act is the statutory mandate for the Agency's Enforcement Training program that provides environmental enforcement and compliance training nationwide through EPA's National Enforcement Training Institute (NETI). The program oversees the design and delivery of core and specialized enforcement courses that sustain a well-trained workforce to carry out the Agency's Superfund enforcement and compliance goals. Courses are provided to lawyers, inspectors, civil and criminal investigators, and technical experts at all levels of government.

NETI operates training facilities in Washington, D.C. and in Lakewood, CO. NETI also maintains a training center on the Internet, "NETI Online," which offers targeted technical training courses and the capability to track individual training plans. "NETI Online's" clearinghouse of training information includes links to lists of course offerings, as well as tools for Agency training providers to assist with developing managing, and evaluating the program's training.¹

FY 2008 Activities and Performance Plan:

In FY 2008, NETI will develop and deliver training to address important gaps in Superfund-related enforcement and compliance assurance knowledge and skills identified in needs assessments and national strategic plans. The NETI advisory service will assist the Agency's enforcement experts to develop course agendas and determine the most effective methods to deliver quality training to the nation's enforcement professionals.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve

¹ For more information, please refer to: <http://www.epa.gov/compliance/training/neti/index.html>

measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. (civil enf)	890	450	500	550	million pounds

One of the program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions². The Agency is exploring methodologies to extend the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

Although the estimated pollution reductions as a result of the enforcement actions taken by EPA have grown over the past five years, these pollutant reductions are projections based on the settlement agreements entered during each fiscal year. One or two cases can have a significant effect on the end-of-year results.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$56.6 / +1.2 FTE) This increase reflects the consolidation of a training function that is being moved from the Superfund Enforcement and Criminal Enforcement programs and into the National Enforcement Training Institute (NETI) located in the Enforcement Training program.
- (+161.5) This increase reflects an increase for payroll and cost of living for existing FTE.

Statutory Authority:

PPA; RLBPHRA; RCRA; CWA; SDWA; CAA; EPCRA; TSCA; FIFRA; ODA; NAAEC; LPA-US/MX-BR; NEPA.

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Environmental Justice

Program Area: Enforcement

Goal: Healthy Communities and Ecosystems

Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$4,691.5	\$3,859.0	\$3,822.0	(\$37.0)
<i>Hazardous Substance Superfund</i>	\$638.6	\$756.7	\$757.0	\$0.3
Total Budget Authority / Obligations	\$5,330.1	\$4,615.7	\$4,579.0	(\$36.7)
Total Workyears	19.7	17.9	16.9	-1.0

Program Project Description:

The Environmental Justice (EJ) program addresses environmental and/or human health concerns in all communities, including minority and/or low-income communities. Research has shown that the minority segments and low-income segments of the population have been, or could be, disproportionately exposed to environmental harm and risks.

The program also provides education, outreach, and data to communities, and facilitates the integration of environmental justice considerations into Agency programs, policies, and activities. The Agency also supports state and Tribal environmental justice programs and conducts outreach and technical assistance to states, local governments, and stakeholders on environmental justice issues.¹

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will enhance and maintain the Online Environmental Justice Geographical Information System Assessment Tool to help individuals, government, industry, and organizations better identify and address environmental and public health issues that may affect them. The Environmental Justice Geographical Information System Assessment Tool provides ready access to environmental, public health, economic, and social demographic information from EPA and other government sources.

In FY 2008, EPA will continue to assist community-based organizations in developing solutions to Superfund-related and other local environmental issues a part of the Environmental Justice Small Grants program and the Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program. Both programs have awarded more than 1,000 grants and cooperative agreements to community-based organizations and other non-profit organizations.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's

¹ For more information on the Environmental Justice program, refer to:
www.epa.gov/compliance/environmentaljustice/index.html.

direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace older measures in the Plan.

Performance Targets:

EPA will measure the results from the Environmental Justice program by tracking the cumulative number of communities with potential environmental justice concerns that achieve significant measurable environmental or public health improvement through collaborative problem-solving strategies.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$0.3) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Executive Order 12898; CERCLA, as amended.

Forensics Support

Program Area: Enforcement

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance; Enhance Societies Capacity for Sustainability through Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Science & Technology	\$13,044.2	\$13,185.2	\$15,075.0	\$1,889.8
<i>Hazardous Substance Superfund</i>	<i>\$3,600.9</i>	<i>\$4,184.2</i>	<i>\$2,310.0</i>	<i>(\$1,874.2)</i>
Total Budget Authority / Obligations	\$16,645.1	\$17,369.4	\$17,385.0	\$15.6
Total Workyears	101.8	107.8	105.8	-2.0

Program Project Description:

The Forensics Support program provides specialized scientific and technical support for the nation's most complex Superfund civil enforcement cases and provides technical expertise for non-routine Agency compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is the only accredited environmental forensics center in the nation. NEIC's Accreditation Standard has been customized to cover the civil, criminal, and special program work conducted by the program.

NEIC collaborates with state, local and Tribal agencies to provide technical assistance, consultation, and on-site investigation and inspection activities in support of the Agency's civil program. In addition, the program coordinates with the Department of Justice and other Federal, state and local law enforcement organizations in support of criminal investigations.¹

FY 2008 Activities and Performance Plan:

Efforts to stay at the forefront of environmental enforcement in FY 2008 will include the refinement of successful multi-media inspection approaches, use of customized laboratory methods to solve unusual enforcement case problems, and applied research and development for both laboratory and field applications. In response to Superfund case needs, the NEIC will conduct applied research and development to identify and deploy new capabilities and to test and/or enhance existing methods and techniques involving environmental measurement and forensic situations. As part of this activity, NEIC also will evaluate the scientific basis and/or technical enforceability of select EPA regulations that may impact Superfund program activities.

In FY 2008, the Forensics program will continue to function under more stringent International Standards of Operation for environmental data measurements to maintain its accreditation. The program also will continue development of emerging technologies in field measurement

¹ For more information, refer to: <http://www.epa.gov/compliance/neic/index.html>.

techniques and laboratory analytical techniques, as well as identifying sources of pollution at abandoned Superfund and other waste sites.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. (civil enf)	890	450	500	550	million pounds

One of the program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions². The Agency is exploring methodologies to strengthen the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

Although the estimated pollution reductions as a result of the enforcement actions taken by EPA have grown over the past 5 years, these pollutant reductions are projections based on settlement agreements entered each fiscal year. One or two cases can have a significant effect on the end-of-year results.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$352.6 / -7.5 FTE) This decrease reflects a transfer to NEIC's Science and Technology budget reflecting a shift in NEIC workload from Superfund related projects to projects which support other media.
- (-2.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

- (-\$50.0) This decrease will reduce available funding for laboratory equipment at the National Enforcement Investigations Center (NEIC).
- (+\$1.1) This increase is associated with increased programmatic laboratory fixed costs.
- (-\$1,472.7) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.

Statutory Authority:

CERCLA; EPCRA.

Superfund: Enforcement

Program Area: Enforcement

Goal: Land Preservation and Restoration

Objective(s): Restore Land

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Hazardous Substance Superfund</i>	<i>\$161,995.4</i>	<i>\$163,650.5</i>	<i>\$161,610.0</i>	<i>(\$2,040.5)</i>
Total Budget Authority / Obligations	\$161,995.4	\$163,650.5	\$161,610.0	(\$2,040.5)
Total Workyears	948.0	1,000.9	971.9	-29.0

Program Project Description:

EPA negotiates cleanup and removal agreements with Potentially Responsible Parties (PRP) at hazardous waste sites and, where negotiations fail, the Agency either takes enforcement actions to require cleanup or expends Superfund Trust Fund dollars to remediate the sites. When EPA uses Trust Fund dollars, the Superfund Enforcement program takes action against PRPs to recover the costs of the cleanup. The Department of Justice (DOJ) supports EPA's Superfund Enforcement program through negotiations and judicial actions to compel PRP clean-up and litigation to recover Trust Fund monies spent.

The Agency encourages its Regional offices to establish and use Special Accounts, which are sub-accounts within the Trust Fund. These Special Accounts segregate site-specific funds obtained from responsible parties who complete settlement agreements with EPA. These funds also act as an incentive for other PRPs to perform work they might not be willing to perform or the funds are used by the Agency to fund clean up. The result is the Agency can sustain the "polluter pays" principle, clean up more sites and also preserve appropriated dollars for sites without viable PRPs.

EPA's financial management community maintains a strong partnership with the Superfund program and provides a full array of financial management support services necessary to pay Superfund bills and recover cleanup and oversight costs for the Trust Fund. This component of the program allows the Agency to centrally manage Superfund budget formulation, justification, and execution as well as financial cost recovery. It also manages oversight billing for Superfund site cleanups (cost of overseeing the responsible parties' cleanup activities), Superfund cost documentation (the Federal cost of cleaning up a Superfund site), and refers delinquent accounts receivable and oversight debts to the DOJ for collection.

FY 2008 Activities and Performance Plan:

The Agency's Superfund program pursues an "enforcement first" policy to ensure that sites for which there are viable, liable responsible parties are cleaned up by those parties. In tandem with

this approach, various Superfund reforms have been implemented to increase fairness, reduce transaction costs, and promote economic redevelopment.¹

Throughout FY 2008, the Superfund Enforcement program will maximize PRP participation in cleanups while promoting fairness in the enforcement process and will continue to recover costs from PRPs when EPA expends money from the Trust Fund. The Agency will maximize PRP participation by reaching a settlement or taking an enforcement action by the time of a remedial action start at 95 percent of non-Federal Superfund sites that have viable, liable parties. The Agency also will continue to ensure Trust Fund stewardship through cost recovery efforts that include addressing 100 percent of past costs at sites where total past costs are equal to or greater than \$200,000 prior to the end of the statute of limitations period.

In FY 2008, the Agency will provide the DOJ with \$24.9 million, through an Interagency Agreement (IAG), to provide support for EPA's Superfund Enforcement program through such actions as negotiating consent decrees with PRPs, preparing judicial actions to compel PRP clean-up, and litigating to recover monies spent in cleaning up contaminated sites. EPA's Superfund enforcement program is responsible for case development and preparation, referral to DOJ, and post-filing actions as well as for providing case and cost documentation support for the docket of current cases with DOJ. The program also ensures that EPA meets cost recovery statute of limitation deadlines, resolves cases, issues bills for oversight, and makes collections in a timely manner. By pursuing cost recovery settlements, the program promotes the principle that polluters should perform or pay for cleanups and preserves appropriated Trust Fund resources to address contaminated sites which have no viable, liable PRPs. The Agency's expenditures will be recouped through administrative actions, CERCLA section 107 case referrals, and settlements reached with the use of alternative dispute resolution.

In FY 2008, the Agency will negotiate remedial design/remedial action cleanup agreements and removal agreements at contaminated properties. Where negotiations fail, the Agency will either take unilateral enforcement actions to require PRP cleanup or use appropriated dollars to remediate sites. When appropriated dollars are used to clean up sites, the program will recover this money from the PRPs. The Agency also will continue its efforts to establish and use special accounts to facilitate clean up.

During FY 2008, the Agency also will continue the financial management aspects of Superfund cost recovery and collections. These efforts include managing Superfund delinquent debt, maintaining the Superfund cost documentation system, and preparing cost documentation packages. The Agency will continue to refine and streamline the cost documentation process to gain further efficiencies; provide DOJ case support for Superfund sites; and calculate indirect cost rates to be applied to direct costs incurred by EPA for site cleanup. The Agency also will continue to maintain the accounting and billing of Superfund oversight costs attributable to responsible parties. These costs represent EPA's cost of overseeing Superfund site clean-up efforts by responsible parties as stipulated in the terms of settlement agreements.

¹ For more information about EPA's Superfund enforcement program, and its various components, refer to: www.epa.gov/compliance/cleanup/superfund/.

A critical component of many response actions selected by EPA is institutional controls. These are established to ensure that property is used and maintained in an appropriate manner that protects the public health after construction of the physical remedy is complete. The Superfund program will oversee the implementation and enforcement of institutional controls as part of its remedies, focusing on sites where construction of engineered remedies has been completed.

EPA also plans further improvements to its budgeting and planning system, financial data warehouse, business intelligence tools, and reporting capabilities which will support the Superfund program. These improvements will support EPA's "green" score in financial performance on the President's Management Agenda scorecard by providing more accessible data to support accountability, budget and performance integration, and management decision-making. During FY 2008, EPA will also continue to explore additional methods in its financial services to achieve greater efficiency.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Refer to DOJ, settle, or write off 100% of Statute of Limitations (SOLs) cases for SF sites with total unaddressed past costs equal to or greater than \$200,000 and report value of costs recovered.	100	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of Superfund sites at which settlement or enforcement action taken before the start of RA.	100	90	95	95	Percent

One of the program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions². The Agency is exploring methodologies to strengthen the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure.

Although the estimated pollution reductions as a result of the enforcement actions taken by EPA have grown over the past 5 years, these pollutant reductions are projections based on settlement agreements entered each fiscal year. One or two cases can have a significant effect on end-of-year results.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-6.1 FTE) This decrease reflects a change in EPA's workforce management strategy that will help the Agency better align resources, skills, and Agency priorities. This represents a slight reduction in FTE that would support the activities under the Superfund enforcement program.
- (-22.1 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills, and Agency priorities in EPA's Regional offices. This net decrease is the result of funds being redirected to support mitigating lead contamination and post construction activities in the response and remedial program, inspection efforts, and Brownfields, homeland security, and Oil spills enforcement projects.
- (-\$2,800.0) This decrease in contractor support funding is based on the Agency's priority setting process and its efforts to best align resources to meet critical mission objectives. This reduction would reduce support the activities under the Superfund enforcement program.
- (-\$1,153.1) This decrease reflects a reduction to CERCLA litigation support provided through an Interagency Agreement with the Department of Justice. The reduction is based on the program's overall priority setting process and its efforts to best align resources to meet critical mission objectives.
- (-\$105.4) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$20.0 / -0.8 FTE) This decrease reflects a transfer of funds and FTE as part of consolidation of a training function to the National Enforcement Training Institute (NETI) under the enforcement training program/project.
- (+\$230.0) This change reflects a technical correction between the Superfund Enforcement and Central Planning, Budgeting and Finance program projects. This

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

resource increase to Superfund Enforcement more accurately reflects planned support for Financial Management activities.

- (-\$200.0) This decrease reduces contract support that would be used to support the financial management aspects of Superfund cost recovery and collections.
- (+\$2,006.3) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$1.7) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act; ERCLA; SBLRBRERA; CERFA; NEPA; AEA; UMTRLWA; PHSA; Safe Drinking Water Act; CCA; FGCAA; FAIR; Federal Acquisition Regulations; FMFIA; FOIA; GMRA; IPIA; IGA; PRA; Privacy Act; CFOA; Government Performance and Results Act; The Prompt Payment Act; Executive Order 12241; Executive Order 12656.

Superfund: Federal Facilities Enforcement

Program Area: Enforcement

Goal: Land Preservation and Restoration

Objective(s): Restore Land

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Hazardous Substance Superfund</i>	<i>\$9,117.9</i>	<i>\$10,196.9</i>	<i>\$9,843.0</i>	<i>(\$353.9)</i>
Total Budget Authority / Obligations	\$9,117.9	\$10,196.9	\$9,843.0	(\$353.9)
Total Workyears	64.3	81.3	74.3	-7.0

Program Project Description:

The Superfund Federal Facilities Enforcement program ensures that all Federal facility sites on the National Priority List have interagency agreements (IAGs), which provide enforceable schedules for the progression of the entire cleanup. After years of service and operation, some Federal facilities contain environmental contamination, such as hazardous wastes, unexploded ordnance, radioactive wastes or other toxic substances. To enable the cleanup and reuse of such sites, the Federal Facilities Enforcement program coordinates creative solutions that protect both human health and the environment. These enforcement solutions help restore facilities so they can once again serve an important role in the economy and welfare of local communities and our country.

FY 2008 Activities and Performance Plan:

Pursuant to the Comprehensive Environmental Response and Compensation Act (CERCLA) Section 120, EPA will enter into IAGs with responsible Federal entities to ensure protective cleanup at a timely pace in FY 2008. EPA will also monitor milestones in existing IAGs, resolve disputes, and oversee all remedial work being conducted at Federal facilities. EPA will also continue its work with affected agencies to resolve outstanding policy issues relating to the cleanup of Federal facilities.

The EPA Enforcement of Environmental Laws (Civil) PART program received an “adequate” rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

One of the program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions¹. The Agency is exploring methodologies to extend the measure by analyzing the risk associated with the pollutants reduced. This may entail analysis of pollutant hazards and population exposure. Work under this program supports Restore Land and Improve Compliance, although currently no specific performance measures exist for the program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-5.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction will reduce the amount of FTE used for negotiating and enforcing interagency agreements with other Federal agencies.
- (-2.0 FTE) This decrease reflects a realignment of FTE which support oversight in the Federal Facility Response program. The decrease aligns FTE with the way the program manages its sites by providing oversight at National Priority List Superfund sites.
- (-\$358.4) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.

Statutory Authority:

CERCLA; SBLRBRERA; DBCRA; Defense Authorization Amendments; BRAC; PPA; CERFA; NEPA; AEA; UMTRLWA; PHSA; DRRA; SDWA; Executive Order 12241; Executive Order 12656.

¹ With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Program Area: Homeland Security

Homeland Security: Communication and Information

Program Area: Homeland Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$5,280.0	\$6,799.7	\$6,906.0	\$106.3
<i>Hazardous Substance Superfund</i>	<i>\$100.4</i>	<i>\$300.0</i>	<i>\$0.0</i>	<i>(\$300.0)</i>
Total Budget Authority / Obligations	\$5,380.4	\$7,099.7	\$6,906.0	(\$193.7)
Total Workyears	7.3	13.0	17.0	4.0

Program Project Description:

This program designs, develops, deploys and maintains EPA's rapid response infrastructure. That infrastructure provides rapid access to communication tools (mobile phone access via high speed Internet lines), accelerated transfers of data, models and maps to support response activities (e.g., plume models and maps to determine the extent of contamination), and enhanced staff access to all EPA data and Web resources.

FY 2008 Activities and Performance Highlights:

EPA's FY 2008 resources in the Information Security and IT/Data Management programs will continue to support the Agency's rapid response infrastructure.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$300.0) This reduction reflects successful deployment of the LAN-in-a-Box program to mobile labs funded by this appropriation. LAN-in-a-Box equipped those mobile laboratories with high speed, secure access to the Internet and EPA Wide Area Network.

Statutory Authority:

NCP; CERCLA; CWA; Homeland Security Act of 2002; Defense Against Weapons of Mass Destruction Act (Title XIV of Public Law 104-201).

Homeland Security: Critical Infrastructure Protection

Program Area: Homeland Security

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$4,717.4	\$7,242.7	\$7,787.0	\$544.3
Science & Technology	\$13,306.1	\$45,251.0	\$25,586.0	(\$19,665.0)
<i>Hazardous Substance Superfund</i>	<i>\$985.1</i>	<i>\$1,571.6</i>	<i>\$1,857.0</i>	<i>\$285.4</i>
Total Budget Authority / Obligations	\$19,008.6	\$54,065.3	\$35,230.0	(\$18,835.3)
Total Workyears	47.1	59.0	59.0	0.0

Program Project Description:

This program involves Superfund activities that coordinate and support protection of the nation's critical public infrastructure from terrorist threats. Through this program, EPA provides subject matter expertise and training support for terrorism-related environmental investigations to support responses authorized under CERCLA. The program coordinates the Agency's law enforcement / crisis management activities and participates in Homeland Security Presidential Directives 5, 7, 8 and 10 activities while also having direct responsibilities pursuant to the National Response Plan, Emergency Support Functions 10 and 13 and the Oil and Hazardous Materials Annex.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to focus on its goal to train all EPA criminal investigators in "Hot Zone Forensic Evidence Collection" typically utilized at crime scenes involving weapons of mass destruction as well as environmental crimes. The program will continue this multi-year effort to train and provide these agents with the necessary specialized response and evidence collection equipment. This will enable EPA criminal investigators to collect evidence and process a crime scene safely and effectively in a contaminated environment.

Advanced crime scene processing training will also be provided to those EPA criminal investigators assigned to the National Counter Terrorism Evidence Response Team (NCERT). EPA criminal investigators will continue to provide environmental expertise for criminal cases and support the FBI and Department of Homeland Security (DHS) during select National Special Security Events (NSSE) and in the event of a terrorist attack anywhere in the United States. Additionally, EPA criminal investigators will provide more robust support, involving evidence collection, to the BioWatch, Water Security Initiative and RadNet programs. During FY 2008, it is anticipated that the number of NSSEs and other events to which EPA criminal investigators are deployed will remain high.

Performance Targets:

Work under this program supports multiple performance objectives. Currently, there are no performance measures specific to this program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$284.4) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$1.0) This increase is for IT and telecommunications resources.

Statutory Authority:

CERCLA as amended; EPCRA; FFSA; Pollution Prosecution Act.

Homeland Security: Preparedness, Response, and Recovery

Program Area: Homeland Security

Goal: Land Preservation and Restoration

Objective(s): Restore Land

Goal: Healthy Communities and Ecosystems

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$1,659.2	\$3,328.7	\$3,381.0	\$52.3
Science & Technology	\$32,692.8	\$44,498.1	\$40,768.0	(\$3,730.1)
<i>Hazardous Substance Superfund</i>	<i>\$40,400.0</i>	<i>\$49,774.9</i>	<i>\$45,280.0</i>	<i>(\$4,494.9)</i>
Total Budget Authority / Obligations	\$74,752.0	\$97,601.7	\$89,429.0	(\$8,172.7)
Total Workyears	148.6	165.6	167.6	2.0

Program Project Description:

EPA's Homeland Security Emergency Preparedness and Response program develops and maintains an agency-wide capability to respond to incidents of national significance with emphasis on those that may involve Weapons of Mass Destruction (WMD). The program builds upon EPA's 30 year-old emergency response and removal program which is responsible for responding and cleaning-up both oil and hazardous substance releases. EPA's homeland security effort expands these responsibilities to include threats associated with radiological, biological, and chemical agents. Over the next several years the Agency will focus on building the capacity to respond to multiple simultaneous incidents of national significance. To meet this challenge the Agency will use a comprehensive approach that brings together all emergency response assets to implement efficient and effective responses. Another priority for this program is improving research, development and technical support for potential threats and response protocols.

FY 2008 Activities and Performance Plan:

In FY 2008, efforts to develop the capability described above will concentrate on four key areas: 1) maintaining a highly skilled, well-trained and equipped response workforce that can rise to the challenge of responding to simultaneous incidents as well as threats involving WMD substances; 2) continuing to develop decontamination options, methods, and protocols to ensure that the nation can quickly recover from nationally significant incidents; 3) establishing a nationwide environmental laboratory network capability to enhance coordination and standardization of laboratory support; and 4) implementing the EPA's National Approach to Response (NAR) to effectively manage EPA's emergency response assets during large-scale activations. EPA activities in support of these efforts include the following:

- Participating at national events that require a heightened level of security. EPA estimates it will pre-deploy its emergency response personnel and response assets to three such national security events.
- Maintaining the skills of EPA's On-Scene Coordinators (OSCs) through specialized training, exercises and equipment. In FY 2008, EPA will strive to conduct training in cluster locations in order to reach a greater audience. EPA will continue procurement of high priority upgrades of specialized response equipment for OSCs.
- Continue to develop data portability tools for field responders. This includes full integration of the decontamination portfolio in the emergency portal enabling users to access the information online and download onto multiple types of portable devices. EPA will continue to manage, collect and validate the portfolio content for new and existing WMD agents as new decontamination techniques are developed or other information emerges from the scientific community.
- Continue to establish a national environmental laboratory capability and capacity (known as the Environmental Laboratory Response Network or eLRN) to coordinate with other established laboratory networks that can provide lab analysis in the aftermath of a terrorist attack. Activities will include participation with the Integrated Consortium of Laboratory Networks, maintaining and updating a laboratory compendium of Federal, state and commercial capabilities, and continuing to develop and maintain a chemical surety program, including fixed and mobile assets. For the surety program, EPA will purchase an additional Portable High-Throughput Integrated Laboratory Identification System (PHILIS) unit to enhance mobile capabilities and continue to build state fixed capacity through a competitive grant program.
- Implementing the National Approach to Response to maximize regional interoperability and to ensure that EPA's OSCs will be able to respond to terrorist threats and incidents of national significance in an effective, nationally consistent manner.
- Continue to develop and validate environmental sampling, analysis and human health risk assessment methods for known and emerging biological threat agents in accordance with Homeland Security Presidential Directive-10. These sampling and analysis methods are critical to ensuring appropriate response and recovery actions and developing necessary laboratory support capacity. The human health risk assessment methods also are extremely important to decisions makers who are faced with determining when decontaminated facilities and equipment can be returned to service. This decontamination and consequence management research will produce data, information, and technologies to assist EPA in developing standards, protocols, and capabilities to recover from and mitigate the risks associated with biological attacks.

Performance Targets:

Work under this program supports multiple performance objectives. Currently, there are no performance measures specific to this program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$655.0) This reflects an increase for payroll and cost of living for existing and new FTE.
- (+4.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills, and Agency priorities. This increase will improve EPA Regional response capabilities, disaster planning, and preparedness for homeland security incidents.
- (-\$3,200 / -2.0 FTE) This reflects the basic funding level required to maintain the eLRN and its coordination with existing laboratory networks and maintain a chemical surety program at the Federal and state levels.
- (-\$1,800.0) This decrease reflects a reduction to planned decontamination activities. The Agency will modify its emergency response training strategy to reduce costs and at the same time reach a larger audience; slow the pace of procuring field response equipment; and make a minimal reduction to efforts to evaluate decontamination methods and disposal options, although this reduction will not affect work already underway.
- (-\$84.7) This reflects a reduction in program travel expenses.
- (-\$64.9) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$0.3) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CERCLA Section 104, 105, 106; Clean Water Act; Oil Pollution Act.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$8,845.1	\$6,268.9	\$6,345.0	\$76.1
Science & Technology	\$3,013.8	\$2,079.0	\$594.0	(\$1,485.0)
Building and Facilities	\$10,800.9	\$11,385.1	\$7,870.0	(\$3,515.1)
<i>Hazardous Substance Superfund</i>	<i>\$534.7</i>	<i>\$594.2</i>	<i>\$594.0</i>	<i>(\$0.2)</i>
Total Budget Authority / Obligations	\$23,194.5	\$20,327.2	\$15,403.0	(\$4,924.2)
Total Workyears	3.0	3.0	3.0	0.0

Program Project Description:

This program involves activities to ensure that EPA's physical structures and assets are secure and operational and that certain physical security measures are in place to help safeguard staff in the event of an emergency, protecting the capability of EPA's vital infrastructure assets. The program also includes the personnel security clearance process, and protecting any classified information.

FY 2008 Activities and Performance Plan:

The Agency will continue to update its physical security vulnerability assessments and also continue the mitigation of medium vulnerabilities at our most sensitive facilities. The Agency will conduct exercises of Continuity of Operations (COOP) plans, activation of essential personnel to the COOP site, and implementation of its mission essential functions from its remote alternate site, including interagency operations. In FY 2008, EPA plans to support training activities and to participate in a major interagency COOP exercise and one EPA internal COOP exercise.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$0.2) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Public Health Security and Bioterrorism Emergency and Response Act of 2002; CERCLA; Public Law 104-12 (Nunn-Lugar II) National Response Plan; National Security Act of 1947, as amended (50 U.S.C. 401 et seq.).

Program Area: Information Exchange / Outreach

Congressional, Intergovernmental, External Relations

Program Area: Information Exchange / Outreach

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$48,586.7	\$52,142.7	\$49,747.0	(\$2,395.7)
<i>Hazardous Substance Superfund</i>	<i>\$35.4</i>	<i>\$130.4</i>	<i>\$155.0</i>	<i>\$24.6</i>
Total Budget Authority / Obligations	\$48,622.1	\$52,273.1	\$49,902.0	(\$2,371.1)
Total Workyears	389.5	381.1	379.1	-2.0

Program Project Description:

The Enforcement and Compliance Assurance program also contributes to the mission of this program by disseminating information about enforcement actions, compliance monitoring, and the availability of compliance assistance. Some of the tools used to inform stakeholders include: monthly Enforcement Alerts, regular news briefs about enforcement and compliance assistance activities, and a website with easily accessible tools for retrieving information.

FY 2008 Activities and Performance Plan:

The emphasis and priority of the program is to provide the vision and leadership for the full range of EPA's mission. In addition to headquarters efforts, the Regional Administrators and their staffs continue to provide leadership to their respective regional offices and the states they serve. These tools assist in building a greater understanding of CERCLA and Superfund related issues for the enforcement program's many stakeholders.

In FY 2008, the Agency will continue to foster public awareness of environmental issues and the Federal government's role in monitoring compliance and enforcing the nation's environmental laws. This awareness and support role are critical to public support and to the Agency's success in meeting its goals. The Agency will issue the following informational materials:

1) enforcement alerts, 2) accomplishments reports, 3) daily updating of the website, 4) weekly news alerts, 5) specialized list-serves with periodic postings, and 6) news releases as Superfund major cases are concluded.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states,

other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$24.3) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$0.3) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Annual Appropriations Act; Federal Advisory Committee Act; Enterprise for the Americas Initiative Act; North America Free Trade Agreement Implementation Act; RLBPHRA; NAAED; LPA-US/MX-BR; CERCLA.

Exchange Network

Program Area: Information Exchange / Outreach

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$18,725.7	\$16,048.5	\$15,364.0	(\$684.5)
<i>Hazardous Substance Superfund</i>	<i>\$1,883.6</i>	<i>\$1,432.4</i>	<i>\$1,433.0</i>	<i>\$0.6</i>
Total Budget Authority / Obligations	\$20,609.3	\$17,480.9	\$16,797.0	(\$683.9)
Total Workyears	23.8	24.0	24.0	0.0

Program Project Description:

This program supports the development and maintenance of the Environmental Information Exchange Network (the Exchange Network) with a focus on Superfund-related data. The Exchange Network is an integrated information system using standardized data formats and definitions to facilitate information sharing among EPA and its partners. The Exchange Network provides a centralized approach to receiving, distributing, and accessing timely and reliable environmental information. This program provides resources to develop, implement, operate and maintain the Agency's Central Data Exchange (CDX, www.epa.gov/cdx), EPA's node on the Exchange Network, which is the point of entry for data submissions to the Agency.

This program also develops the regulatory framework to ensure that electronic submissions are legally acceptable; establishes partnerships with states, Tribes, territories and Tribal consortia; and, supports the E-Rulemaking E-Government (E-Gov) initiative. E-Rulemaking is designed to improve the public's ability to find, view, understand and comment on Federal regulatory actions, and EPA is providing the leadership role on this effort.

FY 2008 Activities and Performance Plan:

In FY 2008, the major focus is on fulfilling the Agency's E-Gov commitments and supporting EPA's information technology initiatives. These activities build on efforts started in FY's 2004-2006 to enhance the availability, quality and analytical usefulness of environmental information for EPA and its partners and stakeholders. These efforts support data exchange by states, Tribes and other partners through the use of the Exchange Network and the CDX, EPA's node on the Exchange Network.

The Exchange Network is the cornerstone of the Agency's efforts to partner with states, Tribes and territories to exchange secure, accurate and timely information to facilitate decisions on environmental and health issues. After FY 2007, all 50 states and approximately 10 tribes will

have nodes on the Exchange Network and will be mapping data to the new schemas so it can be electronically submitted to EPA and shared with other partners. In FY 2008, EPA, states, Tribes, and territories will continue to re-engineer data systems so information that was previously not available, or not easily available, can be exchanged using common data standards and computer language called schemas. These efforts will be closely coordinated with the Agency's program offices and the system of data registries. As data flows are added, the broader use of data standards, tools that check data before it is submitted, and reusable schemas will increase the accuracy and timeliness of the data, improve analytical capabilities, and create savings through economies of scale.

In addition, EPA will improve security by implementing electronic reporting standards that support the authentication and electronic signatures of report submitters. EPA will work to provide assistance to states, Tribes and territories in implementing these standards.

Effective implementation of the Exchange Network activities relies on close coordination with the Information Security, Agency Architecture, and data management activities. Coordination helps to ensure that necessary security measures are adhered to, system platforms follow the Agency's Enterprise Architecture, and data management follows documented standards.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data.	32	29	36	43	Systems

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Number of users from states, tribes, laboratories, and others that choose CDX to report environmental data electronically to EPA.	62,000	47,000	55000	70000	Users

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$0.6) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

FACA; GISRA; CERCLA; CAAA; CWA and amendments; ERD & DAA; TSCA; FIFRA; FQPA; SDWA and amendments; FFDCA; EPCRA; CERCLA; SARA; GPRA; GMRA; CCA; PRA; FOIA; CSA; PR; EFOIA.

Program Area: IT / Data Management / Security

Information Security

Program Area: IT / Data Management / Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$4,198.5	\$5,562.1	\$5,583.0	\$20.9
<i>Hazardous Substance Superfund</i>	<i>\$341.0</i>	<i>\$788.6</i>	<i>\$792.0</i>	<i>\$3.4</i>
Total Budget Authority / Obligations	\$4,539.5	\$6,350.7	\$6,375.0	\$24.3
Total Workyears	8.5	15.8	15.8	0.0

Program Project Description:

The Information Security program protects the confidentiality, availability, and integrity of EPA's Superfund information assets. The program establishes a risk-based cyber security program using a defense-in-depth approach that includes partnering with other Federal agencies and the states; implements aggressive efforts to respond to evolving threats and computer security alerts and incidents, and integrates information security into its day-to-day business; manages the Federal Information Security Management Act (FISMA) data collection and reporting requirements; and, supports the development, implementation and operation and maintenance of the ASSERT security documentation system.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue its technical and system analyses, evaluations and assessments to maintain the security of EPA's information. The constant system and network monitoring is essential to detect and identify any potential weaknesses or vulnerabilities that might compromise EPA's information assets. These proactive efforts allow EPA also to develop cost effective solutions that support EPA's long-term goal of building analytical capacity. EPA also will coordinate information security activities with the Homeland Security IT, Exchange Network and IT/Data Management program requirements and, where possible, identify and implement more efficient solutions.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of Federal Information Security Management Act	100	100	100	100	Percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	reportable systems that are certified and accredited.					

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$4.3) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$0.9) The decrease reflects expected efficiencies that will be achieved in infrastructure support.

Statutory Authority:

FISMA; GPRA; GMRA; CCA; PRA; FOIA; PR; EFOIA.

IT / Data Management

Program Area: IT / Data Management / Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$98,871.4	\$96,807.2	\$91,019.0	(\$5,788.2)
Science & Technology	\$4,412.9	\$4,268.0	\$3,499.0	(\$769.0)
Leaking Underground Storage Tanks	\$130.9	\$175.9	\$177.0	\$1.1
Oil Spill Response	\$38.8	\$32.5	\$34.0	\$1.5
<i>Hazardous Substance Superfund</i>	<i>\$16,646.2</i>	<i>\$17,120.4</i>	<i>\$16,338.0</i>	<i>(\$782.4)</i>
Total Budget Authority / Obligations	\$120,100.2	\$118,404.0	\$111,067.0	(\$7,337.0)
Total Workyears	515.5	488.0	488.0	0.0

Program Project Description:

This Superfund IT Data/Management program manages and coordinates the Agency's Enterprise Architecture and develops analytical tools (e.g., Environmental Indicators) to ensure sound environmental decision-making for the Superfund program. The program 1) implements the Agency's (E-Gov) responsibilities; designs, develops and manages the Agency's Internet and Intranet resources including the Integrated Portal, 2) supports the development, collection, management, and analysis of environmental data (to include both point source and ambient data) to manage statutory programs and to support the Agency in strategic planning at the national, program, and regional levels; provides a secure, reliable, and capable information infrastructure based on a sound enterprise architecture which includes data standardization, integration, and public access, 3) manages the Agency's Quality System ensuring EPA's processes and data are of quality and adhere to Federal guidelines, and, 4) supports regional information technology infrastructure, administrative and environmental programs, and telecommunications. These functions are integral to the implementation of Agency information technology programs and systems like the Exchange Network, the Central Data Exchange (CDX) and Permit Compliance System (PCS). Agency offices rely on the IT/Data Management program and its capabilities to develop and implement tools for ready access to accurate and timely data. Recent partnerships include portals projects with the Offices of Research and Development and Air and Radiation to access scientific and program data. The IT Data/Management program provides support to the Agency-wide Capital Planning and Investment Control (CPIC) program which is a structured, integrated approach to managing IT investments. It ensures that all IT investments align with the

EPA mission and support business needs while minimizing risks and maximizing returns throughout the investment's lifecycle. The CPIC relies on a systematic approach to IT investment management in three distinct phases: select, control, and on-going evaluation, to ensure each investment's objectives support the business and mission needs of the Agency. Business cases and budget exhibits for all Agency major systems can be viewed at <http://www.epa.gov/oei/cpic/>.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's Information Technology community will continue focusing on the Agency's Technology Initiative¹ and fulfilling the Agency's E-Gov commitments. The Agency's Superfund IT/Data Management program forms the core of this effort with its focus on building and implementing the Agency's Integrated Portal and Enterprise Content Management System (ECMS), developing improved Environmental Indicators, and deploying enterprise-wide IT infrastructure solutions. The ECMS, and EPA's enterprise-wide IT infrastructure solutions, combined with the Exchange Network (e.g., Central Data Exchange, CDX), provide the foundation for improved information, data access and sharing opportunities among the states, the Tribes, the public, the regulated community, and EPA.

Feedback and results received during stakeholder meetings on EPA's FY 2003 "Draft Report on the Environment" identified key areas for data collection, review and analysis. EPA's Technology Initiative and its focus areas work together to advance data analyses and the development of an analytical tool kit, including environmental indicators, to address these information needs. These efforts will be reflected in the next "Report on the Environment" planned for release in mid December calendar year 2007 in hard-copy and electronic forms.

In FY 2008, EPA's Integrated Portal activities continue implementing identity and access management solutions, integrating geospatial tools, and linking the CDX. The Portal is the Technology Initiative's link to diverse data sets and systems giving users the ability to perform complex environmental data analyses on data stored at other locations. It provides a single business gateway for people to access, exchange and integrate standardized local, regional and national environmental and public health data.

Using a collaborative process, the Agency will continue to implement the ECMS project, an enterprise-wide, multi-media solution designed to manage and organize environmental data and documents for EPA, regions, field offices and laboratories. Previously fragmented data storage approaches will be converted into a single tool on a standard platform which is accessible to everyone, reducing data and document search time and assisting in security and information retention efforts.

¹ Office of Environmental Information's (OEI) FY 2006 Technology Initiative has three major components: 1) Building on its Analytical Capacity and Indicators work, OEI will uncover and fill data gaps, and develop response capacity; 2) Using the portal and Exchange Network, OEI will increase the integration of quality data, streamline transactions to foster collaboration, reduce the data entry burden, and improve decision making; and 3) OEI's Readiness to Serve initiative will build capacity and infrastructure to allow more EPA employees to telecommute or work safely and securely in the field.

EPA's infrastructure program will continue to deliver secure information services to ensure that the Agency and its programs have a full range of information technology infrastructure components (e.g., user equipment, network connectivity, e-mail, application hosting, and remote access) that make information accessible across the spectrum of mission needs at all locations. The program uses performance-based, outsourced services to obtain the best solutions (value for cost) for the range of program needs. This includes innovative multi-year leasing that sustains and renews technical services in a least-cost, stable manner as technology changes over time (e.g., desktop hardware, software and maintenance).

In addition to supporting key components of EPA's Technology Initiative, IT/Data Management will continue to provide local program offices in the regions' critical support for hardware requirements, software programming and applications, records management systems, data base services, local area network activities, intranet web design, and desktop support. EPA's environmental information needs require the Agency to ensure that it is keeping pace with the states in the areas of data collection, management and utilization. Additionally, this program will continue to focus on information security and the need for each Regional office to have an internal IT security capacity. The Regional offices will implement Agency information resource management policies in areas such as data and technology standards, central data base services, and telecommunications.

EPA's E-Gov participation and contributions continue in FY 2008 with the coordination, development and implementation of the Business Gateway, Geospatial One-Stop, and E-Authentication. Key activities ensure that access to critical data (e.g., geospatial information, federal regulations) is increased through the Geospatial One-Stop portal and the Business Gateway and its Business Portal providing opportunities for collaboration and intergovernmental partnerships, reducing duplication of data investments, and offering the public easy access to important federal services for businesses.

IT/Data Management efforts are integral to the Exchange Network and Information Security programs. Together these programs work to design, develop and deploy secure systems and analytical tools to promote sound environmental decision-making.

In FY 2008, EPA expects savings from the first phase of the Network Optimization project effort of key IT services and solutions. The services included in this effort include email services, access to data files, telephone communications, and Enterprise Content Management System (ECMS). The end result will be changes to the Agency's IT environment including the ability to manage key IT services, use the power of competition to control costs in a highly competitive environment, and hold vendors and contractors accountable for providing consistently excellent services.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$202.4) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$1,000.0) This change reflects the Agency working to streamline IT consolidation. This reduction is an aggregate estimate. The final distribution by program will be determined when the Network Optimization Project is completed.
- (+\$15.2) This increase reflects additional support for an agency-wide performance measurement system.

Statutory Authority:

FACA; GISRA; CERCLA; CAAA; CWA and amendments; ERD & DAA; TSCA; FIFRA; FQPA; SDWA and amendments; FFDCA; EPCRA; RCRA; SARA; GPRA; GMRA; CCA; PRA; FOIA; CSA; PR; EFOIA.

Program Area: Legal / Science / Regulatory / Economic Review

Alternative Dispute Resolution

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$1,004.4	\$1,229.8	\$1,175.0	(\$54.8)
<i>Hazardous Substance Superfund</i>	<i>\$559.4</i>	<i>\$887.2</i>	<i>\$837.0</i>	<i>(\$50.2)</i>
Total Budget Authority / Obligations	\$1,563.8	\$2,117.0	\$2,012.0	(\$105.0)
Total Workyears	8.9	7.6	7.3	-0.3

Program Project Description:

The General Counsel and Regional Counsel Offices provide environmental Alternative Dispute Resolution services (ADR). Funding supports the use of ADR in the Superfund program's extensive legal work with Potentially Responsible Parties (PRPs).

FY 2008 Activities and Performance Plan:

In FY 2008, the Agency will provide conflict prevention and alternative dispute resolution services to EPA Headquarters and Regional Offices and external stakeholders on environmental matters. The national ADR program assists in developing effective ways to anticipate, prevent and resolve disputes and makes neutral third parties – such as facilitators and mediators – more readily available for those purposes. Under EPA's ADR Policy, the Agency encourages the use of ADR techniques to prevent and resolve disputes with external parties in many contexts, including adjudications, rulemaking, policy development, administrative and civil judicial enforcement actions, permit issuance, protests of contract awards, administration of contracts and grants, stakeholder involvement, negotiations and litigation.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$50.8) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.

- (+\$0.6) Change due to rounding in the FY 2008 President's Budget.
- (-0.3 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

EPA's General Authorizing Statutes.

Legal Advice: Environmental Program

Program Area: Legal / Science / Regulatory / Economic Review

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$35,237.7	\$37,525.5	\$39,366.0	\$1,840.5
<i>Hazardous Substance Superfund</i>	<i>\$624.6</i>	<i>\$690.8</i>	<i>\$606.0</i>	<i>(\$84.8)</i>
Total Budget Authority / Obligations	\$35,862.3	\$38,216.3	\$39,972.0	\$1,755.7
Total Workyears	238.3	249.8	247.2	-2.6

Program Project Description:

The Agency's General Counsel and Regional Counsel Offices provide legal representational services, legal counseling and legal support for all Agency environmental activities. Funding supports the use of legal advice in the Superfund programs extensive legal work with Potentially Responsible Parties (PRPs).

FY 2008 Activities and Performance Plan:

In FY 2008, legal advice to environmental programs will include litigation support representing EPA and providing litigation support in cases where EPA is a defendant, as well as those cases where EPA is not a defendant, but may have an interest in the case. Legal advice, counsel and support are necessary for Agency management and program offices on matters involving environmental issues including, for example, providing interpretations of relevant and applicable laws, regulations, directives, policy and guidance documents and other materials.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$85.3) This decrease reflects the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce cost.
- (+\$0.5) Change due to rounding in the FY 2008 President's Budget.

- (-0.5 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

EPA's General Authorizing Statutes.

Program Area: Operations and Administration

Financial Assistance Grants / IAG Management

Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$22,280.0	\$21,847.0	\$23,439.0	\$1,592.0
<i>Hazardous Substance Superfund</i>	\$2,752.7	\$2,920.8	\$3,049.0	\$128.2
Total Budget Authority / Obligations	\$25,032.7	\$24,767.8	\$26,488.0	\$1,720.2
Total Workyears	186.5	163.3	177.5	14.2

Program Project Description:

Grants and Interagency Agreements comprise over half of the Agency's budget. Superfund resources in this program support activities related to the management of Financial Assistance Grants/Interagency Agreements (IAGs), and of suspension and debarment at Headquarters and within Regions. The key components of this program are ensuring that EPA's management of grants and IAGs meets the highest fiduciary standards, and that grant funding produces measurable environmental results. This program focuses on maintaining a high level of integrity in the management of EPA's assistance agreements, and fostering relationships with state and local governments to support the implementation of environmental programs. Sound grants management fosters efficiency and effectiveness assisting all of EPA's programs. A substantial portion of the Superfund program is implemented through IAGs with the Army Corps of Engineers and the Coast Guard.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will achieve key objectives under its long-term Grants Management Plan. These objectives include strengthening accountability, competition and positive environmental outcomes, and aggressively implementing new and revised policies on at-risk grantees.¹ The Grants Management Plan has provided a framework for extensive improvements in grants management at the technical administrative level, programmatic oversight level, and the executive decision-making level of the Agency. EPA will continue to reform grants management by conducting on-site and pre-award reviews of grant recipients and applicants, performing indirect cost rate reviews, providing Tribal technical assistance, and implementing its Agencywide training program for project officers, grant specialists, and managers.

¹ US EPA, *EPA Grants Management Plan*. EPA-216-R-03-001, April 2003, <http://www.epa.gov/ogd/EO/finalreport.pdf>.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program.

FY 2008 Change from the FY 2007 President's Budget (Dollars in Thousands):

- (+\$240.3) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$112.1) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+1.5 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. The increase is also attributed to the need to strengthen accountability in the grants process, and implement new grants management policies in EPA's Regional Offices.

Statutory Authority:

EPA's Environmental Statutes; Annual Appropriations Acts; FGCAA; Section 40 Code of Federal Regulations, Parts: 30, 31, 35, 40, 45, 46, and 47.

Facilities Infrastructure and Operations
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$336,980.6	\$294,760.1	\$303,728.0	\$8,967.9
Science & Technology	\$8,841.7	\$70,239.5	\$73,859.0	\$3,619.5
Building and Facilities	\$30,871.3	\$28,430.9	\$26,931.0	(\$1,499.9)
Leaking Underground Storage Tanks	\$769.6	\$916.8	\$901.0	(\$15.8)
Oil Spill Response	\$366.1	\$499.3	\$490.0	(\$9.3)
<i>Hazardous Substance Superfund</i>	<i>\$66,365.6</i>	<i>\$73,944.7</i>	<i>\$74,956.0</i>	<i>\$1,011.3</i>
Total Budget Authority / Obligations	\$444,194.9	\$468,791.3	\$480,865.0	\$12,073.7
Total Workyears	375.1	438.6	415.9	-22.7

Program Project Description:

Superfund resources in the Facilities Infrastructure and Operations Program Project are used to fund rent, utilities, and security, and to manage activities and support services in many centralized administrative areas at EPA. These include health and safety, environmental compliance, occupational health, medical monitoring, fitness/wellness and safety, and environmental management functions. Resources for this program also support a full range of ongoing facilities management services including facilities maintenance and operations, Headquarters security, space planning, shipping and receiving, property management, printing and reproduction, mail management, and transportation services.

FY 2008 Activities and Performance Plan:

The Agency will continue to manage its lease agreements with General Services Administration (GSA) and other private landlords by conducting rent reviews and verifying that monthly billing statements are correct. The Agency also reviews space needs on a regular basis.

These resources also help to improve operating efficiency and encourage the use of new, advanced technologies and energy. EPA will continue to direct resources towards acquiring alternative fuel vehicles and more fuel-efficient passenger cars and light trucks to meet the goals set by Executive Orders (EO) 13149¹ and 13123², *Greening the Government through Federal*

¹ Information available at <http://www.epa.gov/fedsite/eo13149.htm>

² Information available at <http://www.epa.gov/fedsite/eo13123.htm>

Fleet and Transportation Efficiency and *Greening the Government through Efficient Energy Management* respectively. Additionally, the Agency will attain the EOs' goals through several initiatives, including comprehensive facility energy audits, sustainable building design in Agency construction and alteration projects, energy savings performance contracts to achieve energy efficiencies, the use of off-grid energy equipment, energy load reduction strategies, green power purchases, and the use of Energy Star rated products and buildings.

EPA will provide transit subsidy to eligible applicants as directed by EO 13150³ *Federal Workforce Transportation*. EPA will continue the implementation of the Safety and Health Management Systems to ensure a safe working environment.

Performance Targets:

Work under this program supports multiple strategic objectives. Performance information is included in the Program Performance and Assessment section.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$666.8) This decrease represents projected rent cost savings.
- (+\$161.9) Provides additional resources for increases in utility costs.
- (-\$45.8) This decrease represents projected security cost savings.
- (+\$52.4) Provides additional resources for increases in transit subsidy.
- (+\$134.3) Provides additional resources for increases in Regional moves.
- (+\$158.6) Provides additional resources for increases in Regional laboratory operations costs.
- (-\$26.0) This reduction reflects savings from improvements to the Agency's small administrative IT Systems.
- (+\$1,558.5) Provides additional resources to cover basic facilities management services in EPA's ten Regional offices. These additional resources will go towards supporting facility operations, environmental compliance, occupational health and safety and fitness/wellness.
- (-\$190.5) This reduction reflects efficiencies gained in Agency administrative or contract management services.

³ Additional information available at <http://ceq.eh.doe.gov/nepa/regs/eos/eo13150.html>

- (-\$125.3) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-1.2 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

FPASA; PBA; Annual Appropriations Act; CWA; CAA; D.C. Recycling Act of 1988; Executive Orders 10577 and 12598; Presidential Decision Directive 63 (Critical Infrastructure Protection).

Acquisition Management

Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$23,040.8	\$25,418.3	\$29,992.0	\$4,573.7
Leaking Underground Storage Tanks	\$357.3	\$360.8	\$165.0	(\$195.8)
<i>Hazardous Substance Superfund</i>	<i>\$19,577.1</i>	<i>\$23,514.3</i>	<i>\$24,645.0</i>	<i>\$1,130.7</i>
Total Budget Authority / Obligations	\$42,975.2	\$49,293.4	\$54,802.0	\$5,508.6
Total Workyears	351.6	357.2	357.3	0.1

Program Project Description:

Superfund resources in this program support contract and acquisition management at Headquarters, Regional Offices, Research Triangle Park and Cincinnati offices. Sound contract management fosters efficiency and effectiveness assisting all of EPA's programs. Much of the Superfund program is implemented through contracts. EPA focuses on maintaining a high level of integrity in the management of its procurement activities and fostering relationships with state and local governments to support the implementation of environmental programs.

FY 2008 Activities and Performance Plan:

EPA's Acquisition Management System has reached the end of its useful life. Staff increasingly spends time making the system work as opposed to using the system to accomplish their work. The system is obsolete, and therefore an upgrade is not feasible. In FY 2008, EPA will continue to implement its new acquisition system. The new system will provide data on contracts that support mission oriented planning and evaluation. The new system will allow the Agency to reach President's Management Agenda (PMA) goals, E-Government requirements, and the needs of Agency personnel resulting in more efficient process implementation. The benefits of the new system are: 1) program offices will be able to track the progress of individual actions, and 2) extensive querying and reporting capabilities to meet internal and external demands. In addition, the system will integrate with the Agency's financial systems and government-wide shared services.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$882.1) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$900.0) This change reflects an increase over the FY 2007 increase, to support development and deployment of the Agency's new Acquisition Management System. An increase totaling of \$3 million is requested (\$2.1 million EPM and \$900 thousand Superfund) for FY 2008. The new Acquisition Management System is required because the existing system is obsolete and impedes efficiency. The new system will be capable of integrating with the GSA Integrated Acquisition Environment (IAE).
- (-\$1,131.5) This reduction is the result of efficiencies gained in Acquisition Management through the streamlining and consolidation of contracting activities.
- (-\$61.6) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+\$540.0) This increase provides OARM with funding for Defense Contract Audit Agency (DCAA) Contract Services and oversight functions that were transferred from OIG. The total provided for this activity is \$1.8 million of which \$1.26 million is in EPM Acquisition Management.
- (+\$1.7) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

EPA's Environmental Statutes; Annual Appropriations Acts; contract law.

Human Resources Management
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$42,966.8	\$40,202.5	\$40,175.0	(\$27.5)
Leaking Underground Storage Tanks	\$3.0	\$3.0	\$3.0	\$0.0
<i>Hazardous Substance Superfund</i>	<i>\$5,282.1</i>	<i>\$5,270.2</i>	<i>\$5,036.0</i>	<i>(\$234.2)</i>
Total Budget Authority / Obligations	\$48,251.9	\$45,475.7	\$45,214.0	(\$261.7)
Total Workyears	323.5	297.6	296.3	-1.3

Program Project Description:

Superfund resources in this program support activities related to the provision of human capital and human resources management services for the entire Agency. Human Resources Management resources are allocated to the Superfund appropriation based on the portion of Superfund FTE requiring Human Resources Management services. EPA supports organizational development and management activities through Agencywide and interagency councils and committees and through participation in interagency management improvement initiatives. The Agency continually evaluates and improves Superfund-related human resource and workforce functions, employee development, leadership development, workforce planning, and succession management.

FY 2008 Activities and Performance Plan:

EPA is committed to fully implementing *Investing in Our People II, EPA's Strategy for Human Capital*¹, which was issued in December 2003, and updated in 2005 to reflect a focus on obtaining measurable results. In FY 2008, the Agency will continue its efforts to implement a Workforce Planning System:

- Closing competency gaps for Toxicology, Information Technology, Human Resources, Grant and Contract specialist positions, as well as leadership positions throughout the Agency.
- Finalizing a Strategic Recruitment Plan, significantly reducing the time to hire for senior executives and reducing the overall number of vacancies for non-SES positions processed beyond 45 days.

¹ US EPA *Investing in OUR People II, EPA's Strategy for Human Capital*. Available at <http://www.epa.gov/oarm/strategy.pdf>

- Implementing innovative recruitment and hiring flexibilities that address personnel shortages in mission-critical occupations.

In accordance with OMB Circular A-76 *Implementation of the Federal Activities Inventory Reform Act of 1998*² the Agency will also build on competitive sourcing principles to identify the most efficient and cost effective strategies for performing functions critical to the EPA mission. Each of these activities will also support the Agency's President's Management Agenda goals and objectives.

Performance Targets:

Work under this program supports multiple strategic objectives. Performance information is included in the Program Performance and Assessment section.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$12.5) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+\$94.0) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$315.7) This reduction is the result of efficiencies gained in Human Resources Management through the consolidation and streamlining of workforce planning and succession management activities.

Statutory Authority:

Title V USC, FAIR Act.

² Available at <http://www.whitehouse.gov/omb/fedreg/fair2002notice4.html>

Central Planning, Budgeting, and Finance
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$70,768.6	\$83,548.1	\$74,960.0	(\$8,588.1)
Leaking Underground Storage Tanks	\$760.9	\$1,014.8	\$1,102.0	\$87.2
<i>Hazardous Substance Superfund</i>	<i>\$21,783.7</i>	<i>\$25,540.8</i>	<i>\$24,306.0</i>	<i>(\$1,234.8)</i>
Total Budget Authority / Obligations	\$93,313.2	\$110,103.7	\$100,368.0	(\$9,735.7)
Total Workyears	515.8	537.7	530.0	-7.7

Program Project Description:

EPA's financial management community maintains a strong partnership with the Superfund program. The Office of the Chief Financial Officer (OCFO) recognizes and supports this continuing partnership by providing a full array of financial management support services necessary to pay Superfund bills and recoup cleanup and oversight costs for the Trust Fund. OCFO manages Superfund budget formulation, justification, and execution as well as financial cost recovery. OCFO also manages oversight billing for Superfund site cleanups (cost of overseeing the responsible party's cleanup activities), Superfund cost documentation (the federal cost of cleaning up a Superfund site), and refers delinquent accounts receivable and oversight debts to the Department of Justice for collection.
(Refer to <http://www.epa.gov/ocfo/functions.htm> for more information).

FY 2008 Activities and Performance Plan:

EPA will continue efforts to modernize the Agency's financial systems and business processes. Beginning in FY 2007 and continuing through 2008 and into 2009, the Agency will replace its legacy accounting system and related modules with a new system certified to meet the latest government accounting standards. This extensive modernization effort will reduce costs, and comply with Congressional direction and new Federal financial systems requirements. This work is framed by the Agency's Enterprise Architecture and will ensure maximum use of enabling technologies for e-Gov initiatives including e-Procurement, e-Payroll, and e-Travel.

EPA plans further improvements to its budgeting and planning system, financial data warehouse, business intelligence tools, and reporting capabilities. These improvements will support EPA's "green" score in financial performance on the President's Management Agenda (PMA) scorecard

by providing more accessible data to support accountability, cost accounting, budget and performance integration, and management decision-making.

In FY 2008, EPA will continue to strengthen its accountability and effectiveness of operations through improved coordination and integration of internal control assessments as required under Revised OMB Circular A-123. Improvements in internal controls will further support EPA's PMA initiatives for improved financial performance.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures specific for this program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$790.7) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$1,800.0) The funding level required for the Financial Replacement System (FinRS) Capital Investment is expected to be lower in FY 2008, the second year of system implementation. Final costs will not be known until after the contract procurement is completed.
- (-\$230.0) This change reflects a technical correction that shifts funds to the Superfund Enforcement program from Central Planning, Budgeting and Finance.
- (-\$0.7) This decrease reflects a shift from Superfund to correct regional workforce support resource allocation.
- (+\$5.2) Change due to rounding in the FY 2008 President's Budget.
- (-1.1 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

Annual Appropriations Act; CCA; CERCLA; CSA; E-Government Act of 2002; EFOIA; EPA's Environmental Statutes, and the FGCAA; FAIR; Federal Acquisition Regulations, contract law and EPA's Assistance Regulations (40CFR Parts 30, 31, 35, 40,45,46, 47); FMFIA(1982); FOIA; GMRA(1994); IPIA; IGA of 1978 and Amendments of 1988; PRA; PR; CFOA (1990); GPRA (1993); The Prompt Payment Act (1982); Title 5 USC.

Program Area: Research: Human Health And Ecosystems

Human Health Risk Assessment

Program Area: Research: Human Health and Ecosystems

Goal: Healthy Communities and Ecosystems

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Science & Technology	\$33,663.5	\$34,488.5	\$38,856.0	\$4,367.5
<i>Hazardous Substance Superfund</i>	<i>\$3,604.4</i>	<i>\$3,847.2</i>	<i>\$3,972.0</i>	<i>\$124.8</i>
Total Budget Authority / Obligations	\$37,267.9	\$38,335.7	\$42,828.0	\$4,492.3
Total Workyears	181.5	183.9	182.1	-1.8

Program Project Description:

The Human Health Risk Assessment (HHRA) program provides health hazard assessments and develops assessment methods to support Superfund in the following areas:

The Integrated Risk Information System (IRIS)¹, Provisional Peer-Reviewed Toxicity Values, and other health hazard assessments: Based on the expressed needs of EPA's Solid Waste and Emergency Response program, this program prepares hazard characterization and dose-response profiles for environmental pollutants and issues of specific relevance to site assessments and remediation. Where IRIS values are unavailable, the HHRA program develops provisional peer-reviewed toxicity values for evaluating chemical specific exposures at Superfund sites. Support for these assessments is provided through the Superfund Technical Support Centers (R&D Criteria: Quality, Relevance).

Risk assessment guidance, methods, and model development: Improved risk assessment guidance, methods, and models to support Superfund includes the development of dermal absorption tools to better estimate potential human exposures at Superfund sites, and the consultative support necessary for the application of these methods (R&D Criteria: Quality, Relevance).

Superfund research is guided by the long term *Waste Research Strategy*², which was developed with participation from major clients and outlines research needs and priorities. These research efforts are guided by multi-year plans (MYPs)³, developed with input from across the Agency, including scientific staff in the Superfund program and the regional offices. The MYPs outline

¹ Available at: <http://www.epa.gov/iris>.

² U.S. EPA, Office of Research and Development, *Waste Research Strategy*. Washington, D.C.: EPA. For more information, see <http://www.epa.gov/ord/htm/documents/wastepub.pdf>.

³ For more information, see <http://www.epa.gov/osp/myp>.

The *Waste Research Strategy* outlines the research needs and priorities at the time it was prepared. To guide these research efforts as progress is made and new needs emerge, EPA develops multi-year research plans that are revised periodically. EPA is currently merging the Contaminated Sites and RCRA Multi-Year Plans (MYPs) into one cohesive Land Research MYP, with input from across the Agency, to ensure research conducted continues to support the Agency's mission to protect human health and the environment.

steps for meeting the needs of Agency programs and for evaluating progress through annual performance goals and measures. Application of the research results and existing published scientific information to risk assessment needs is described in the HHRA MYP⁴.

In FY 2003, a Board of Scientific Counselors (BOSC)—a Federal advisory committee comprised of qualified, independent scientists and engineers—subcommittee review found that the National Center for Environmental Assessment (NCEA) has made several key advancements including completion of a strategic plan, targeting cutting-edge risk assessments, improving the proportionate representation of ecological assessments to human health assessments, enhancing communication, and improving capabilities to provide environmental assessments resources in response to September 11th. A subsequent BOSC subcommittee program review is scheduled for September 2007.

FY 2008 Activities and Performance Plan:

In FY 2008 the HHRA program directly supports key elements of EPA's Strategic Plan relating to Superfund - particularly the characterization of risks, reduction of contaminant exposures, and cleanup of contaminated sites. Risk assessment activities relevant to Superfund cleanups will include (R&D Criteria: Relevance):

- Continuing to work toward the completion of IRIS health hazard assessments for high priority chemicals found at multiple Superfund sites and thereby contributing to decision-making needs for Superfund and other Agency programs;
- Completing 50 new or renewed Provisional Peer Reviewed Toxicity Values (PPRTV) at the request of the Solid Waste and Emergency Response program, and providing health hazard evaluations, reference doses/concentrations (RfD/Cs), and/or cancer slope factors for priority pollutants to support Agency risk assessments (R&D Criteria: Quality, Relevance, Performance);
- Providing an external review draft update of the Exposure Factors Handbook, collating exposure information for use in Superfund site assessments (also supported by HHRA in the Science and Technology appropriation; R&D Criteria: Relevance, Performance); and
- Providing technical support to Superfund site and program managers on human health risk assessment through the Superfund Technical Support Centers.

In calendar year 2006, the Human Health Risk Assessment Program received a “moderately effective” rating in its first PART review. This rating was supported by findings that the program has long-term and annual performance measures with ambitious targets, as well as a set of results indicating that the program is on track to meet its goals. As a follow-up to the PART, the program must: (1) expand its efficiency measure to include all major work products; (2) implement a new IRIS review process; (3) engage in regular, independent evaluations that assess the program's effectiveness; and (4) investigate alternative approaches for measuring progress

⁴ Available at: <http://www.epa.gov/osp/myr/HHRA.pdf>.

related to providing timely, high quality scientific assessments. It also will be reviewed by a BOSC subcommittee every three to four years, with mid-cycle reviews occurring midway between the comprehensive reviews.

Performance Targets:

In 2008, the program plans to accomplish its goals of completing and delivering 100% of its planned outputs in support of (1) Air Quality Criteria/ Science Assessment documents, (2) human health risk assessments, and (3) HHRA technical support documents. Additionally, the program plans to meet its efficiency goal of reducing the average cost to produce Air Quality Criteria/ Science Assessment documents. In achieving these targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to the health of people, communities, and ecosystems.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$116.9) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$12.8) This is a technical adjustment to realign travel resources across the research program to better reflect FY 2008 programmatic priorities. There will be no programmatic impact.
- (-\$4.6) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$0.3) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (-0.1 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction reflects efficiencies gained in EPA's Research and Development IT and administrative activities and will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

SWDA; HSWA; SARA; CERCLA.

Program Area: Research: Land Protection

Research: Land Protection and Restoration

Program Area: Research: Land Protection

Goal: Land Preservation and Restoration

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Science & Technology	\$12,101.5	\$10,552.8	\$10,737.0	\$184.2
Leaking Underground Storage Tanks	\$617.2	\$651.3	\$660.0	\$8.7
Oil Spill Response	\$828.4	\$903.1	\$901.0	(\$2.1)
<i>Hazardous Substance Superfund</i>	\$22,210.2	\$21,963.9	\$20,081.0	(\$1,882.9)
Total Budget Authority / Obligations	\$35,757.3	\$34,071.1	\$32,379.0	(\$1,692.1)
Total Workyears	141.6	142.8	141.3	-1.5

Program Project Description:

The Land Research Program provides essential research to EPA's Solid Waste and Emergency Response program and Regional Offices to enable them to accelerate scientifically defensible and cost-effective decisions for cleanup at complex contaminated sites. Research areas include: contaminated sediment, ground water, and multi-media. The research program also provides site-specific technical support through EPA labs and centers, as well as liaisons located in each Regional Office. As such, this program is a vital component of EPA's efforts to reduce and control risks to human health and the environment.

Research within this program is responsive to the Superfund law requirements under Section 209(a) of Pub. L. 99-499, which states "...a comprehensive and coordinated Federal program of research, development, demonstration, and training for the purpose of promoting the development of alternative and innovative treatment technologies that can be used in response actions under the CERCLA program." Research is guided by the long-term *Waste Research Strategy*¹, which was developed with participation from major clients and outlines research needs and priorities. These research efforts are guided by the Land Multi-Year Plan (MYP)² developed with input from across the Agency, which outlines steps for meeting the needs of Agency programs and for evaluating progress through annual performance goals and measures. Specific human health risk and exposure assessments and methods are conducted under the Human Health Risk Assessment program.

¹ EPA, Office of Research and Development, *Waste Research Strategy*. Washington, D.C.: EPA. For more information, see <http://www.epa.gov/ord/htm/documents/wastepub.pdf>.

² For more information, see <http://www.epa.gov/osp/myp>.

The *Waste Research Strategy* outlines the research needs and priorities at the time it was prepared. To guide these research efforts as progress is made and new needs emerge, EPA develops multi-year research plans that are revised periodically. EPA merged the Contaminated Sites and RCRA Multi-Year Plans (MYPs) into one cohesive Land Research MYP, with input from across the Agency, to ensure research conducted continues to support the Agency's mission to protect human health and the environment. The new plan will be posted when peer-review comments are addressed in the second quarter of FY 2007.

The Land Protection and Restoration research program was reviewed by EPA's research oversight body, the Board of Scientific Counselors (BOSC), in FY 2006 (December 2005). The BOSC found that the program generates high-quality products and conducts appropriately focused multi-disciplinary research.

In addition, EPA's Science Advisory Board (SAB) conducted an independent review of the Contaminated Sites and Resource Conservation and Recovery Act (RCRA) multi-year plans in 2004 and released its final report in May 2005. The report is available on the EPA web site at http://www.epa.gov/science1/pdf/contaminated_sites_rcra_sab-05-009.pdf. The review panel found the plans to be programmatically and scientifically sound (R&D Criteria: Quality) and commended the research and development program's close coordination with the program office (R&D Criteria: Relevance) and use of leveraging opportunities. The panel endorsed EPA's proposal to merge the two plans, which in part address closely related research needs.

Suggestions from both the SAB review and the BOSC review are being incorporated into the research program.

FY 2008 Activities and Performance Plan:

In FY 2008, research will continue to advance EPA's ability to accurately characterize the risks posed by contaminated sediments and determine the range and scientific foundation for remedy selection options by improving risk characterization, site characterization, and understanding of remedial options (R&D Criteria: Relevance). Specifically, EPA will continue work on an evaluation of the long-term accuracy of upgraded contaminant transport and fate models in the field. This work will be followed by:

- The development of new contaminated sediment fate and transport modeling capabilities (completed during FY 2008).
- The development of a consensus framework for modeling remediation options in large water bodies and estuaries (complete by FY 2009).

Documented remediation methods are needed for contaminated sediments for high-cost decisions at controversial sites. One tool to improve the management of sediments is a report that EPA will deliver in FY 2008 that will address data collection and model development for more accurate prediction of dredging residuals. Future research in this area will depend on report results. In addition, continuing through FY 2010, EPA will develop a flux meter to evaluate advective transport of contaminants, useful for designing permanent sediment remedies and assessing achievement of the ground water environmental indicators.

In the ground water area, transport of contaminants in that medium and the subsequent intrusion of contaminant vapors into buildings is a critical research issue for EPA's hazardous waste remediation programs. Work is ongoing to develop reliable soil gas sampling methodologies and to improve vapor intrusion modeling capability. A user guide for sampling soils contaminated with volatile organic compounds (VOCs) will be completed in FY 2008.

In FY 2008, research products for Dense Non-Aqueous Phase Liquids (DNAPLs) in ground water will include: demonstration, evaluation and optimization of DNAPL remediation technologies; assessment and prediction of the benefits of partial DNAPL depletion; and development and assessment of integrated DNAPL source remediation methods. In addition, reports on the remediation of inorganic plumes using permeable reactive barriers will be produced.

EPA will continue to provide technical support to Superfund project managers via seven technical support centers (TSCs) and two modeling assistance web sites that provide site-specific technical support to more than 100 cleanup program sites in the form of responses to scientific questions (e.g. human health and environmental toxicity) and technology transfer products to EPA program offices and other stakeholders (R&D Criteria: Performance). TSCs provide direct, practical, expert assistance to EPA offices and other stakeholders. They also provide information based on research results to increase the speed and quality of Superfund cleanups and reduce associated cleanup costs (R&D Criteria: Quality, Performance). Development of human health toxicity values and technical support activities are discussed and conducted under the Human Health Risk Assessment Program.

In 2006, the Land Protection and Restoration Research Program received an “adequate” rating in its first PART review. EPA and OMB continue to work to finalize appropriate ambitious performance measures, develop and implement a protocol for improved budget-performance integration, and develop a new efficiency measure that captures the cost effectiveness of research activities. To this end, OMB, EPA, and members of the BOSC formed a workgroup to discuss long-term measurement of EPA’s research and development programs. As part of the workgroup, EPA has devised program-specific questions to be addressed by the BOSC and used in support of long-term measurement. To identify appropriate outcome-oriented efficiency measures for research programs, EPA is soliciting input from the National Academy of Sciences.

Performance Targets:

Work under this program supports EPA’s Enhance Science and Research objective. New performance measures were developed for 2006 PART Assessments, which also are supported by the Land Protection and Restoration activities under other appropriations. These measures address the increasing utility of EPA research tools and technologies as well as the reduction of uncertainty due to utilization of research and development methodologies, models, and statistical designs.

In 2008, the program plans to accomplish its goals of completing and delivering 100% of its planned outputs. Additionally, the program plans to meet its efficiency goal of reducing to 29 days its technical support centers’ average time for processing and responding to requests for technical document review, statistical analysis, and the evaluation of characterization and treatability study plans. In achieving these targets, the program will contribute to EPA’s goal of applying sound science in the protection and restoration of land.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1.8) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (-\$1,600.0) This reflects a decrease in research related to the treatment of inorganic contaminated sediments, evaluation of existing remedies and development of new remedies.
- (-\$184.1) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$86.2) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-\$14.4) This is a technical adjustment to realign travel resources across the research program to better reflect FY 2008 programmatic priorities. There will be no programmatic impact.
- (-1.1 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. This reduction reflects efficiencies gained in EPA's Research and Development IT and administrative activities and will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.

Statutory Authority:

SWDA; HSWA; SARA; CERCLA; RCRA; OPA; BRERA.

Program Area: Research: Sustainability

Research: Sustainability

Program Area: Research: Sustainability

Goal: Compliance and Environmental Stewardship

Objective(s): Enhance Societies Capacity for Sustainability through Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Science & Technology	\$27,042.4	\$21,404.9	\$22,478.0	\$1,073.1
<i>Hazardous Substance Superfund</i>	<i>\$292.0</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$27,334.4	\$21,404.9	\$22,478.0	\$1,073.1
Total Workyears	86.8	77.3	76.2	-1.1

Program Project Description:

Under the Small Business Research (SBIR) Program¹, as required by the Small Business Act as amended², EPA sets aside 2.5% of its extramural research budget for contracts to small businesses to develop and commercialize new environmental technologies. SBIR, the only activity contained in this program, will not be funded under the Superfund account at this time.

Performance Targets:

Work under this program supports EPA's Enhance Science and Research objective. Currently, there are no PART performance measures for this specific program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- The 2.5% set-aside will be identified when the FY 2008 budget is enacted.

Statutory Authority:

CAA; CWA; FIFRA; PPA; RCRA; SDWA; SBA; SARA; TSCA.

¹ For more information, see <http://es.epa.gov/ncer/sbir>.

² U.S. Public Law 219. 79th Congress, 2nd session, 22 July 1982. *Small Business Innovation Development Act of 1982*. For more information, see <http://thomas.loc.gov/cgi-bin/bdquery/z?d097:s.881>.

Program Area: Superfund Cleanup

Superfund: Emergency Response and Removal

Program Area: Superfund Cleanup

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Hazardous Substance Superfund</i>	<i>\$205,038.7</i>	<i>\$192,398.9</i>	<i>\$191,880.0</i>	<i>(\$518.9)</i>
Total Budget Authority / Obligations	\$205,038.7	\$192,398.9	\$191,880.0	(\$518.9)
Total Workyears	353.0	281.4	288.4	7.0

Program Project Description:

The Superfund Emergency Response and Removal program ensures that releases of hazardous substances, including chemical, biological, and radiological agents, to the environment are appropriately addressed through either a Federal lead action or by providing technical support and oversight to state, local, other Federal responders, and potentially responsible parties (PRPs). Through authorities spelled out in various statutes and the National Contingency Plan (NCP), EPA, as the Federal On-Scene Coordinator (OSC), evaluates and responds to thousands of small to large releases. This activity ensures that spills are appropriately addressed to protect human health and the environment. EPA provides technical support at emergency, time-critical, and non-time critical response actions. This activity also supports the development and maintenance of the necessary response infrastructure to enable EPA to effectively respond to accidental and intentional releases as well as natural disasters.

Additional information on the emergency response and removal program can be found on the OSC internet site at: <http://www.epaosc.net/default.htm>.

FY 2008 Activities and Performance Plan:

EPA personnel assess, respond to, mitigate, and clean up thousands of releases, whether accidental, deliberate, or naturally occurring. In FY 2008, EPA Federal OSCs will conduct and/or provide support for removal assessments, emergency responses, and cleanup response actions at National Priority List (NPL) and non-NPL sites. In FY 2008, approximately 195 Superfund-lead removal actions and 125 private party removal actions overseen by EPA will be completed.

In FY 2008, EPA will continue to respond and conduct site removal actions based upon the risk to human health and the environment. In recent years, emergency response and removal activities have grown more complicated, requiring more resources and time to complete. In addition, these activities often require personnel with specific knowledge of harmful substances, health and safety issues, complex options or the utilization of emerging technologies. As a result of these factors, in FY 2008 EPA will be reducing its focus on non-time critical removal actions, depending upon the specific needs at the time, in order to focus on the highest priority sites.

As part of its strategy for improving effectiveness, the Agency will improve response readiness in FY 2008 using data provided in the after-action reports prepared by EPA emergency responders. Lessons learned from these reports are used to develop smarter technical solutions for the OSC community. The Agency will continue to maintain highly skilled technical personnel in the field, ensuring their readiness to respond to releases of dangerous materials without compromising health and safety.

The Superfund Removal program received its first PART review in 2003 and its second PART review in 2005. The initial program rating was “results not demonstrated” because the program lacked adequate performance measures or an efficiency measure. In 2005, the Removal program received an overall rating of “moderately effective” in the PART review because it established performance and efficiency measures. In addition to implementing the new measures, EPA is taking steps to improve data accuracy and completeness through continuing efforts to modernize the program’s data repository, the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS).

Annual performance for the Superfund Removal program is measured by the number of Superfund-lead removals actions completed, and the number of private party removal actions overseen by EPA and completed. Both measures contribute to the goals of EPA’s 2006-2011 Strategic Plan.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Voluntary removal actions, overseen by EPA, completed.	93	115	120	125	removals

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Superfund-lead removal actions completed annually.	157	195	195	195	removals

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Superfund-lead removal actions completed annually per million dollars.	1.02	0.91	0.92	0.93	removals

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (+7.0 FTE) This change reflects EPA’s workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These FTE will be utilized to strengthen EPA's ability to respond to emergencies, including support for coordination

between EPA and its Federal, state and local response partners, as well as to support removal activities at properties where significant lead contamination is present.

- (+\$3,565.8) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$4,039.9) Reduces funding for non-time critical Regional response activities. Of this reduction, \$1.8 million will be redirected to the Superfund Remedial program for Regional construction cleanup work at NPL sites.
- (+\$70.0) This increase provides funds to support development of a plan for regular, comprehensive, and independent program evaluations.
- (-\$94.8) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to non-site specific program travel expenses in headquarters and the Regions.
- (-\$20.0) This reduction reflects efficiencies gained in Agency administrative or contract management services.

Statutory Authority:

CERCLA, Sections 104, 105, 106; CWA; OPA.

Superfund: EPA Emergency Preparedness

Program Area: Superfund Cleanup

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Hazardous Substance Superfund</i>	<i>\$11,115.1</i>	<i>\$8,863.1</i>	<i>\$9,318.0</i>	<i>\$454.9</i>
Total Budget Authority / Obligations	\$11,115.1	\$8,863.1	\$9,318.0	\$454.9
Total Workyears	32.3	44.1	44.1	0.0

Program Project Description:

EPA implements the Emergency Preparedness program in coordination with the Department of Homeland Security (DHS) and other Federal agencies to deliver Federal assistance to state, local, and Tribal governments during natural disasters and other major environmental incidents. The Agency carries out this responsibility under multiple statutory authorities as well as the National Response Plan (NRP), which provides the framework and structure for managing national emergencies. EPA is the designated lead for the NRP's Emergency Support Function covering hazardous materials, oil, and other contaminants. As such, the Agency participates in high-level DHS and other interagency committees and workgroups to develop national planning and implementation policies at the operational level.

EPA also chairs the 16 agency National Response Team (NRT) and co-chairs multiple Regional Response Teams (RRTs) throughout the United States. The teams coordinate the actions of Federal partners to prevent, prepare for, and respond to emergencies.

In addition to helping the Federal government respond to natural or accidental environmental emergencies, the NRP framework is critical to helping the Federal government respond to chemical, biological, and radiological releases resulting from terrorists incidents. EPA efforts to effectively prepare for and respond to terrorist incidents are funded under the Homeland Security: Preparedness, Response, and Recovery Program.

FY 2008 Activities and Performance Plan:

Preparedness on a national level is essential to ensure that EPA, other Federal agencies, and state and local emergency responders are able to deal with multiple emergencies. This program will continue to enhance the Agency's readiness capabilities in FY 2008 by improving internal and external coordination with those agencies.

In FY 2008, EPA will continue to chair and provide administrative and logistical support to the NRT and co-chair the 13 RRTs throughout the United States. The NRT and RRTs coordinate Federal partner actions to prevent, prepare for, and respond to releases of hazardous substances and other emergencies, whether accidental or intentional. Building on current efforts to enhance

national emergency response management, NRT agencies will continue implementation of the National Incident Management System (NIMS) and the NRP. NRT agencies will improve notification and response procedures, develop response technical assistance documents, and continue to implement and test incident command/unified command systems across all levels of government and the private sector as well as assist in the development of Regional Contingency Plans and Local Area Plans.

In FY 2008, EPA will provide technical assistance, training, and exercises to continue fostering a working relationship between state, local, and Federal responders implementing the system. EPA will lead participants in the development of scenario-specific national and Regional level plans to respond to terrorist events and incidents of national significance.

EPA also will continue to provide staff support as needed during a national disaster, emergency and other high profile, large-scale responses carried out under the NRP. When activated under the NRP, EPA supports activities at the NRT, RRTs, Domestic Readiness Group (DRG), Incident Advisory Council (IAC) and the National Operations Center (NOC).

In FY 2008, EPA staff will deliver presentations on the NRP to national forums and will participate in nationwide exercises to test and improve the capabilities of the Federal government's preparedness and response system. EPA conducts an annual week-long readiness training event for Federal On-Scene Coordinators, which is attended by EPA and its government partners from other Federal agencies, states and local entities. This training offers short courses on a variety of environmentally related emergency response topics designated to efficiently utilize Federal first responders.

Performance Targets:

Work under this program supports EPA's objective for restoring land. Currently, there are no performance measures specific to this program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$484.7) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$26.5) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to program travel expenses in Headquarters and the Regions.
- (-\$3.3) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CERCLA; CWA; OPA; Stafford Act.

Superfund: Federal Facilities

Program Area: Superfund Cleanup

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Hazardous Substance Superfund</i>	<i>\$32,461.2</i>	<i>\$31,486.6</i>	<i>\$31,879.0</i>	<i>\$392.4</i>
Total Budget Authority / Obligations	\$32,461.2	\$31,486.6	\$31,879.0	\$392.4
Total Workyears	138.4	133.0	134.0	1.0

Program Project Description:

The Superfund Federal Facilities Response program facilitates faster, more effective and less costly cleanup and reuse of Federal facilities while ensuring protection of human health and the environment from releases of hazardous substances. The Agency fulfills a number of statutory and regulatory obligations at Federal facilities, including conducting oversight on those sites on the Superfund National Priority List (NPL) where cleanup is being done by other Federal agencies, such as the Department of Defense (DOD) and the Department of Energy (DOE). In fulfilling its management responsibilities, the Superfund Federal Facilities Response program collaborates with other Federal agencies, state and local governments, Tribes, and communities.

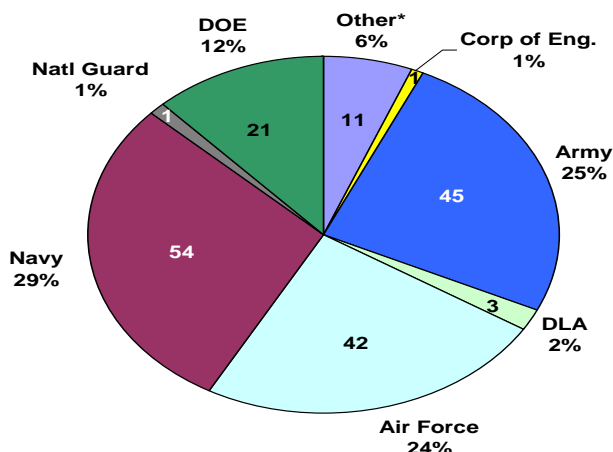
The Superfund Federal Facilities Response program provides technical assistance to other Federal entities, states, Tribes, local governments and communities during the cleanup of Federal properties. The program ensures statutory responsibilities related to the transfer of contaminated Federal properties at both NPL and non-NPL sites are properly fulfilled. Such responsibilities include approval of transfers prior to implementation of remedies at NPL sites (i.e., early transfer), and approving determinations that remedies are operating “properly and successfully” at both NPL and non-NPL sites. Often EPA, and the parties implementing the remedies, face unique challenges due to the types of contamination present, the size of the facility and extent of contamination, ongoing facility operations that need to continue, complex community involvement requirements, and complexities related to the redevelopment of the facilities. For additional information regarding the Superfund Federal Facilities Response program, please refer to: <http://www.epa.gov/fedfac/>.

FY 2008 Activities and Performance Plan:

In FY 2008, the Superfund Federal Facilities Response program will continue to focus on achieving site construction completions, accelerating cleanups, promoting reuse of current or former Federal properties and ensuring appropriate community involvement. As of October 2006, there were: 158 Federal facilities on the NPL, 14 Federal facilities deleted from the NPL, 5 Federal facilities proposed to be added to the NPL, 70 (41%) Federal facility sites with a final remedy selected, 55 (32%) Federal facility sites that had achieved site construction completion and 14 (8%) Federal facility sites identified as site-wide ready for anticipated use.

There still remains extensive work to be performed in the Superfund Federal Facilities Response program. As of October 2006, the program was conducting oversight and/or providing technical assistance on 411 ongoing Remedial Investigations/Feasibility Studies (RI/FS) and 221 ongoing Remedial Actions (RA) at 172 Federal facilities.

NPL Federal Facilities by Agency
(Proposed, Final and Deleted)



**Other Federal Agencies include: Coast Guard (1), Dept. of the Interior (2), Dept. of Transportation (1), EPA (1), Federal Aviation Administration (1), National Aeronautics & Space Administration (2), Small Business Administration (1), Dept. of Agriculture (2)*

In FY 2008, the program will continue supporting and encouraging citizen involvement by participating in DOD's Restoration Advisory Boards (RABs) and the DOE's Site Specific Advisory Boards (SSABs). The RABs and SSABs provide an opportunity for public input on the environmental cleanup process at Federal facilities, and foster information exchange and partnerships among community members, DOD, DOE, states, and EPA.

The program will continue strengthening its efforts towards ensuring the safe reuse of former Federal properties, as well as ensuring the safe continued use of facilities under the jurisdiction of the Federal government. At properties that will remain in Federal jurisdiction and control, the program will work with the other Federal agencies to ensure that cleanup remedies are appropriate for continued Federal use. The Superfund Federal Facilities Response program will continue working with state and local governments, Tribes, communities and transferees to ensure properties transferred to non-Federal entities will be reused in a safe and productive manner.

The program also will continue to monitor the progress of five-year reviews being conducted at Federal sites where waste has been left in place and land use is restricted as a result of that contaminated waste. In FY 2008, the program will review approximately 22 five-year review

reports at Federal facility NPL sites to fulfill statutory requirements and inform the public regarding the protectiveness of remedies at those facilities.

In FY 2008, EPA will continue providing oversight and technical assistance, as appropriate, at DOD's military munitions response sites, including oversight of some Formerly Used Defense Sites (FUDS) with munitions, such as the Spring Valley site in Washington, DC. FUDS are properties formerly owned, leased, possessed, or operated by DOD that are now owned by a non-DOD party.

The Superfund Federal Facilities Response program will continue working with the U.S. Army Corps of Engineers (USACE) and states in the cleanups of Formerly Utilized Sites Remedial Action Program (FUSRAP) properties. FUSRAP properties are contaminated with radioactive materials and mixed waste resulting from the Nation's early atomic weapons and energy program. Three of the 27 active FUSRAP sites are listed on the Superfund NPL, and the USACE and DOE are currently evaluating several sites proposed for the NPL.

In carrying out its responsibilities at facilities owned by other Federal agencies, EPA prioritizes its activities based primarily on the degree of risk to human health and the environment, as it does at non-Federal facilities. If another Federal agency requests EPA to change its priorities to accommodate that agency's own priorities (e.g., property transfer), EPA will seek reimbursement for the additional cost required for that effort.

The Superfund Federal Facilities Response Program will continue supporting DOD at selected Base Realignment and Closure (BRAC) installations closed or realigned during the first four rounds of BRAC (BRAC I-IV). EPA's participation in the BRAC I-IV accelerated cleanup process continues to be funded through an interagency agreement, which expires on September 30, 2008. The fifth round of BRAC (BRAC V), finalized on November 9, 2005, will result in additional EPA work requirements at selected BRAC V installations which began in FY 2006. This includes, but is not limited to, meeting and expediting statutory obligations for overseeing cleanup and facilitating property transfer. The Agency's FY 2008 request does not include additional support for BRAC-related services to DOD at BRAC V facilities. If EPA services are required at levels above its base for BRAC V related installations, the Agency will require reimbursement from DOD for the costs the Agency incurs to provide those services.

The program underwent a PART assessment in 2005 and received an overall rating of "moderately effective." As follow-up to the PART, the program has been working with other Federal agencies to attain long-term environmental measures. Such efforts will continue in FY 2007. In addition, the program conducted a policy review in FY 2006 to ensure policies and guidance documents are still relevant, updated and comprehensive. The program plans to implement several of the resulting recommendations in FY 2007.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Program dollars expended annually per operable unit	697	1,000	960	920	thousand

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	completing cleanup activities.					

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of Federal Facility Superfund sites where all remedies have completed construction.	55	51	56	60	sites

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of Federal Facility Superfund sites where the final remedial decision for contaminants at the site has been determined.	70	61	76	81	remedies

Performance goals and measures for the Superfund Federal Facilities Response program are currently a component of the overall Superfund Remedial program's measures. The Agency's ability to meet its annual Superfund targets is partially dependent on work performed at Federal facility sites on the NPL. In FY 2008, the Superfund Federal Facilities Response program is expected to achieve five construction completions.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+1.0 FTE) This change reflects EPA's Regional workforce management strategy that will help the Agency better align resources, skills, and Agency priorities.
- (+\$901.0) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$514.2) This reflects a reduction of \$352 thousand in Headquarters and \$162 thousand in the Regions for non-NPL activities, such as FUDS, and general support activities such as the Regional records center. The \$162 thousand reduction in Regional resources will be redirected to the Superfund Remedial program for Regional construction cleanup work at NPL sites.
- (-\$50.6) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to non-site specific program travel expenses in Headquarters and the Regions.

- (-\$3.8) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (+\$60.0) This increase provides funds for program evaluations in the Superfund Federal Facilities Response program.

Statutory Authority:

CERCLA/SARA; RCRA; Defense Base Closure and Realignment Act of 1988, 1990, 1992, 1994, and 2004 as amended by the National Defense Authorization Acts and the Base Closure Community Redevelopment and Homeless Assistance Act; Community Environmental Response Facilitation Act; National Defense Authorization Act; and NEPA.

Superfund: Remedial

Program Area: Superfund Cleanup

Goal: Land Preservation and Restoration

Objective(s): Restore Land; Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Hazardous Substance Superfund</i>	<i>\$667,056.2</i>	<i>\$581,594.9</i>	<i>\$584,836.0</i>	<i>\$3,241.1</i>
Total Budget Authority / Obligations	\$667,056.2	\$581,594.9	\$584,836.0	\$3,241.1
Total Workyears	969.0	950.2	946.2	-4.0

Program Project Description:

The Superfund Remedial program manages the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and in so doing helps make these properties available for reuse. Resources in this program are used to: 1) collect and analyze data on sites to determine the need for an EPA Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response, 2) conduct or oversee investigations and studies to select remedies, 3) design and construct or oversee construction of remedies and post-construction activities at non-Federal facility sites, 4) facilitate participation of other Federal agencies, state, local, and Tribal governments and communities in the program, and 5) provide sound science and continually integrate smarter technical solutions into protection strategies.

In addition to research conducted by the Agency, EPA stays abreast of state-of-the-art analytical methods and remediation technologies by working in partnership with academia, other Federal agencies, and industry to identify and deploy promising technologies and strategies. The technical support provided by the Superfund Remedial program is used by other programs, including RCRA Corrective Action, Underground Storage Tanks, Brownfields and state voluntary cleanup programs. For more information about the program, please refer to <http://www.epa.gov/superfund/about.htm>.

FY 2008 Activities and Performance Plan:

In FY 2008, as in prior years, cleanup and response work at contaminated sites remains the top priority of the Superfund Remedial program. The program will continue to address intractable and complex environmental problems, such as contaminated soil and groundwater affecting residential areas that can cause human health problems. The goal of the program's work is ultimately to provide long-term human health protection at the Nation's most contaminated hazardous waste sites. In addition to its cleanup work, the Superfund Remedial program will undertake temporary activities, when appropriate, to protect people from threats posed by uncontrolled hazardous wastes or contaminated groundwater, such as providing alternative drinking water supplies or relocating residents. These efforts demonstrate the Agency's

commitment to protecting human health from both possible short- and long-term effects of site-related contamination.

In FY 2008, the program has established targets as follows:

- (1) 272 Remedial Final Site Assessment Decisions, for a cumulative total of 39,910;
- (2) 10 sites with Human Exposures under Control, for a cumulative total of 1,289;
- (3) 15 sites with Groundwater Migration under Control, for a cumulative total of 983;
- (4) 30 sites deemed Site-wide Ready for Anticipated Use, for a cumulative total of 255;
- and
- (5) 24 Construction Completions, for a cumulative total of 1,060.

In addition to conducting current program activities, the Agency will undertake several additional actions to improve program management and increase efficiency. In FY 2008, the Superfund Remedial program will focus attention on construction costs by working with the Army Corps of Engineers to review how each of EPA's Regional Offices plan and implement construction projects, site-specifically and programmatically, in order to maximize efficient use of resources, especially in multi-year projects.

The Superfund Remedial Action program was initially assessed under PART in 2004, and received an overall rating of "adequate." The PART found that the program's two long-term outcome-based measures, Human Exposures Under Control and Groundwater Migration Under Control, support the cleanup and reuse of contaminated land by tracking progress in controlling all unacceptable human exposure contaminant pathways at sites listed on the National Priority List (NPL). In FY 2007, the program will use a new efficiency measure that tracks NPL sites with human exposures under control per million dollars.

As additional follow-up to the PART, EPA is working to modernize the program's data repository (e.g., the Comprehensive Environmental Response, Compensation, and Liability Information System, or CERCLIS) to ensure accurate and complete information on program performance and financial management. The program also will continue to implement the recommendations of the Agency's 120-day study on management of the Superfund program.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Annual number of Superfund sites with remedy construction completed.	40	40	24	30	completions

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Superfund final site assessment decisions completed.	518	419	350	272	assessments

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Human exposures under control per million dollars.			6.1	6.4	thousand

With remedies constructed at 1,006 sites by the end of FY 2006, the Superfund Remedial program is increasing its focus on ensuring that remedies at those sites will provide long-term protection of human health, and has developed a new measure to report program accomplishments in making land ready for reuse at sites where construction is completed. The Site-wide Ready for Anticipated Use (RAU) measure complies with the Agency's responsibility to report long-term outcome based accomplishments under the Government Performance and Results Act (GPRA). This measure documents sites where all cleanup goals have been achieved for media that may affect current and reasonably anticipated future land uses of the site so that there are no unacceptable risks. In addition, all institutional or other controls required in the Record(s) of Decision or other remedy decision document(s) for these sites have been put in place. The measure reflects the high priority EPA places on land revitalization as an integral part of the Agency's cleanup mission for the Superfund program as well as the priority EPA is now placing on post-construction activities at NPL sites.

Even though the Superfund program met its FY 2006 targets for the majority of its performance measures, challenges remain for the coming years. These challenges include a diminishing universe of eligible construction completion sites; many of the remaining sites that have not reached the construction completion stage are highly complex; and the number of sites that will complete all remedies in any particular year will fluctuate based on construction schedules. As a result, EPA has adjusted the prior FY 2007 construction completion target to 24 and has established a FY 2008 target of 30.

While the Superfund Remedial program has a number of projects ready to begin construction, funding also must be provided for several large, complex remedial projects to ensure construction at an optimal pace. In addition, as the program has matured, it has become necessary for the Agency to devote more resources toward post-construction activities, including long-term remedial actions and five-year reviews. The Remedial Allowance for new construction, ongoing projects, and post-construction activities is \$259 million in FY 2008. As in the prior year, the Agency proposes to continue its redirection of resources from earlier phase activities toward remedial construction. Although the Agency exceeded its FY 2006 goal by nearly 100 decisions, it is anticipated that Remedial Final Assessment Decisions will be decreasing from 350 in FY 2007 to 272 in FY 2008. However, EPA and its partners will continue to prioritize site assessments based on risk, and the Agency maintains flexibility to manage resources within the Superfund Remedial program project depending on the need in FY 2008.

Performance goals and measures for the Superfund Federal Facilities Response program are a component of the Superfund Remedial program's measures. The Agency's ability to meet its annual Superfund targets is partially dependent on work performed by other Federal agencies at

NPL Federal facility sites. These performance measures contribute to the goals set out in EPA's 2006-2011 Strategic Plan.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-4.0 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (+\$2,329.8) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$1,500.0) This reflects a net increase to the Superfund Remedial program. A total of \$4.0 million is being redirected to the Remedial program for Regional construction cleanup work at NPL sites.
- (-\$373.8) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to non-site specific program travel expenses in Headquarters and the Regions.
- (-\$184.0) This reduction reflects efficiencies gained in Agency administrative or contract management services.
- (-\$35.2) This reduction reflects savings from improvements to the Agency's small administrative IT Systems.
- (+\$4.3) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CERCLA of 1980, Section 104, as amended by SARA of 1986, as reauthorized through October 1994 as part of the Omnibus Budget Reconciliation Act of 1990.

Superfund: Support to Other Federal Agencies

Program Area: Superfund Cleanup

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Hazardous Substance Superfund</i>	<i>\$4,989.0</i>	<i>\$8,575.4</i>	<i>\$6,575.0</i>	<i>(\$2,000.4)</i>
Total Budget Authority / Obligations	\$4,989.0	\$8,575.4	\$6,575.0	(\$2,000.4)
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

Other Federal agencies contribute to the Superfund program by providing services in areas where EPA does not possess the necessary specialized expertise. These agencies provide numerous Superfund-related services which Superfund resources support. In most years, contributors include the Department of Interior (DOI), the National Oceanic and Atmospheric Administration (NOAA), the Federal Emergency Management Agency (FEMA), the Occupational Safety and Health Administration (OSHA) and the United States Coast Guard (USCG).

FY 2008 Activities and Performance Plan:

In FY 2008, the Agency will continue to provide resources through interagency agreements to support other select Federal agencies. The following table illustrates the levels of funding proposed to be provided to each Federal agency in EPA's FY 2008 request:

Other Federal Agency Funding
(\$ in thousands)

Agency	FY 2007 Pres Bud	FY 2008 Pres Bud
DOI	\$ 801.1	\$ 546.0
FEMA	\$ 324.1	\$ 0.0
NOAA	\$ 1,963.0	\$ 1,063.0
OSHA	\$ 520.8	\$ 0.0
USCG	\$ 4,966.4	\$ 4,966.0
Total	\$ 8,575.4	\$ 6,575.0

DOI will provide response preparedness and management assistance that supports the National Response Team/Regional Response Teams (NRT/RRTs), and EPA's Special Units including the Environmental Response Team, the National Decontamination Team, and the Radiation Response Team.

NOAA will provide site-specific technical support during hazardous waste site investigations, assist in ecological risk assessments, identify and evaluate the severity of risks posed to natural

resources from hazardous waste sites, and evaluate strategies/methods of minimizing those risks. NOAA also will assist in developing and conducting field testing of advanced chemical sampling and analytical equipment used for cost effective and efficient response operations. New technology and information will be applied by NOAA to identify effective countermeasures during response operations.

The USCG, serving as a Federal On-Scene Coordinator (OSC), will conduct small scale Superfund removals in the coastal zone of any release or threatened release into the environment of hazardous substances, or pollutants or contaminants which may present an imminent and substantial danger to the public health or welfare or the environment.

Performance Targets:

Work under this program supports EPA's objective for restoring land. Currently, there are no performance measures specific to this program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$2,000.0) Reduces funding for DOI and NOAA, based on past level of effort, and eliminates funding for the Occupational Safety and Health Administration (OSHA) and the Federal Emergency Management Agency (FEMA), reflecting a decreased demand for their services. The USCG is funded at approximately the FY 2007 President's Budget level because EPA's need for its services to respond to natural disasters and homeland security events has not decreased in recent years.
- (-\$0.4) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CERCLA Sections 104, 105, 106; CWA; OPA.

Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification

Table of Contents - Leaking Underground Storage Tanks

Resource Summary Table	1
Program Projects in LUST	1
Program Area: Compliance	2
Compliance Assistance and Centers	3
Program Area: IT / Data Management / Security	5
IT / Data Management	6
Program Area: Operations and Administration.....	8
Acquisition Management	9
Central Planning, Budgeting, and Finance	11
Facilities Infrastructure and Operations.....	13
Human Resources Management	15
Program Area: Research: Land Protection	16
Research: Land Protection and Restoration	17
Program Area: Underground Storage Tanks (LUST / UST)	19
LUST / UST	20
LUST Cooperative Agreements.....	23

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

APPROPRIATION: Leaking Underground Storage Tanks
Resource Summary Table
(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Leaking Underground Storage Tanks				
Budget Authority	\$86,184.4	\$72,759.0	\$72,461.0	(\$298.0)
Total Workyears	69.8	76.9	75.3	-1.6

Program Projects in LUST
(Dollars in Thousands)

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Compliance				
Compliance Assistance and Centers	\$481.3	\$839.1	\$688.0	(\$151.1)
IT / Data Management / Security				
IT / Data Management	\$130.9	\$175.9	\$177.0	\$1.1
Operations and Administration				
Acquisition Management	\$357.3	\$360.8	\$165.0	(\$195.8)
Central Planning, Budgeting, and Finance	\$760.9	\$1,014.8	\$1,102.0	\$87.2
Facilities Infrastructure and Operations	\$769.6	\$916.8	\$901.0	(\$15.8)
Human Resources Management	\$3.0	\$3.0	\$3.0	\$0.0
Subtotal, Operations and Administration	\$1,890.8	\$2,295.4	\$2,171.0	(\$124.4)
Research: Land Protection				
Research: Land Protection and Restoration	\$617.2	\$651.3	\$660.0	\$8.7
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$11,889.1	\$10,590.1	\$10,558.0	(\$32.1)
LUST Cooperative Agreements	\$71,175.1	\$58,207.2	\$58,207.0	(\$0.2)
Subtotal, LUST Cooperative Agreements	\$71,175.1	\$58,207.2	\$58,207.0	(\$0.2)
Subtotal, Underground Storage Tanks (LUST / UST)	\$83,064.2	\$68,797.3	\$68,765.0	(\$32.3)

Program Area: Compliance

Compliance Assistance and Centers

Program Area: Compliance

Goal: Land Preservation and Restoration

Objective(s): Preserve Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$27,774.3	\$28,890.7	\$29,547.0	\$656.3
<i>Leaking Underground Storage Tanks</i>	<i>\$481.3</i>	<i>\$839.1</i>	<i>\$688.0</i>	<i>(\$151.1)</i>
Oil Spill Response	\$257.8	\$280.2	\$291.0	\$10.8
Hazardous Substance Superfund	\$11.0	\$22.2	\$22.0	(\$0.2)
Total Budget Authority / Obligations	\$28,524.4	\$30,032.2	\$30,548.0	\$515.8
Total Workyears	197.9	212.1	208.4	-3.7

Program Project Description:

To improve compliance with environmental laws, regulated entities, Federal agencies and the public benefit from easy access to tools that help them understand these laws and find efficient, cost-effective means for putting them into practice. To protect our Nation's groundwater and drinking water from petroleum releases from Underground Storage Tanks (UST), EPA will continue to provide compliance assistance tools, technical assistance, and training to promote and enforce UST systems compliance.¹

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to provide general and targeted compliance assistance to the regulated community and integrate assistance into its enforcement and compliance assurance efforts. In FY 2008 the Agency also will continue to obtain state commitments to increase their inspection and enforcement presence where state-specific UST compliance goals are not met. The Agency and states will use innovative compliance approaches, along with outreach and education tools, to bring more USTs into compliance. The Agency will also continue to provide guidance to foster the use of new technology to enhance compliance.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic

¹ For more information refer to: www.epa.gov/swerust1/cat/index.htm.

architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Work under this program supports the goal to preserve land. Currently, there are no performance measures specific to this program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-0.7 FTE) This decrease reflects the Agency's plans to realign FTE to address the increased number of Brownfields grant reviews which are becoming more complex and resource intensive.
- (-\$152.0) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce cost.
- (+\$0.9) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

PPA; CERFA; NEPA; AEA; UMTRLWA.

Program Area: IT / Data Management / Security

IT / Data Management

Program Area: IT / Data Management / Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$98,871.4	\$96,807.2	\$91,019.0	(\$5,788.2)
Science & Technology	\$4,412.9	\$4,268.0	\$3,499.0	(\$769.0)
<i>Leaking Underground Storage Tanks</i>	<i>\$130.9</i>	<i>\$175.9</i>	<i>\$177.0</i>	<i>\$1.1</i>
Oil Spill Response	\$38.8	\$32.5	\$34.0	\$1.5
Hazardous Substance Superfund	\$16,646.2	\$17,120.4	\$16,338.0	(\$782.4)
Total Budget Authority / Obligations	\$120,100.2	\$118,404.0	\$111,067.0	(\$7,337.0)
Total Workyears	515.5	488.0	488.0	0.0

Program Project Description:

This IT/Data Management Leaking Underground Storage Tanks program manages and coordinates the Agency's Enterprise Architecture and develops analytical tools (e.g., Environmental Indicators) to ensure sound environmental decision-making. The program, 1) implements the Agency's E-Government (E-Gov) responsibilities; designs, develops and manages the Agency's Internet and Intranet resources including the Integrated Portal, 2) supports the development, collection, management, and analysis of environmental data (to include both point source and ambient data) to manage statutory programs and to support the Agency in strategic planning at the national, program, and Regional levels, 3) provides a secure, reliable, and capable information infrastructure based on a sound enterprise architecture which includes data standardization, integration, and public access, 4) manages the Agency's Quality System ensuring EPA's processes and data are of quality and adhere to Federal guidelines, and, supports Regional information technology infrastructure, administrative and environmental programs, and telecommunications. These functions are integral to the implementation of Agency information technology programs and systems like the Exchange Network, the Central Data Exchange (CDX) and Permit Compliance System (PCS). Agency Offices rely on the IT/Data Management program and its capabilities to develop and implement tools for ready access to accurate and timely data.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's Information Technology community will continue focusing on the Agency's Technology Initiative¹ and fulfilling the Agency's E-Gov commitments. The Agency's IT/Data Management LUST program forms the core of this effort with its focus on building and implementing the Agency's Integrated Portal and Enterprise Content Management System (ECMS), developing Environmental Indicators, and continuing to deploy enterprise-wide IT infrastructure solutions.

In FY 2008 the IT/Data Management LUST resources continue to support EPA's 'Readiness to Serve' infrastructure program. This program delivers secure information services to ensure that the Agency and the LUST programs have a full range of information technology infrastructure components (e.g., user equipment, network connectivity, e-mail, application hosting, remote access) that make information accessible across the spectrum of mission needs at all locations. The program uses performance-based, outsourced services to obtain the best solutions (value for cost) for the range of program needs. This includes innovative multi-year leasing that sustains and renews technical services in a least-cost, stable manner as technology changes over time (e.g., desktop hardware, software and maintenance).

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1.1) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

FACA; GISRA; CERCLA; CAAA; CWA and amendments; ERD & DAA; TSCA; FIFRA; FQPA; SDWA and amendments; FFDCA; EPCRA; RCRA; SARA; GPRA; GMRA; CCA; PRA; FOIA; CSA; PR; EFOIA.

¹ Office of Environmental Information's (OEI) FY 2006 Technology Initiative has three major components: 1) Building on its Analytical Capacity and Indicators work, OEI will uncover and fill data gaps, and develop response capacity; 2) Using the portal and Exchange Network, OEI will increase the integration of quality data, streamline transactions to foster collaboration, reduce the data entry burden, and improve decision making; and 3) OEI's Readiness to Serve initiative will build capacity and infrastructure to allow more EPA employees to telecommute or work safely and securely in the field.

Program Area: Operations and Administration

Acquisition Management

Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$23,040.8	\$25,418.3	\$29,992.0	\$4,573.7
<i>Leaking Underground Storage Tanks</i>	<i>\$357.3</i>	<i>\$360.8</i>	<i>\$165.0</i>	<i>(\$195.8)</i>
Hazardous Substance Superfund	\$19,577.1	\$23,514.3	\$24,645.0	\$1,130.7
Total Budget Authority / Obligations	\$42,975.2	\$49,293.4	\$54,802.0	\$5,508.6
Total Workyears	351.6	357.2	357.3	0.1

Program Project Description:

LUST resources in this program support contract and acquisition management activities at Headquarters, Regional Offices, Research Triangle Park and Cincinnati offices. Sound contract management fosters efficiency and effectiveness assisting all of EPA's programs. EPA focuses on maintaining a high level of integrity in the management of its LUST-related procurement activities, and in fostering relationships with state and local governments, to support the implementation of environmental programs.

FY 2008 Activities and Performance Plan:

The Agency will improve electronic government capabilities and enhance the education of its contract workforce. The Agency will work to eliminate paper-processing in the LUST acquisition process and manage acquisition records electronically. In addition, LUST resources will support the Superfund/RCRA Regional Procurement Operations Division (SRPOD) in its contract and acquisition management activities.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$91.8) This reduction reflects efficiencies gained in Agency administrative or contract management services.

- (-\$105.0) This payroll and FTE decrease reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities. These reductions will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (+\$1.0) Change due to rounding in the FY 2008 President's Budget.
- (-0.9 FTE) This change reflects EPA's workforce management strategy that will help the Agency better align resources, skills and Agency priorities.

Statutory Authority:

EPA's Environmental Statutes; Annual Appropriations Acts; FAR; contract law.

Central Planning, Budgeting, and Finance
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$70,768.6	\$83,548.1	\$74,960.0	(\$8,588.1)
<i>Leaking Underground Storage Tanks</i>	<i>\$760.9</i>	<i>\$1,014.8</i>	<i>\$1,102.0</i>	<i>\$87.2</i>
Hazardous Substance Superfund	\$21,783.7	\$25,540.8	\$24,306.0	(\$1,234.8)
Total Budget Authority / Obligations	\$93,313.2	\$110,103.7	\$100,368.0	(\$9,735.7)
Total Workyears	515.8	537.7	530.0	-7.7

Program Project Description:

Activities under the Central Planning, Budgeting and Finance program/project support the management of integrated planning, budgeting, financial management, performance and accountability processes and systems to ensure effective stewardship of resources. PART and GPRA coordination is also a priority. (Refer to <http://www.epa.gov/ocfo/functions.htm> for additional information).

FY 2008 Activities and Performance Plan:

EPA will continue efforts to modernize the Agency's financial systems and business processes. The modernization effort will reduce cost, and comply with Congressional direction and new Federal financial systems requirements. This work is framed by the Agency's Enterprise Architecture and will ensure maximum use of enabling technologies for e-Gov initiatives including e-Procurement, e-Payroll, and e-Travel.

EPA plans further improvements to its budgeting and planning system, financial data warehouse, business intelligence tools and reporting capabilities. These improvements will support EPA's "green" score in financial performance on the President's Management Agenda scorecard by providing more accessible data to support accountability, cost accounting, budget and performance integration, and management decision-making.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$86.2) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$2.0) This increase provides funding for contracts to support the financial management of the LUST program.
- (-\$1.0) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Annual Appropriations Act; CCA; CERCLA; CSA; E-Government Act of 2002; EFOIA; EPA's Environmental Statutes, and the Federal Grant and Cooperative Agreement Act; FAIR; Federal Acquisition Regulations, contract law and EPA's Assistance Regulations (40CFR Parts 30, 31, 35, 40,45,46, 47); FMFIA (1982); FOIA; GMRA(1994); IPIA; IGA of 1978 and Amendments of 1988; PRA; PR; CFOA (1990); GPRA (1993); The Prompt Payment Act (1982); Title 5 USC.

Facilities Infrastructure and Operations
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$336,980.6	\$294,760.1	\$303,728.0	\$8,967.9
Science & Technology	\$8,841.7	\$70,239.5	\$73,859.0	\$3,619.5
Building and Facilities	\$30,871.3	\$28,430.9	\$26,931.0	(\$1,499.9)
<i>Leaking Underground Storage Tanks</i>	<i>\$769.6</i>	<i>\$916.8</i>	<i>\$901.0</i>	<i>(\$15.8)</i>
Oil Spill Response	\$366.1	\$499.3	\$490.0	(\$9.3)
Hazardous Substance Superfund	\$66,365.6	\$73,944.7	\$74,956.0	\$1,011.3
Total Budget Authority / Obligations	\$444,194.9	\$468,791.3	\$480,865.0	\$12,073.7
Total Workyears	375.1	438.6	415.9	-22.7

Program Project Description:

LUST resources in the Facilities Infrastructure and Operations Program Project are used to manage activities and support services in many centralized administrative areas at EPA. These include health and safety, environmental compliance, occupational health, medical monitoring, fitness/wellness and safety, and environmental management functions. LUST Resources for this program also support a full range of ongoing facilities management services including: facilities maintenance and operations, Headquarters security, space planning, shipping and receiving, property management, printing and reproduction, mail management, and transportation services.

FY 2008 Activities and Performance Plan:

The Agency will continue to manage its lease agreements with GSA and other private landlords by conducting rent reviews and verifying that monthly billing statements are correct. Further, EPA will provide transit subsidy to eligible applicants as directed by Executive Order 13150¹ *Federal Workforce Transportation*.

Performance Targets:

Work under this program supports multiple strategic objectives. Performance information is included in the Program Performance and Assessment section.

¹ Additional information available at <http://ceq.eh.doe.gov/nepa/regs/eos/eo13150.html>

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$16.3) This decrease represents fixed cost savings in FY 2008.
- (+\$0.5) Provides additional resources for increases in transit subsidy.

Statutory Authority:

FPASA; PBA; annual Appropriations Acts; CWA; CAA; D.C. Recycling Act of 1988; Executive Orders 10577 and 12598; Homeland Security Presidential Decision Directive 63 (Critical Infrastructure Protection).

Human Resources Management
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$42,966.8	\$40,202.5	\$40,175.0	(\$27.5)
<i>Leaking Underground Storage Tanks</i>	\$3.0	\$3.0	\$3.0	\$0.0
Hazardous Substance Superfund	\$5,282.1	\$5,270.2	\$5,036.0	(\$234.2)
Total Budget Authority / Obligations	\$48,251.9	\$45,475.7	\$45,214.0	(\$261.7)
Total Workyears	323.5	297.6	296.3	-1.3

Program Project Description:

LUST resources in this program support activities related to the provision of human capital and human resources management services to the entire Agency. EPA supports organizational development and management activities through Agencywide and interagency councils and committees and through participation in interagency management improvement initiatives. The Agency continually evaluates human resource and workforce functions, employee development, leadership development, workforce planning, and succession management.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to meet the Department of Labor requirements for distributing workmen's compensation and disability. Human Resources Management resources are allocated to the LUST appropriation based on the portion of LUST FTE requiring Human Resources Management services.

Performance Targets:

Work under this program supports multiple strategic objectives. Performance information is included in the Program Performance and Assessment section.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

Title V USC.

Program Area: Research: Land Protection

Research: Land Protection and Restoration

Program Area: Research: Land Protection

Goal: Land Preservation and Restoration

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Science & Technology	\$12,101.5	\$10,552.8	\$10,737.0	\$184.2
<i>Leaking Underground Storage Tanks</i>	<i>\$617.2</i>	<i>\$651.3</i>	<i>\$660.0</i>	<i>\$8.7</i>
Oil Spill Response	\$828.4	\$903.1	\$901.0	(\$2.1)
Hazardous Substance Superfund	\$22,210.2	\$21,963.9	\$20,081.0	(\$1,882.9)
Total Budget Authority / Obligations	\$35,757.3	\$34,071.1	\$32,379.0	(\$1,692.1)
Total Workyears	141.6	142.8	141.3	-1.5

Program Project Description:

Research applicable to leaking underground storage tanks (LUSTs) addresses assessment and cleanup of leaks for fuels and various fuel additives, including methyl tertiary butyl ether (MTBE). Assessment focuses on development of source term and transport modeling modules that can be applied by state project managers. Remediation research addresses multiple remediation approaches applicable to spilled fuels, with or without oxygenates.

Research is guided by the long term *Waste Research Strategy*¹, which was developed with participation from major clients and outlines research needs and priorities. These research efforts are guided by the Land Multi-Year Plan (MYP)², developed with input from across the Agency, which outlines steps for meeting the needs of Agency programs and for evaluating progress through annual performance goals and measures. Specific human health risk and exposure assessments and methods are discussed and conducted under the Human Health Risk Assessment program.

The Land Protection and Restoration research program was reviewed by EPA's Board of Scientific Counselors (BOSC)—a Federal advisory committee comprised of qualified, independent scientists and engineers—in FY 2006 (December 2005). The BOSC found that the program generates high quality products and conducts appropriately focused multi-disciplinary research.

¹ EPA, Office of Research and Development, *Waste Research Strategy*. Washington, D.C.: EPA. For more information, see <http://www.epa.gov/ord/htm/documents/wastepub.pdf>.

² For more information, see <http://www.epa.gov/osp/myp>.

The *Waste Research Strategy* outlines the research needs and priorities at the time it was prepared. To guide these research efforts as progress is made and new needs emerge, EPA develops multi-year research plans that are revised periodically. EPA merged the Contaminated Sites and RCRA Multi-Year Plans (MYPs) into one cohesive Land Research MYP, with input from across the Agency, to ensure research conducted continues to support the Agency's mission to protect human health and the environment. The new plan will be posted when peer-review comments are addressed in the second quarter of FY 2007.

FY 2008 Activities and Performance Plan:

Leaking underground storage tanks (LUSTs) assessment research will focus on the development of online transport models that can be used by state project managers (R&D Criteria: Relevance). Remedies being investigated include active water treatment and monitored natural attenuation, with performance influenced by the nature of the fuel oxygenate. A report on monitored natural attenuation of ethylene dibromide (EDB) will be produced so that the program office and project managers can evaluate alternative remedies (R&D Criteria: Performance).

A major concern of EPA is the fate of pollutants released from leaking underground tanks into ground water (R&D Criteria: Relevance). In FY 2008, EPA will continue to enhance the Tools for Analysis of Contaminated Sites (TACS) version 2, which contains methodologies and software to aid in the analysis of field data from these types of sites. The TACS utilizes a two-tiered structure allowing for analysis of sites with either limited or extensive data sets to address important site management issues, such as: contaminant plumes (contracting, stable, or expanding) and the occurrence (or non-occurrence) of biodegradation (R&D Criteria: Relevance, Performance).

In 2006, the Land Protection and Restoration Research Program received an “adequate” rating in its first PART review. EPA and OMB continue to work to finalize appropriate ambitious performance measures, develop and implement a protocol for improved budget-performance integration, and develop a new efficiency measure that captures the cost effectiveness of research activities. To this end, OMB, EPA, and members of the BOSC formed a workgroup to discuss long-term measurement of EPA’s research and development programs. As part of the workgroup, EPA has devised program-specific questions to be addressed by the BOSC and used in support of long-term measurement. To identify appropriate outcome-oriented efficiency measures for research programs, EPA is soliciting input from the National Academy of Sciences.

Performance Targets:

Work under this program project supports EPA’s Enhance Science and Research objective. Performance measures for this specific program are included under the Superfund Land Protection and Restoration program.

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (+\$7.9) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$0.9) This technical adjustment realigns workforce support costs (such as capital equipment and repairs and improvement) across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.
- (-\$0.1) This is a technical adjustment to realign travel resources across the research program to better reflect FY 2008 priorities. There will be no programmatic impacts.

Statutory Authority:

SWDA; HSWA; SARA; CERCLA; RCRA; OPA; BRERA.

Program Area: Underground Storage Tanks (LUST / UST)

LUST / UST

Program Area: Underground Storage Tanks (LUST / UST)

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$9,042.3	\$11,713.7	\$11,719.0	\$5.3
<i>Leaking Underground Storage Tanks</i>	<i>\$11,889.1</i>	<i>\$10,590.1</i>	<i>\$10,558.0</i>	<i>(\$32.1)</i>
Total Budget Authority / Obligations	\$20,931.4	\$22,303.8	\$22,277.0	(\$26.8)
Total Workyears	111.7	131.3	131.3	0.0

Program Project Description:

The Leaking Underground Storage Tanks (LUST) program promotes rapid and effective responses to releases from Federally-regulated underground storage tanks (USTs) containing petroleum by enhancing state, local, and Tribal enforcement and response capability.

EPA provides technical information, forums for information exchange, and training opportunities to states, Tribes and Intertribal Consortia to encourage program development, and/or implementation of the LUST program, and to address groundwater and drinking water contamination from oxygenates. These activities support the LUST cooperative agreements, awarded by EPA to states to assist them in implementing their oversight and programmatic role. For more information, refer to <http://www.epa.gov/swerust1/20clenup.htm>.

EPA works with state UST programs to clean up LUST sites, promote innovative approaches to corrective action to streamline the remediation process, and measure and evaluate national program progress and performance. The Agency has primary responsibility for implementing the LUST program in Indian country, and uses a portion of its LUST funding to implement the program in Indian country (including but not limited to cleanup activities and enforcement).

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to work with the states and Tribes to complete LUST cleanups in an effort to reduce the backlog of 113,919 cleanups not yet completed.¹ Since the beginning of the LUST program, EPA has cleaned up almost 75 percent (or 350,813) of all reported releases. As of September 2006, EPA and state tank programs completed 14,493 cleanups in states and territories in FY 2006, of which 43 cleanups were completed in Indian country (refer to http://www.epa.gov/swerust1/cat/ca_06_34.pdf). For FY 2008, the program's goal for LUST cleanups in Indian country is 30.

¹ U.S. Environmental Protection Agency Memorandum, *FY 2006 End-of-Year Activity Report*, from Cliff Rothenstein, Director, Office of Underground Storage Tanks to UST/LUST Regional Division Directors, Regions 1-10, dated November 14, 2006, http://www.epa.gov/swerust1/cat/ca_06_34.pdf.

EPA's LUST program priorities continue to focus on increasing the efficiency of LUST cleanups nationwide; addressing contaminants of concern; and promoting the continued use, reuse, and long-term management of LUST sites. In FY 2008, EPA will continue to help states and Tribes improve LUST cleanup performance by targeting source water areas using a drinking water mapping application, developing and promoting the use of innovative tools such as multi-site and geographical cleanup approaches, optimizing the use of cleanup technologies, and streamlining cleanup decisions and processes. (Refer to <http://www.epa.gov/OUST/cat/index.htm>.) EPA also will continue its efforts to monitor the soundness of state cleanup funds, a significant source of funding for addressing LUST cleanups, and the impact of contaminants.

The 2005 EPA² requirement to develop a strategy for implementing the program in Indian country enhanced EPA's efforts and provided renewed focus to improve the LUST cleanup rate in Indian country. To address leaking USTs in Indian Country, EPA will continue to provide support for site assessments, investigations and remediation; enforcement against responsible parties; cleanup of soil and/or groundwater; alternate water supplies; and cost recovery against UST owners and operators. The EPA also will continue to provide technical expertise and assistance by utilizing in-house personnel, contractors and grants/cooperative agreements to Tribal entities; response activities; oversight of responsible party lead cleanups; and support and assistance to Tribal governments.

The LUST program was assessed under PART and in 2004 received an overall rating of "adequate" from OMB's third review of the program. To achieve an adequate rating, EPA was asked to create two long-term performance measures that focus on environmental outcomes: 1) increasing the number of cleanups that meet state risk-based standards for human exposure and groundwater migration, and 2) number of cleanups that meet risk-based standards for human exposure and groundwater migration on Indian country.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of cleanups that meet risk-based standards for human exposure and groundwater migration (tracked as the number of LUST cleanups completed)	14,493	13,600	13,000	13,000	cleanups
Outcome	Number of cleanups that meet risk-based standards for human	43	30	30	30	cleanups

² For more information regarding UST/LUST provisions refer to, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ058.109.pdf (scroll to Title XV - Ethanol and Motor Fuels, Subtitle B – Underground Storage Tank Compliance, on pages 500-513 of the pdf file) for information on the UST/LUST provisions.

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of cleanups that meet risk-based standards for human exposure and groundwater migration (tracked as the number of LUST cleanups completed)	14,493	13,600	13,000	13,000	cleanups
	exposure and groundwater migration on Indian Country.					

The program tracks the number of cleanups that meet state risk-based standards for human exposure and groundwater migration on Indian Country annually.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$28.9) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$63.4) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to program travel expenses in Headquarters and the Regions.
- (+\$2.4) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

SWDA of 1976, as amended by the Superfund Reauthorization Amendments of 1986 (Subtitle I), Section 9003(h); Section 8001(a) Tribal Grants Public Law 105-276; EPA Act of 2005.

LUST Cooperative Agreements

Program Area: Underground Storage Tanks (LUST / UST)

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Leaking Underground Storage Tanks</i>	<i>\$71,175.1</i>	<i>\$58,207.2</i>	<i>\$58,207.0</i>	<i>(\$0.2)</i>
Total Budget Authority / Obligations	\$71,175.1	\$58,207.2	\$58,207.0	(\$0.2)
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Leaking Underground Storage Tanks (LUST) program promotes rapid and effective responses to releases from Federally-regulated underground storage tanks (USTs) containing petroleum by enhancing state, local, and Tribal enforcement and response capability. EPA provides resources to 49 states (refer to <http://www.epa.gov/swerust1/20clenup.htm>), the District of Columbia, and five territories (Puerto Rico, Virgin Islands, the Northern Mariana Islands, American Samoa, and Guam) through cooperative agreements authorized under Section 9003(h) of the Solid Waste Disposal Act (SWDA) for the oversight and cleanup of petroleum releases from USTs. EPA will continue to fund research, studies and training under Section 8001 (a)(1) of the SWDA that directly supports state oversight and cleanup of LUST sites under Section 9003(h).

States are the primary implementing agencies (except in Indian country). States and territories have the authority to respond to petroleum releases from USTs using LUST Trust funds where owners and operators are unknown, unwilling, or unable to take corrective actions. States and territories use the LUST Trust Fund to administer their corrective action programs, oversee cleanups by responsible parties, undertake necessary enforcement actions, and pay for cleanups in cases where a responsible party cannot be found or is unwilling or unable to pay for a cleanup (refer to <http://www.epa.gov/OUST/ltffacts.htm>), and cost recover from responsible parties who are unwilling to pay for cleanups.

When the LUST Trust Fund is used, tank owners/operators are liable to the state for costs incurred and are subject to cost recovery actions. EPA, with few exceptions, does not perform the cleanup of LUSTs. Approximately 40 states have UST cleanup funds that pay for most UST cleanups and are separate from the LUST Trust Fund; collectively states raise and spend more than \$1 billion annually. EPA will not use LUST appropriations to implement any provision of the Energy Policy Act (EPAct) of 2005 that is not also a leaking underground storage tank activity authorized by SARA.

FY 2008 Activities and Performance Plan:

EPA's on-going work focuses attention and efforts on increasing the efficiency of LUST cleanups nationwide. In FY 2008, EPA will continue to work with the states to complete cleanups and reduce the backlog of 113,919 cleanups¹ not yet completed. Since the beginning of the UST program, almost 75 percent (or 350,813) of all reported releases has been cleaned up. At the FY 2008 request level, the Agency will provide not less than 80percent of LUST appropriated funds to states to carry out specific purposes.² EPA will distribute LUST funding to states under a previously established allocation process.

The LUST program was assessed under PART and in 2004 received an overall rating of “adequate” from OMB’s third review of the program. To achieve an adequate rating, EPA was asked to create two long-term performance measures that focus on environmental outcomes: 1) increasing the number of cleanups that meet state risk-based standards for human exposure and groundwater migration, and 2) LUST cleanups completed over a three-year rolling average per total cleanup dollars, which is a new measure of program efficiency. Due to the recent legislative changes from the EPAct, EPA and the states are re-evaluating and updating this measure.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of cleanups that meet state risk-based standards for human exposure and groundwater migration (tracked as the number LUST cleanups completed).	14,493	13,600	13,000	13,000	cleanups

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (-\$0.2) Change due to rounding in the FY 2008 President’s Budget.

Statutory Authority:

SWDA of 1976, as amended by SARA of 1986 (Subtitle I), Section 9003(h); Section 9004(f); Section 8001(a)(1); Section 9003(h)(7) of the SWDA.

¹ U.S. Environmental Protection Agency Memorandum, *FY 2006 End-of-Year Activity Report*, from Cliff Rothenstein, Director, Office of Underground Storage Tanks to UST/LUST Regional Division Directors, Regions 1-10, dated November 14, 2006, http://www.epa.gov/swrust1/cat/ca_06_34.pdf

² Title XV, Subtitle B of the EPAct of 2005; SWDA of 1976, as amended by the Superfund Reauthorization Amendments of 1986 (Subtitle I), Section 9004(f).

**Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification**

Table of Contents - Oil Spill

Resource Summary Table	1
Program Projects in Oil Spills	1
Program Area: Compliance	2
Compliance Assistance and Centers	3
Program Area: Enforcement	5
Civil Enforcement	6
Program Area: IT / Data Management / Security	8
IT / Data Management	9
Program Area: Oil	11
Oil Spill: Prevention, Preparedness and Response	12
Program Area: Operations and Administration.....	15
Facilities Infrastructure and Operations.....	16
Program Area: Research: Land Protection	18
Research: Land Protection and Restoration	19

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Oil Spill Response
Resource Summary Table
(Dollars in Thousands)**

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Oil Spill Response				
Budget Authority	\$15,895.5	\$16,506.0	\$17,280.0	\$774.0
Total Workyears	84.2	98.7	102.2	3.5

**Program Projects in Oil Spills
(Dollars in Thousands)**

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Compliance				
Compliance Assistance and Centers	\$257.8	\$280.2	\$291.0	\$10.8
Enforcement				
Civil Enforcement	\$1,759.1	\$1,826.3	\$2,065.0	\$238.7
IT / Data Management / Security				
IT / Data Management	\$38.8	\$32.5	\$34.0	\$1.5
Oil				
Oil Spill: Prevention, Preparedness and Response	\$12,645.3	\$12,964.6	\$13,499.0	\$534.4
Operations and Administration				
Facilities Infrastructure and Operations	\$366.1	\$499.3	\$490.0	(\$9.3)
Research: Land Protection				
Research: Land Protection and Restoration	\$828.4	\$903.1	\$901.0	(\$2.1)
Subtotal, Research: Land Protection and Restoration	\$828.4	\$903.1	\$901.0	(\$2.1)

Program Area: Compliance

Compliance Assistance and Centers

Program Area: Compliance

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$27,774.3	\$28,890.7	\$29,547.0	\$656.3
Leaking Underground Storage Tanks	\$481.3	\$839.1	\$688.0	(\$151.1)
<i>Oil Spill Response</i>	\$257.8	\$280.2	\$291.0	\$10.8
Hazardous Substance Superfund	\$11.0	\$22.2	\$22.0	(\$0.2)
Total Budget Authority / Obligations	\$28,524.4	\$30,032.2	\$30,548.0	\$515.8
Total Workyears	197.9	212.1	208.4	-3.7

Program Project Description:

EPA's Compliance Assistance program includes a range of activities and tools designed to improve compliance with environmental laws. Regulated entities, Federal agencies and the public benefit from easy access to tools that help them understand these laws and find efficient, cost-effective means for putting them into practice.

This portion of the Compliance Assistance program is designed to prevent oil spills using compliance assistance and civil enforcement tools and strategies and to prepare for and respond to any oil spill affecting the inland waters of the United States. EPA's Oil Program has a long history of effective response to major oil spills, and the lessons learned have helped to improve our country's prevention and response capabilities.

FY 2008 Activities and Performance Plan:

Pursuant to the Clean Water Act (CWA) Section 311 (oil spill and hazardous substances) requirements, the Agency will continue in FY 2008 to provide compliance assistance to regulated entities to assist them in understanding their legal requirements under the CWA and provide them with cost effective compliance strategies to help prevent oil spills.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance Program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

More information is included in the Program Performance and Assessment Section. For more information, visit: <http://www.epa.gov/oilspill/prevent.htm>.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$10.5) This reflects an increase for payroll and cost of living for existing FTE.
- (+\$0.3) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

OPA; CWA; CERCLA; PPA; NEPA; PHSA; DREAA; SDWA; Executive Order 12241; Executive Order 12656.

Program Area: Enforcement

Civil Enforcement

Program Area: Enforcement

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$118,560.9	\$120,777.7	\$126,645.0	\$5,867.3
<i>Oil Spill Response</i>	<i>\$1,759.1</i>	<i>\$1,826.3</i>	<i>\$2,065.0</i>	<i>\$238.7</i>
Hazardous Substance Superfund	\$785.4	\$883.0	\$884.0	\$1.0
Total Budget Authority / Obligations	\$121,105.4	\$123,487.0	\$129,594.0	\$6,107.0
Total Workyears	936.4	958.5	969.1	10.6

Program Project Description:

This portion of the Civil Enforcement program is designed to prevent oil spills using civil enforcement and compliance assistance approaches, and to prepare for, and respond to, any oil spills affecting the inland waters of the United States. EPA's oil program has a long history of effective response to oil spills, including several major incidents. The lessons learned improve our country's prevention and response capabilities.¹

FY 2008 Activities and Performance Plan:

Pursuant to Clean Water Act Section 311 (Oil Spill and Hazardous Substances) requirements, EPA's Civil Enforcement program will develop policies, issue administrative cleanup orders and/or judicial actions for injunctive relief, assess civil penalties for violations of those orders or for spills into the environment, and assist in the recovery of cleanup costs expended by the government. In FY 2008, the program will also provide support for field investigations and inspections of spills as well as Spill Control Countermeasure compliance assistance.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

¹ For more information refer to: www.epa.gov/oilspill/index.htm.

Performance Targets:

One of the program measures, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions². The Agency is exploring methodologies to strengthen the measure by: 1) adding components that deal with pollutant hazard; and 2) identifying an indicator of the population that would have been exposed to the pollutant. Work under this program supports the goal to preserve land. Currently, there are no performance measures specific to this program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+1.5 FTE) The increase reflects an FTE realignment from Superfund Enforcement. The Civil Enforcement program anticipates increased legal workload to ensure compliance with the Spill Prevention, Control and Countermeasures (SPCC) regulation and the Facility Response Plan (FRP) program requirements due to an increase of FTE to the response component of the Oil program.
- (+\$240.2) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$1.5) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

OPA; CWA; CERCLA; NEPA; Pollution Prosecution Act.

² With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Program Area: IT / Data Management / Security

IT / Data Management

Program Area: IT / Data Management / Security

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$98,871.4	\$96,807.2	\$91,019.0	(\$5,788.2)
Science & Technology	\$4,412.9	\$4,268.0	\$3,499.0	(\$769.0)
Leaking Underground Storage Tanks	\$130.9	\$175.9	\$177.0	\$1.1
<i>Oil Spill Response</i>	<i>\$38.8</i>	<i>\$32.5</i>	<i>\$34.0</i>	<i>\$1.5</i>
Hazardous Substance Superfund	\$16,646.2	\$17,120.4	\$16,338.0	(\$782.4)
Total Budget Authority / Obligations	\$120,100.2	\$118,404.0	\$111,067.0	(\$7,337.0)
Total Workyears	515.5	488.0	488.0	0.0

Program Project Description:

The IT/Data Management Oil program manages and coordinates the Agency's Enterprise Architecture and develops analytical tools (e.g., Environmental Indicators) to ensure sound environmental decision-making. The program 1) implements the Agency's E-Government (E-Gov) responsibilities; designs, develops and manages the Agency's Internet and Intranet resources including the Integrated Portal, 2) supports the development, collection, management, and analysis of environmental data (to include both point source and ambient data) to manage statutory programs and to support the Agency in strategic planning at the national, program, and regional levels, 3) provides a secure, reliable, and capable information infrastructure based on a sound enterprise architecture which includes data standardization, integration, and public access, 4) manages the Agency's Quality System ensuring EPA's processes and data are of quality and adhere to Federal guidelines, and, 5) supports regional information technology infrastructure, administrative and environmental programs, and telecommunications. These functions are integral to the implementation of Agency information technology programs and systems like the Exchange Network, the Central Data Exchange (CDX) and Permit Compliance System (PCS). Agency offices rely on the IT/Data Management program and its capabilities to develop and implement tools for ready access to accurate and timely data.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's Information Technology community will continue focusing on the Agency's Technology Initiative¹ and fulfilling the Agency's E-Gov commitments. The Agency's IT/Data Management Oil program forms the core of this effort with its focus on building and implementing the Agency's Integrated Portal and Enterprise Content Management System (ECMS), developing Environmental Indicators, and continuing to deploy enterprise-wide IT infrastructure solutions.

In FY 2008, the IT/Data Management Oil Spill resources continue to support EPA's 'Readiness to Serve' infrastructure program. This program delivers secure information services to ensure that the Agency and the Oil programs have a full range of information technology infrastructure components (e.g., user equipment, network connectivity, e-mail, application hosting, remote access) that make information accessible across the spectrum of mission needs at all locations. The program uses performance-based, outsourced services to obtain the best solutions (value for cost) for the range of program needs. This includes innovative multi-year leasing that sustains and renews technical services in a least-cost, stable manner as technology changes over time (e.g., desktop hardware, software and maintenance).

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1.5) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

FACA; GISRA; CERCLA; CAAA; CWA and amendments; ERD & DAA; TSCA; FIFRA; FQPA; SDWA and amendments; FFDCA; EPCRA; RCRA; SARA; GPRA; GMRA; CCA; PRA; FOIA; CSA; PR; EFOIA.

¹ Office of Environmental Information (OEI)'s FY 2006 Technology Initiative has three major components: 1) Building on its Analytical Capacity and Indicators work, OEI will uncover and fill data gaps, and develop response capacity; 2) Using the portal and Exchange Network, OEI will increase the integration of quality data, streamline transactions to foster collaboration, reduce the data entry burden, and improve decision making; and 3) OEI's Readiness to Serve initiative will build capacity and infrastructure to allow more EPA employees to telecommute or work safely and securely in the field.

Program Area: Oil

Oil Spill: Prevention, Preparedness and Response

Program Area: Oil

Goal: Land Preservation and Restoration

Objective(s): Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Oil Spill Response</i>	<i>\$12,645.3</i>	<i>\$12,964.6</i>	<i>\$13,499.0</i>	<i>\$534.4</i>
Total Budget Authority / Obligations	\$12,645.3	\$12,964.6	\$13,499.0	\$534.4
Total Workyears	73.5	82.0	84.0	2.0

Program Project Description:

The Oil program protects U.S. waters by effectively preventing, preparing for, responding to and/or monitoring oil spills. EPA conducts oil spill prevention, preparedness, and enforcement activities associated with the over half million non-transportation-related oil storage facilities that EPA regulates through its spill prevention program. The Spill Prevention, Control and Countermeasures (SPCC) regulation and the Facility Response Plan (FRP) regulations establish EPA's Oil program regulatory framework. In addition to its prevention responsibilities, EPA serves as the lead responder for cleanup of all inland zone spills, including transportation-related spills from pipelines, trucks, and other transportation systems. EPA accesses the Oil Spill Liability Trust Fund, administered by the U.S. Coast Guard, to obtain reimbursement for site-specific spill response activities. Over 24,000 oil spills occur in the U.S. every year, with half of these spills occurring in the inland zone over which EPA has jurisdiction. On average, one spill of greater than 100,000 gallons occurs every month from EPA-regulated oil storage facilities and the inland oil transportation network. For more information, refer to <http://www.epa.gov/oilspill>.

FY 2008 Activities and Performance Plan:

FY 2008 program priorities include improvements to the Oil program's regulatory requirements. In FY 2008, EPA intends to finalize regulatory changes that are to be proposed in FY 2007 designed to clarify a number of technical issues associated with the SPCC rule requirements and to address small businesses, farms, and other sector adjustments that arose from regulatory work completed in calendar year 2006. Substantial supporting work, including data gathering activities and responding to public comments on the proposed rule, will be necessary to complete rule finalization in FY 2008. EPA also expects to revise and update guidance that was issued in calendar year 2005 to ensure it reflects current rule requirements and input from stakeholders.

The largest oil storage facilities and refineries must prepare Facility Response Plans (FRPs) to identify response resources and ensure their availability in the event of a worst case discharge. FRPs establish communication, address security, identify an individual with authority to implement removal actions, and describe training and testing drills at the facility. In FY 2008, EPA will continue to review/approve FRPs and conduct inspections and exercises at an estimated 250 FRP facilities. EPA will emphasize emergency preparedness, particularly through

the use of unannounced drills and exercises, to ensure facilities and responders can effectively implement response plans.

Working with area officials (state, local and Federal officials in a given geographic location), EPA will continue to enhance the existing National Preparedness for Response Exercise Program by strengthening area contingency plans (ACPs) and regional contingency plans. The ACPs detail the responsibilities of various parties in the event of a spill/release, describe unique geographical features, sensitive ecological resources, and drinking water intakes for the area covered, and identify available response equipment and its location. EPA conducts a small number of ACP exercises each year to evaluate and strengthen the plans.

EPA's Oil Spill program was assessed under PART in 2005 and received an overall rating of "adequate." Program performance is determined by measuring the gallons of oil spilled to navigable waters from facilities subject to EPA's FRP regulations and measuring the compliance rate of facilities with the FRP and SPCC requirements. The program is also developing stronger strategic planning procedures to ensure continuous program improvement, ensuring data quality, and developing a forum to share best spill prevention practices across Regional Offices. EPA issued guidance to Regional program managers for use in understanding and reporting on these performance measures and recommendations/follow up actions.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of inspected facilities subject to Spill Prevention, Control and Countermeasures (SPCC) regulations found to be in compliance.	50	100	53	55	percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of inspected facilities subject to Facility Response Plan (FRP) regulations found to be in compliance.	71	100	75	78	percent

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Gallons of oil spilled to navigable waters per million program dollar spent annually on prevention and			No target established	90,000	gallons

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	preparedness at Facility Response Plan (FRP) facilities.					

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+2.0 FTE) The redirection of 2.0 FTE to the Oil Spill Prevention and Preparedness program would increase by 27 percent the level of effort EPA has available to ensure compliance with the FRP and SPCC program requirements. Specifically, these resources would allow EPA to increase the level of Regional inspections, preparedness drilling, compliance assessment and other programs.
- (+\$574.0) This reflects an increase for payroll and cost of living for existing FTE.
- (-\$43.6) This reduction reflects an Agencywide effort to reduce international travel as well as a reduction to program travel expenses in Headquarters and the Regions.
- (+\$4.0) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Federal Water Pollution Control Act as amended by the OPA of 1990. The regulatory framework includes the Oil and Hazardous Substances NCP (40 CFR Part 300) and the Oil Pollution Prevention regulation (40 CFR Part 112) which covers the SPCC, and FRP program requirements.

Program Area: Operations and Administration

Facilities Infrastructure and Operations
Program Area: Operations and Administration

Goal: Provide Agency-wide support for multiple goals to achieve their objectives. This support involves Agency-wide activities primarily provided by EPA's six (6) support offices - the Office of Administration and Resources Management (OARM), Office of the Chief Financial Officer (OCFO), Office of Environmental Information (OEI), Office of General Counsel (OGC), Office of the Administrator (OA), and the Office of Inspector General (OIG).

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Environmental Program & Management	\$336,980.6	\$294,760.1	\$303,728.0	\$8,967.9
Science & Technology	\$8,841.7	\$70,239.5	\$73,859.0	\$3,619.5
Building and Facilities	\$30,871.3	\$28,430.9	\$26,931.0	(\$1,499.9)
Leaking Underground Storage Tanks	\$769.6	\$916.8	\$901.0	(\$15.8)
<i>Oil Spill Response</i>	<i>\$366.1</i>	<i>\$499.3</i>	<i>\$490.0</i>	<i>(\$9.3)</i>
Hazardous Substance Superfund	\$66,365.6	\$73,944.7	\$74,956.0	\$1,011.3
Total Budget Authority / Obligations	\$444,194.9	\$468,791.3	\$480,865.0	\$12,073.7
Total Workyears	375.1	438.6	415.9	-22.7

Program Project Description:

Oil Spill account resources in the Facilities Infrastructure and Operations Program Project are used to manage activities and support services in many centralized administrative areas such as health and safety, environmental compliance, occupational health, medical monitoring, fitness/wellness and safety, and environmental management functions at EPA. Oil appropriation resources for this program also support a full range of ongoing facilities management services including: facilities maintenance and operations, Headquarters security, space planning, shipping and receiving, property management, printing and reproduction, mail management and transportation services.

FY 2008 Activities and Performance Plan:

The Agency will continue to manage its lease agreements with the General Services Administration (GSA) and other private landlords by conducting rent reviews and verifying that monthly billing statements are correct. Further, EPA will provide transit subsidy to eligible applicants as directed by Executive Order 13150¹ *Federal Workforce Transportation*.

Performance Targets:

Work under this program supports multiple strategic objectives. Performance information is included in the Program Performance and Assessment section.

¹ Additional information available at <http://ceq.eh.doe.gov/nepa/regs/eos/eo13150.html>

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$9.3) This decrease represents projected rent savings in FY 2008.

Statutory Authority:

Federal Property and Administration Services Act; Public Building Act; Annual Appropriations Act; CWA; CAA; D.C. Recycling Act of 1988; Executive Orders 10577 and 12598; Department of Justice United States Marshals Service, Vulnerability Assessment of Federal Facilities Report; Presidential Decision Directive 63 (Critical Infrastructure Protection).

Program Area: Research: Land Protection

Research: Land Protection and Restoration

Program Area: Research: Land Protection

Goal: Land Preservation and Restoration

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Science & Technology	\$12,101.5	\$10,552.8	\$10,737.0	\$184.2
Leaking Underground Storage Tanks	\$617.2	\$651.3	\$660.0	\$8.7
<i>Oil Spill Response</i>	<i>\$828.4</i>	<i>\$903.1</i>	<i>\$901.0</i>	<i>(\$2.1)</i>
Hazardous Substance Superfund	\$22,210.2	\$21,963.9	\$20,081.0	(\$1,882.9)
Total Budget Authority / Obligations	\$35,757.3	\$34,071.1	\$32,379.0	(\$1,692.1)
Total Workyears	141.6	142.8	141.3	-1.5

Program Project Description:

Land protection research in the oil spills area focuses on three aspects: test protocol development, fate and transport modeling, and remediation. EPA develops and uses protocols for testing various spill response product classes to pre-qualify products as required by the preparedness and response requirements of the Oil Pollution Act of 1990.

Research is guided by the long term *Waste Research Strategy*¹, which was developed with participation from major clients and outlines research needs and priorities. Testing products ensures they work as claimed and provides access to effective means to reduce damage when an oil spill occurs. These research efforts are guided by the Land Multi-Year Plan (MYP)², developed with input from across the Agency, which outlines steps for meeting the needs of Agency programs and for evaluating progress through annual performance goals and measures. Specific human health risk and exposure assessments and methods are discussed and conducted under the Human Health Risk Assessment program.

The Land Protection and Restoration research program was reviewed by EPA's research oversight body, the Board of Scientific Counselors (BOSC), in FY 2006 (December 2005). The BOSC found that the program generates high quality products and conducts appropriately focused multi-disciplinary research.

¹ EPA, Office of Research and Development, *Waste Research Strategy*. Washington, D.C.: EPA. For more information, see <http://www.epa.gov/ord/htm/documents/wastepub.pdf>.

² For more information, see <http://www.epa.gov/osp/myp>.

The Waste Research Strategy outlines the research needs and priorities at the time it was prepared. To guide these research efforts as progress is made and new needs emerge, EPA develops multi-year research plans that are revised periodically. EPA merged the Contaminated Sites and RCRA Multi-Year Plans (MYPs) into one cohesive Land Research MYP, with input from across the Agency, to ensure research conducted continues to support the Agency's mission to protect human health and the environment. The new plan will be posted when peer-review comments are addressed in the second quarter of FY 2007.

FY 2008 Activities and Performance Plan:

In FY 2008, oil spill model development will include linkage of EPA's Research Object Oriented Oil Spill Model (ERO3s) to uncertainty analysis tools (R&D Criteria: Performance) and incorporation of exposure simulation with various modeled response actions (R&D Criteria: Relevance). Remediation research continues on advances associated with physical, chemical, and biological risk management methods for petroleum and non-petroleum oils spilled into freshwater and marine environments as well as development of a protocol for testing solidifiers and treating oil. Research products are presented at meetings and posted or linked on EPA's oil spills web site for use by oil spill managers (R&D Criteria: Quality, Performance).

In 2006, the Land Protection and Restoration Research Program received an "adequate" rating in its first PART review. EPA and OMB continue to work to finalize appropriate ambitious performance measures, develop and implement a protocol for improved budget-performance integration, and develop a new efficiency measure that captures the cost effectiveness of research activities. To this end, OMB, EPA, and members of the BOSC formed a workgroup to discuss long-term measurement of EPA's research and development programs. As part of the workgroup, EPA has devised program-specific questions to be addressed by the BOSC and used in support of long-term measurement. To identify appropriate outcome-oriented efficiency measures for research programs, EPA is soliciting input from the National Academy of Sciences.

Performance Targets:

Work under this program project supports EPA's Enhance Science and Research objective. Performance measures for this specific program are included under the Superfund Land Protection and Restoration program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$1.8) This decrease is the net effect of increases for payroll and cost of living for existing FTE, combined with a reduction based on the recalculation of base workforce costs.
- (-\$0.3) This is a technical adjustment to realign travel resources across the research program to better reflect FY 2008 programmatic priorities. There will be no programmatic impact.

Statutory Authority:

SWDA; HSWA; SARA; CERCLA; RCRA; OPA; BRERA.

Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification

Table of Contents - State and Tribal Assistance Grants

Resource Summary Table	1
Program Projects in STAG	1
Program Area: Brownfields.....	18
Brownfields Projects	19
Program Area: Infrastructure Assistance	22
Infrastructure Assistance: Alaska Native Villages	23
Infrastructure Assistance: Clean Water SRF	25
Diesel Emissions Reduction Grant Program.....	28
Infrastructure Assistance: Drinking Water SRF	30
Infrastructure Assistance: Mexico Border	33
Infrastructure Assistance: Puerto Rico.....	36
Program Area: Categorical Grants.....	37
Categorical Grant: Beaches Protection	38
Categorical Grant: Brownfields	40
Categorical Grant: Environmental Information	42
Categorical Grant: Hazardous Waste Financial Assistance.....	44
Categorical Grant: Homeland Security	46
Categorical Grant: Lead	48
Categorical Grant: Nonpoint Source (Sec. 319)	50
Categorical Grant: Pesticides Enforcement	53
Categorical Grant: Pesticides Program Implementation.....	55
Categorical Grant: Pollution Control (Sec. 106).....	58
Categorical Grant: Pollution Prevention.....	62
Categorical Grant: Public Water System Supervision (PWSS).....	64
Categorical Grant: Radon	66
Categorical Grant: Sector Program.....	68
Categorical Grant: State and Local Air Quality Management.....	70
Categorical Grant: Targeted Watersheds	73
Categorical Grant: Toxics Substances Compliance	74
Categorical Grant: Tribal Air Quality Management.....	76
Categorical Grant: Tribal General Assistance Program.....	78
Categorical Grant: Underground Injection Control (UIC).....	81
Categorical Grant: Underground Storage Tanks.....	84
Categorical Grant: Wetlands Program Development	87

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: State and Tribal Assistance Grants
Resource Summary Table
(Dollars in Thousands)**

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
State and Tribal Assistance Grants				
Budget Authority	\$3,409,572.7	\$2,797,448.0	\$2,744,450.0	(\$52,998.0)
Total Workyears	0.0	0.0	0.0	0.0

**Program Projects in STAG
(Dollars in Thousands)**

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Air Toxics and Quality				
Clean School Bus Initiative	\$9,795.4	\$0.0	\$0.0	\$0.0
Brownfields				
Brownfields Projects	\$93,549.0	\$89,119.4	\$89,258.0	\$138.6
Infrastructure Assistance				
Infrastructure Assistance: Alaska Native Villages	\$33,905.5	\$14,850.0	\$15,500.0	\$650.0
Infrastructure Assistance: Clean Water SRF	\$905,435.8	\$687,555.0	\$687,554.0	(\$1.0)
Diesel Emissions Reduction Grant Program				
Energy Policy Act Implementation	\$0.0	\$49,500.0	\$35,000.0	(\$14,500.0)
Subtotal, Diesel Emissions Reduction Grant Program	\$0.0	\$49,500.0	\$35,000.0	(\$14,500.0)
Infrastructure Assistance: Drinking Water SRF	\$813,735.3	\$841,500.0	\$842,167.0	\$667.0
Infrastructure Assistance: Mexico Border	\$49,013.5	\$24,750.0	\$10,000.0	(\$14,750.0)
Infrastructure Assistance: Puerto Rico	\$0.0	\$990.0	\$0.0	(\$990.0)
Subtotal, Infrastructure Assistance	\$1,802,090.1	\$1,619,145.0	\$1,590,221.0	(\$28,924.0)
STAG Infrastructure Grants / Congressional Priorities				
Congressionally Mandated Projects	\$360,947.0	\$0.0	\$0.0	\$0.0
Categorical Grants				
Categorical Grant: Beaches Protection	\$9,707.3	\$9,900.0	\$9,900.0	\$0.0

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Categorical Grant: Brownfields	\$51,377.9	\$49,494.9	\$49,495.0	\$0.1
Categorical Grant: Environmental Information	\$19,308.2	\$14,850.0	\$12,850.0	(\$2,000.0)
Categorical Grant: Hazardous Waste Financial Assistance	\$103,364.9	\$103,345.5	\$103,346.0	\$0.5
Categorical Grant: Homeland Security	\$4,283.1	\$4,950.0	\$4,950.0	\$0.0
Categorical Grant: Lead	\$15,115.2	\$13,563.1	\$13,564.0	\$0.9
Categorical Grant: Nonpoint Source (Sec. 319)	\$203,807.2	\$194,040.0	\$194,040.0	\$0.0
Categorical Grant: Pesticides Enforcement	\$19,876.7	\$18,711.0	\$18,711.0	\$0.0
Categorical Grant: Pesticides Program Implementation	\$13,749.8	\$12,968.9	\$12,970.0	\$1.1
Categorical Grant: Pollution Control (Sec. 106)				
Water Quality Monitoring Grants	\$946.1	\$18,500.0	\$18,500.0	\$0.0
Categorical Grant: Pollution Control (Sec. 106) (other activities)	\$219,826.3	\$203,161.0	\$203,164.0	\$3.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	\$220,772.4	\$221,661.0	\$221,664.0	\$3.0
Categorical Grant: Pollution Prevention	\$4,192.6	\$5,940.0	\$5,940.0	\$0.0
Categorical Grant: Public Water System Supervision (PWSS)	\$98,590.8	\$99,099.0	\$99,100.0	\$1.0
Categorical Grant: Radon	\$8,577.4	\$8,073.5	\$8,074.0	\$0.5
Categorical Grant: Sector Program	\$1,938.9	\$2,227.5	\$2,228.0	\$0.5
Categorical Grant: State and Local Air Quality Management	\$225,269.8	\$185,179.5	\$185,180.0	\$0.5
Categorical Grant: Targeted Watersheds	\$14,301.8	\$6,930.0	\$0.0	(\$6,930.0)
Categorical Grant: Toxics Substances Compliance	\$6,347.5	\$5,098.5	\$5,099.0	\$0.5
Categorical Grant: Tribal Air Quality Management	\$11,723.9	\$10,939.5	\$10,940.0	\$0.5
Categorical Grant: Tribal General Assistance Program	\$60,086.9	\$56,925.0	\$56,925.0	\$0.0
Categorical Grant: Underground Injection Control (UIC)	\$10,591.5	\$10,890.0	\$10,891.0	\$1.0
Categorical Grant: Underground Storage Tanks				
Energy Policy Act Implementation	\$0.0	\$37,566.7	\$22,274.0	(\$15,292.7)
Categorical Grant: Underground Storage Tanks (other activities)	\$14,328.1	\$0.0	\$0.0	\$0.0
Subtotal, Categorical Grant: Underground Storage Tanks	\$14,328.1	\$37,566.7	\$22,274.0	(\$15,292.7)
Categorical Grant: Wastewater Operator Training	\$1,382.1	\$0.0	\$0.0	\$0.0
Categorical Grant: Water Quality Cooperative Agreements	\$11,136.7	\$0.0	\$0.0	\$0.0
Categorical Grant: Wetlands Program Development	\$13,360.5	\$16,830.0	\$16,830.0	\$0.0
Subtotal, Categorical Grant: Wetlands	\$13,360.5	\$16,830.0	\$16,830.0	\$0.0

Program Project	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Program Development				
Subtotal, Categorical Grants	\$1,143,191.2	\$1,089,183.6	\$1,064,971.0	(\$24,212.6)

FY 2008 President's Request						
STAG Resources						
(Dollars in Thousands)						
			FY 2006 Obligations*	FY 2007 Pres Bud		FY 2008 Pres Bud
Alaskan Native Villages			\$33,905.5	\$14,850.0		\$15,500.0
Brownfields Infrastructure Projects			\$93,549.0	\$89,119.4		\$89,258.0
Clean School Bus Initiative**			\$9,795.4	\$0.0		\$0.0
Clean Water State Revolving Fund			\$905,435.8	\$687,555.0		\$687,554.0
Congressional Projects			\$360,947.0	\$0.0		\$0.0
Diesel Emission Reduction Grants			\$0.0	\$49,500.0		\$35,000.0
Drinking Water State Revolving Fund			\$813,735.3	\$841,500.0		\$842,167.0
Mexico Border			\$49,013.5	\$24,750.0		\$10,000.0
State/Tribal Categorical Grant Assistance			\$1,143,191.2	\$1,089,183.6		\$1,064,971.0
Puerto Rico			\$0.0	\$990.0		\$0.0
FY 2006 Rescission to Prior Grant Funds			-\$72,614.3***	\$0.0		\$0.0
Cancellation of Balances from Prior Years (Reimbursement and Advanced Construction Grants)			\$0.0	\$0.0		-\$5,000.0
TOTAL			\$3,336,958.4	\$2,797,448.0		\$2,739,450.0
* Reflects FY 2006 1.0% and 0.476% rescission.						
** The Clean School Bus Initiative activities are now part of the Diesel Emission Reduction Grants program.						
*** Part of the FY 2006 \$80 M rescission of prior year funds.						

Program Projects In STAG
(Dollars in Thousands)

Program Project	FY 2006 Obligations	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Brownfields Projects	\$93,549.0	\$89,119.4	\$89,258.0	138.6
Categorical Grant: Beaches Protection	\$9,707.3	\$9,900.0	\$9,900.0	\$0.0
Categorical Grant: Brownfields	\$51,377.90	\$49,494.9	\$49,495.0	\$0.1
Categorical Grant: Environmental Information	\$19,308.2	\$14,850.0	\$12,850.0	(\$2,000.0)
Categorical Grant: Hazardous Waste Financial Assistance	\$103,364.9	\$103,345.5	\$103,346.0	\$0.5
Categorical Grant: Homeland Security	\$4,283.1	\$4,950.0	\$4,950.0	\$0.0
Categorical Grant: Lead	\$15,115.2	\$13,563.1	\$13,564.0	\$0.9
Categorical Grant: Nonpoint Source (Sec. 319)	\$203,807.2	\$194,040.0	\$194,040.0	\$0.0
Categorical Grant: Pesticides Enforcement	\$19,876.7	\$18,711.0	\$18,711.0	\$0.0
Categorical Grant: Pesticides Program Implementation	\$12,907.0	\$12,968.9	\$12,970.0	\$1.1
Categorical Grant: Pollution Control (Sec. 106)	\$220,772.4	\$221,661.0	\$221,664.0	\$3.0
Categorical Grant: Pollution Prevention	\$4,192.6	\$5,940.0	\$5,940.0	\$0.0
Categorical Grant: Public Water System Supervision (PWSS)	\$98,590.8	\$99,099.0	\$99,100.0	\$1.0
Categorical Grant: Radon	\$8,577.4	\$8,073.5	\$8,074.0	\$0.5
Categorical Grant: Sector Program	\$1,938.9	\$2,227.5	\$2,228.0	\$0.5
Categorical Grant: State and Local Air Quality Management	\$225,269.8	\$185,179.5	\$185,180.0	\$0.5
Categorical Grant: Targeted Watersheds	\$14,301.8	\$6,930.0	\$0.0	(\$6,930.0)
Categorical Grant: Toxics Substances Compliance	\$6,347.5	\$5,098.5	\$5,099.0	\$0.5
Categorical Grant: Tribal Air Quality Management	\$11,723.9	\$10,939.5	\$10,940.0	\$0.5
Categorical Grant: Tribal General Assistance Program	\$60,086.9	\$56,925.0	\$56,925.0	\$0.0
Categorical Grant: Underground Injection Control (UIC)	\$10,591.5	\$10,890.0	\$10,890.0	\$0.0
Categorical Grant: Underground Storage Tanks	\$14,328.1	\$37,566.7	\$22,274.0	(\$15,292.7)
Categorical Grant: Wastewater Operator Training	\$1,382.1	\$0.0	\$0.0	\$0.0
Categorical Grant: Wetlands Program Development	\$13,360.5	\$16,830.0	\$16,830.0	\$0.0
Clean School Bus Initiative*	\$9,795.4	\$0.0	\$0.0	\$0.0
Congressionally Mandated Projects	\$360,947.0	\$0.0	\$0.0	\$0.0
Diesel Emission Reduction Grants	\$0.0	\$49,500.0	\$35,000.0	(\$14,500.0)

Infrastructure Assistance: Alaska Native Villages	\$33,905.5	\$14,850.0	\$15,500.0	\$650.0
Infrastructure Assistance: Clean Water SRF	\$905,435.8	\$687,555.0	\$687,554.0	(\$1.0)
Infrastructure Assistance: Drinking Water SRF	\$813,735.3	\$841,500.0	\$842,167.0	\$667.0
Infrastructure Assistance: Mexico Border	\$49,013.5	\$24,750.0	\$10,000.0	(\$14,750.0)
Infrastructure Assistance: Puerto Rico	\$0.0	\$990.0	\$0.0	(\$990.0)

*Clean School Bus Initiative activities are now part of the Diesel Emission Reduction Grants program.

INFRASTRUCTURE / STAG PROJECT FINANCING

Infrastructure and Special Projects Funds

The President's Request includes a total of \$1.679 billion in 2008 for EPA's Infrastructure programs and State and Tribal Assistance Grant (STAG) projects. Approximately \$1.545 billion will support EPA's Goal 2: Clean and Safe Water, \$99.3 million will support EPA's Goal 4: Healthy Communities and Ecosystems and \$35.0 million will support Goal 1: Clean Air and Global Climate Change.

Infrastructure and targeted projects funding under the STAG appropriation provides financial assistance to states, municipalities, interstates, and Tribal governments to fund a variety of drinking water, wastewater, air and Brownfields environmental projects. These funds are essential to fulfill the Federal government's commitment to help our state, Tribal and local partners obtain adequate funding to construct the facilities required to comply with Federal environmental requirements and ensure public health and revitalize contaminated properties.

Providing STAG funds to capitalize State Revolving Fund (SRF) programs, EPA works in partnership with the states to provide low-cost loans to municipalities for infrastructure construction. As set-asides of the SRF programs, grants are available to Indian Tribes and Alaska Native Villages for drinking water and wastewater infrastructure needs based on national priority lists. The Brownfields Environmental Program provides states, Tribes, and political subdivisions (including cities, towns, and counties) the necessary tools, information, and strategies for promoting a unified approach to environmental assessment, cleanup, characterization, and redevelopment at sites contaminated with hazardous wastes and petroleum contaminants.

The resources included in this budget will enable the Agency, in conjunction with EPA's state, local, and Tribal partners, to achieve several important goals for 2008. Some of these goals include:

- 90 percent of the population served by community water systems will receive drinking water meeting all health-based standards.
- Award 101 assessment grants under the Brownfields program, bringing the cumulative total grants awarded to 1,160 by the end of FY 2008 paving the way for productive reuse of these properties. This will bring the total number of sites assessed to 11,000 while leveraging a total of \$10.9 billion in cleanup and redevelopment funds since 1995.

Goal 1: Clean Air and Global Climate Change

Diesel Emissions Reduction Grant Program

In FY 2008, EPA will support the Diesel Emissions Reduction Grants program, authorized by Title VII, Subtitle G of the 2005 Energy Policy Act. This program focuses on reducing

particulate matter (PM) from existing diesel engines, including on-highway and nonroad equipment and reducing other, smog-forming emissions such as nitrogen oxides and hydrocarbons. Five sectors are targeted for reduction: freight, construction, school buses, agriculture, and ports. Grants will be provided to eligible entities in areas of the country that are not meeting ambient air quality standards. This program will help provide immediate reductions by retrofitting the engines with emission control technologies sooner than would otherwise occur through normal turnover of the fleet because these engines often remain in service for 20 or more years. In 2008, up to 30 percent of the appropriated funds may be used to provide formula grants to states for the purpose of establishing state grant and loan programs. EPA expects to fund at least 200 new grants deploying emission control technology in various sectors using diesel engines. These funds will also support competitive grants for replacing, repowering and retrofitting older school buses with emission control technology. By the end of FY 2006, approximately 10,000 buses will have been switched to a cleaner fuel, retrofitted with emissions control equipment, or replaced. EPA estimates that the \$35 million for National Clean Diesel Campaign grants will leverage at least an additional \$72 million in funding assistance.

Goal 2: Clean and Safe Water

Capitalizing Clean Water and Drinking Water State Revolving Funds

The Clean Water and Drinking Water State Revolving Fund programs demonstrate a true partnership between states, localities and the Federal government. These programs provide Federal financial assistance to states, localities, and Tribal governments to protect the nation's water resources by providing funds for the construction of drinking water and wastewater treatment facilities. The state revolving funds are two important elements of the nation's substantial investment in sewage treatment and drinking water systems, which provides Americans with significant benefits in the form of reduced water pollution and safe drinking water.

EPA will continue to provide financial assistance for wastewater and other water projects through the Clean Water State Revolving Fund (CWSRF). CWSRF projects include nonpoint source, estuary, storm water, and sewer overflow projects. The dramatic progress made in improving the quality of wastewater treatment since the 1970s is a national success. In 1972, only 84 million people were served by secondary or advanced wastewater treatment facilities. Today, 99 percent of community wastewater treatment plants, serving 181 million people, use secondary treatment or better. Water infrastructure projects supported by the program contribute to direct ecosystem improvements by lowering the amount of nutrients and toxic pollutants in all types of surface waters. While great progress has been made, many rivers, lakes and ocean/coastal areas still suffer an enormous influx of pollutants after heavy rains. The contaminants result in beach closures, infect fish and degrade the ability of the watersheds to sustain a healthy ecosystem. Improvements to our cities' infrastructure remain a top priority if we are to reclaim our water resources.

The FY 2008 request includes \$687.6 million in funding for the CWSRF. More than \$24 billion has been provided to capitalize the CWSRF, almost three times the original Clean Water Act authorized level of \$8.4 billion. Total CWSRF funding available for loans since 1988 through

June 2006, reflecting loan repayments, state match dollars, and other funding sources, is nearly \$61 billion, of which more than \$58 billion has been provided to communities as financial assistance. The following table illustrates the long-term financial picture for the CWSRF:

Annual Federal Capitalization	Revolving Level	Time Span
\$688 million through 2011 (\$6.8 billion total, 2004-2011)	\$3.4 billion (in 2001 \$)	2015 through 2040

The DWSRF is designed to be self-sustaining over time and will help offset the costs of ensuring safe drinking water supplies and assisting small communities in meeting their responsibilities. Since its inception in 1997, the Drinking Water State Revolving Fund (DWSRF) program has made available \$12.8 billion to finance 4,985 infrastructure improvement projects nationwide, with a return of \$1.73 for every \$1 of Federal funds invested. As of June 30, 2006, \$7.3 billion in capitalization grants have been awarded, amounting to loans/assistance of \$11 billion.

The following table illustrates the long-term financial picture for the DWSRF:

Annual Federal Capitalization	Revolving Level	Time Span
\$842 million through 2018	\$1.2 billion (in 2001 \$)	2019 through 2039

Set-Asides for Tribes: To improve public health and water quality on Tribal lands, the Agency will continue the 1 ½ percent CWSRF set-aside for funding wastewater grants to Tribes as provided in the Agency's 2002 appropriation. The 2002 World Summit in Johannesburg adopted the goal of reducing the number of people lacking access to basic sanitation by 50 percent by 2015. Through this program, EPA contributes to this goal which will provide for the development of sanitation facilities for Tribes and Alaska Native Villages.

Alaska Native Villages

The President's Budget provides \$15.5 million for Alaska native villages for the construction of wastewater and drinking water facilities to address serious sanitation problems. EPA will continue to work with the Department of Health and Human Services' Indian Health Service, the State of Alaska, the Alaska Native Tribal Health Council and local communities to provide needed financial and technical assistance.

Goal 4: Healthy Communities and Ecosystems

Brownfields Environmental Projects

The President's Budget includes \$89.3 million for Brownfields environmental projects. EPA will award grants for assessment activities, cleanup, and revolving loan funds (RLF). Additionally, this includes cleanup of sites contaminated by petroleum or petroleum products and environmental job training grants. In FY 2008, the funding provided will result in the assessment of 1,000 Brownfields properties. Using EPA grant dollars, the brownfields grantees

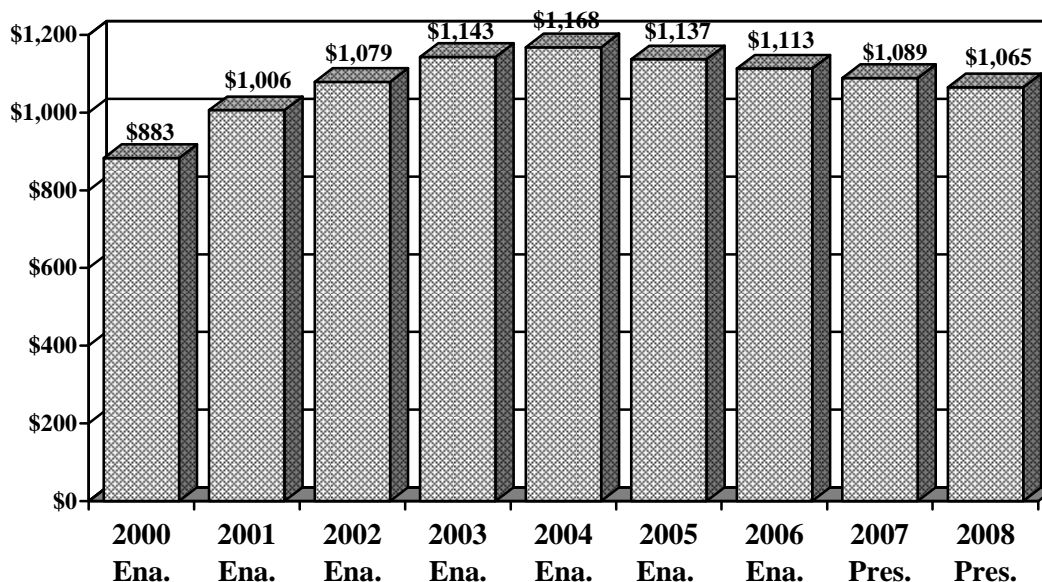
will leverage cleanup and redevelopment jobs and \$900.0 million in cleanup and redevelopment funding.

Mexico Border

The President's Request includes a total of \$10.0 million for water infrastructure projects along the U.S./Mexico Border. The goal of this program is to reduce environmental and human health risks along the U.S./Mexico Border. EPA's U.S./Mexico Border program provides funds to support the planning, design and construction of high priority water and wastewater treatment projects along the border. The Agency's goal is to provide protection of people in the U.S.-Mexico border area from health risks by increasing the number of homes connected to potable water supply and wastewater collection and treatment systems. The program has sufficient resources to carry out currently approved projects and provides \$10.0 million to address new needs in FY 2008.

CATEGORICAL GRANTS PROGRAM (STAG)

(Dollars in millions)



*Does not account for the 2006 \$80.0 million rescission.

Categorical Grants

In FY 2008, EPA requests a total of \$1.065 billion for 22 “categorical” program grants for state, interstate organizations, non-profit organizations, intertribal consortia, and Tribal governments. EPA will continue to pursue its strategy of building and supporting state, local and Tribal capacity to implement, operate, and enforce the Nation’s environmental laws. Most environmental laws envision establishment of a decentralized nationwide structure to protect public health and the environment. In this way, environmental goals will ultimately be achieved through the actions, programs, and commitments of state, Tribal and local governments, organizations and citizens.

In FY 2008, EPA will continue to offer flexibility to state and Tribal governments to manage their environmental programs as well as provide technical and financial assistance to achieve mutual environmental goals. First, EPA and its state and Tribal partners will continue implementing the National Environmental Performance Partnership System (NEPPS). NEPPS is designed to allow states more flexibility to operate their programs, while increasing emphasis on measuring and reporting environmental improvements. Second, Performance Partnership Grants (PPGs) will continue to allow states and Tribes funding flexibility to combine categorical program grants to address environmental priorities.

Also, to help improve EPA’s grants management, the agency is developing a standardized template that all states will use to develop and submit their State grant agreements. The template will include clear linkages to EPA’s Strategic Plan and long-term and annual goals, as well as consistent requirements for regular performance reporting. The template will allow for

meaningful comparisons between various states' past and planned activities and performance, making progress more visible and programs more transparent. EPA will continue to work with the states on implementation in 2008.

HIGHLIGHTS:

State & Local Air Quality Management, Radon, and Tribal Air Quality Management Grants

The FY 2008 request includes \$204.2 million for Air State and Local Assistance grants to support state, local, and Tribal air programs, as well as radon programs. Grant funds for State and Local Air Quality Management and Tribal Air Quality Management are requested in the amount of \$185.2 million and \$10.9 million, respectively. These funds provide resources to multi-state, state, local, and Tribal air pollution control agencies for the development and implementation of programs for the prevention and control of air pollution for certain research and demonstration activities, and for monitoring networks.

In FY 2008, EPA will continue to work with state and local air pollution control agencies to develop or implement state implementation plans (SIPs) for the 8-hour ozone standard, the fine particle (PM-2.5) standard, and regional haze. States must submit the 8-hour ozone SIPs to EPA in FY 2007, and will continue with their implementation in FY 2008. States must submit regional haze SIPs to EPA in December 2007 and PM2.5 SIPs in April 2008. States will incorporate regional haze reduction strategies, developed by regional planning organizations, into their Regional Haze SIPs.

EPA will work with Federally-recognized Tribal governments nationwide to continue development and implementation of Tribal air quality management programs. Tribes are active in protection of the 4% of the land mass of the United States over which they have sovereignty and work closely with EPA to monitor criteria pollutants and air toxics. Tribes participate extensively in national monitoring networks and operate and report data from over 300 monitors. Several Tribes are developing Tribal Implementation Plans for continuing air quality management programs and roughly 30 will have qualified for and accepted designation to act as a state (TAS) for at least part of the Clean Air Act.

Lastly, this request includes \$8.1 million for Radon grants to continue to focus efforts on priority activities to achieve health risk reduction. In FY 2008, EPA expects 225,000 additional homes to have radon reducing features (approximately 145,000 mitigations and 75,000 new homes with radon resistant new construction), bringing the cumulative number of U.S. homes with radon reducing features to 2,000,000.

Pesticide Enforcement, Toxics Substance Compliance, & Sector Program Grants

The FY 2008 request includes \$26.0 million to build environmental enforcement partnerships with states and Tribes and to strengthen their ability to address environmental and public health threats. The enforcement state grants request consists of \$18.7 million for Pesticides Enforcement, \$5.1 million for Toxic Substances Enforcement Grants, and \$2.2 million for Sector Grants. State and Tribal enforcement grants will be awarded to assist in the implementation of

compliance and enforcement provisions of the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). These grants support state and Tribal compliance activities to protect the environment from harmful chemicals and pesticides.

Under the Pesticides Enforcement Grant program, EPA provides resources to states and Indian Tribes to conduct FIFRA compliance inspections and take appropriate enforcement actions and implement programs for farm worker protection. Under the Toxic Substances Compliance Grant program, states receive funding for compliance inspections of asbestos and polychlorinated biphenyls (PCBs) and for implementation of the state lead abatement enforcement program. The funds will complement other Federal program grants for building state capacity for lead abatement, and enhancing compliance with disclosure, certification and training requirements. Under the Sector program grants, EPA builds environmental partnerships with states and Tribes to strengthen their ability to address environmental and public health threats, including contaminated drinking water, pesticides in food, hazardous waste, toxic substances, and air pollution. These grants also support state agencies implementing authorized, delegated, or approved environmental programs.

Pesticides Program Implementation Grants

The FY 2008 request includes \$13.0 million for Pesticides Program Implementation grants. These resources will assist states and Tribes in implementing the safer use of pesticides, including: worker protection programs; certification and training of pesticide applicators; protection of endangered species; Tribal pesticide programs; and integrated pest management and environmental stewardship. In FY 2008, EPA plans to complete a cumulative 100 percent of all Reregistration Eligibility Decisions which often include changes to allowable use patterns for pesticides already in the market. Pesticides Program Implementation Grants help state programs stay current with changing requirements.

Lead Grants

The FY 2008 request includes \$13.6 million for Lead grants. This funding will support the development of authorized programs in both states and Tribes to prevent lead poisoning through the training of workers who remove lead-based paint, the accreditation of training programs, the certification of contractors, and renovation education programs. Another activity that this funding will support is the collection of lead data to determine the nature and extent of the lead problem within an area so that states, Tribes and the Agency can better target remaining areas of high risk. In FY 2008, EPA expects to reduce the number of child lead poisoning cases by 38,700.

In FY 2008, EPA will continue to award Targeted Grants to Reduce Childhood Lead Poisoning. These grants are available to a wide range of applicants, including state and local governments, Federally-recognized Indian Tribes and Tribal consortia, territories, institutions of higher learning, and nonprofit organizations. In addition, EPA will continue a grant program initiated in FY 2007 which focuses on low-income communities through grants to national organizations engaged in working with these communities. This grant program is designed to help national

and community organizations reach under-served populations that may have a disproportionate number of children with elevated blood lead levels.

Pollution Prevention Grants

The FY 2008 request includes \$5.9 million for Pollution Prevention grants. The program provides grant funds to deliver technical assistance to small and medium-sized businesses. The goal is to assist businesses and industries with identifying improved environmental strategies and solutions for reducing waste at the source. The program demonstrates that source reduction can be a cost-effective way of meeting or exceeding Federal and state regulatory requirements. In FY 2008, EPA is targeting a reduction of 469 million pounds of pollution, 1.7 billion gallons of water conserved, 50.1 million dollars saved through reduction in pollution and 1.3 billion BTUs conserved.

Environmental Information Grants

In FY 2008, EPA requests \$12.9 million to continue the Environmental Information Exchange Network (Exchange Network) grant program. Started in 2002, the Exchange Network grant program provides states, territories, Tribes, and Tribal consortia assistance to develop the information management and technology (IM/IT) capabilities they need to participate in the Exchange Network and thus improve environmental decision making, increase environmental data quality and accuracy, and reduce burdens on those who provide and those who access information. With nodes established in all 50 states, in FY 2008 this grant program will emphasize supporting all partners in the development and exchange of regulatory and non-traditional data flows in FY 2008.

State and Tribal Underground Storage Tanks Program

The FY 2008 request includes \$22.3 million for Underground Storage Tank (UST) grants. In FY 2008, EPA will continue to assist states and Tribes in implementing the UST program and will provide assistance and alternative mechanisms to states to help them meet their new responsibilities authorized under the Energy Policy Act. These new duties include performing additional inspections so that tanks are inspected every three years, developing operator training requirements, prohibiting fuel deliveries at non-compliant UST facilities, requiring secondary containment for new and replaced tanks and piping or financial responsibility for tank installers and manufacturers, and ensuring owners and operators routinely and correctly monitor all regulated USTs and piping in accordance with regulations.

EPA has the primary responsibility for implementation of the UST program in Indian Country. In FY 2008, grants under the FY 1999 Appropriations Act (P.L. 105-276) will continue to help Tribes develop the capacity to administer UST programs. For example, funding is used to support training for Tribal staff, educate owners and operators in Indian Country about UST requirements, and maintain information on USTs located in Indian Country. EPA also will implement the UST Tribal strategy developed in FY 2006 in Indian Country.

Hazardous Waste Financial Assistance Grants

In FY 2008, EPA requests \$103.3 million for Hazardous Waste Financial Assistance grants. Hazardous Waste Financial Assistance grants are used for the implementation of the Resource Conservation and Recovery Act (RCRA) hazardous waste program, which includes permitting, authorization, waste minimization, enforcement, and corrective action activities. In FY 2008, EPA expects to increase the number of hazardous waste facilities with permits in order to meet the 2008 goal of 95 percent coverage and increase the percent of annual permit renewals in line with 2008 requirements of a 50 percent annual renewal rate.

By the end of FY 2008, EPA and the authorized states will also control human exposures to contamination at 95 percent of the highest priority RCRA corrective action facilities (1,968 facilities), control migration of contaminated groundwater at 80 percent of these facilities, and complete the construction of final remedies at 20 percent of these facilities.

Brownfields Grants

In FY 2008, EPA requests \$49.5 million to continue the Brownfields grant program that provides assistance to states and Tribes to develop and enhance their state and Tribal response programs. This funding will help states and Tribes develop legislation, regulations, procedures, and guidance, to establish or enhance the administrative and legal structure of their response programs. In addition, grant funding will help states and Tribes capitalize Revolving Loan Funds for Brownfields cleanup, purchase environmental insurance, and conduct site-specific related activities such as assessments at Brownfields sites. In FY 2008, the funding provided will result in the assessment of 1,000 Brownfields properties. Using EPA grant dollars, the brownfields grantees will leverage \$900.0 million in cleanup and redevelopment funding.

Water Pollution Control (Clean Water Act Section 106) Grants

The FY 2008 EPA request includes \$221.7 million for Water Pollution Control grants. These funds enable National Pollution Discharge Elimination System (NPDES) permitting, enhance water quality monitoring activities, support Total Maximum Daily Load (TMDL) development, and will lead to improved water quality standards. EPA will work with states to implement the new rules governing discharges from Concentrated Animal Feeding Operations (CAFOs). States and authorized Tribes will continue to review and update their water quality standards as required by the Clean Water Act. The Agency's goal is that 87 percent of state submissions will be approvable in 2008. EPA also encourages states to continually review and update the water quality criteria in their standards to reflect the latest scientific information from EPA and other sources. EPA's goal for 2008 is that 68 percent of states will have updated their standards to reflect the latest scientific information in the past three years.

Wetlands Grants

In FY 2008, the request includes \$16.8 million for Wetlands Program grants. Through Wetlands Program Development Grants, states, Tribes, and local governments receive technical and financial assistance that will support the Administration's goal of protecting, restoring, and

enhancing 3 million acres of wetlands. These grants will do this through the development and implementation of state and Tribal wetland programs that improve water quality in watersheds throughout the country as well as assist private landowners, educate local governments, and monitor and assess wetland quantity and quality.

Public Water System Supervision Grants

In FY 2008, EPA requests \$99.1 million for Public Water System Supervision (PWSS) grants. These grants provide assistance to implement and enforce National Primary Drinking Water Regulations to ensure the safety of the Nation's drinking water resources and to protect public health. In FY 2008, the Agency will emphasize that states use their PWSS funds to ensure that drinking water systems of all sizes achieve or remain in compliance and drinking water systems of all sizes are meeting new health-based standards that came into effect in FY 2006, *e.g.*, arsenic and uranium.

Tribal General Assistance Program Grants

In FY 2008, EPA's request includes \$56.9 million for the Tribal General Assistance Program (GAP) to help Federally-recognized Tribes and intertribal consortia develop, implement and assume environmental programs. In FY 2008, 50% of Federally-recognized Tribes and intertribal Consortia, out of a universe of 572 eligible entities, will have access to an environmental presence, or representative, to administer delegated environmental programs.

Homeland Security Grants

In FY 2008, the request includes \$5.0 million for Homeland Security grants to support states' efforts to work with drinking water and wastewater systems to develop and enhance emergency operations plans; conduct training in the implementation of remedial plans in small systems; and develop detection, monitoring and treatment technology to enhance drinking water and wastewater security. Fifty-six states and territories are eligible for Homeland Security grants.

Underground Injection Control (UIC) Grants

The FY 2008, EPA requests \$10.9 million for the Underground Injection Control grants program. Ensuring safe underground injection of waste materials is a fundamental component of a comprehensive source water protection program. Grants are provided to states that have primary enforcement authority (primacy) to implement and maintain UIC programs. EPA and the states will continue to address Classes I, II, and III existing wells determined to be in significant violation and Class V wells determined to be in violation in FY 2008. Additionally, EPA and the states will close or permit Motor Vehicle Waste Disposal wells (Class V) identified during FY 2008.

BEACH Act Grants

The FY 2008 request includes \$9.9 million for the 35 states and territories with Great Lakes or coastal shorelines to protect public health at the Nation's beaches. The Beaches Environmental Assessment and Coastal Health Act (BEACH Act) of October 2000 authorizes EPA to award

grants to help eligible states and territories develop and implement beach bacteria monitoring and notification programs. These programs inform the public about the risk of exposure to disease-causing microorganisms in coastal waters (including the Great Lakes).

Non-Point Source Program Grants (NPS – Clean Water Act Section 319)

In FY 2008, EPA requests \$194.0 million for Non-Point Source Program grants to states, territories, and Tribes. These grants enable states to use a range of tools to implement their programs including: both non-regulatory and regulatory programs, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects. The request also eliminates the statutory one-third of one-percent cap on Clean Water Act Section 319 Non-point Source Pollution grants that may be awarded to Tribes. EPA's goal is to reduce annually the amount of runoff of phosphorus, nitrogen, and sediment through 319-funded projects by 4.5 million pounds, 8.5 million pounds, and 700,000 tons, respectively.

Program Area: Brownfields

Brownfields Projects

Program Area: Brownfields

Goal: Healthy Communities and Ecosystems

Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$93,549.0</i>	<i>\$89,119.4</i>	<i>\$89,258.0</i>	<i>\$138.6</i>
Hazardous Substance Superfund	\$9,319.5	\$0.0	\$0.0	\$0.0
Total Budget Authority / Obligations	\$102,868.5	\$89,119.4	\$89,258.0	\$138.6
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

Economic changes over several decades have left thousands of communities with contaminated properties and abandoned sites known as brownfields. The Agency's Brownfields program coordinates a Federal, state, Tribal, and local government approach to assist in addressing environmental site assessment and cleanup through grants and cooperative agreements authorized by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104(k).

The Brownfields program also assists in addressing environmental site assessment and cleanup through competitive grants to eligible entities and cooperative agreements authorized by CERCLA Section 104(k). The statute requires the Brownfields program to allocate 25% of the total available funds for CERCLA 104(k) grants to address sites contaminated by petroleum. With the funds requested, EPA will provide: 1) assessment and cleanup grants for recipients to inventory, characterize, assess, and conduct cleanup and redevelopment planning related to brownfields sites; 2) capitalization grants for Revolving Loan Funds (RLFs) to provide low interest loans for cleanups; 3) job training grants; 4) petroleum grants and 5) financial assistance to localities, states, Tribes, and non-profit organizations for research, training, and technical assistance.

In cooperation with other Federal agencies, EPA developed the Brownfields Federal Partnership Action Agenda in November 2002. The Action Agenda describes the commitment of over 20 Federal agencies to help communities more effectively prevent, assess, safely clean up, and reuse brownfields. For more information, refer to http://www.epa.gov/docs/swerosps/bf/partners/federal_partnerships.htm.

FY 2008 Activities and Performance Plan:

Funding requested for FY 2008 will be used to support the following activities:

- Funding and technical support for 109 assessment grants for recipients to inventory, assess, and conduct cleanup and redevelopment planning at brownfields sites. In FY

2008, the funding provided will result in the assessment of 1,000 brownfields properties. Brownfields grantees will leverage 5,000 cleanup and redevelopment jobs and \$900,000,000 in cleanup and redevelopment funding.

- RLF capitalization grants and cleanup grants for 63 communities, enabling eligible entities to develop cleanup strategies, make loans to clean up properties, and encourage communities to leverage other funds into their RLF pools and cleanup grants. The Agency will award cooperative agreements to capitalize RLF grants of up to \$1,000,000 each and award direct cleanup grants of up to \$200,000 per site to communities and non-profits.
- Assessment and cleanup of abandoned underground storage tanks (USTs) and other petroleum contamination found on brownfields properties in approximately 43 brownfields communities.
- Brownfields job training and development grants of up to \$200,000 each over two years. This funding will provide for 12 new job training grants for community residents to take advantage of new jobs leveraged by the assessment and cleanup of brownfields.
- Training, research and technical assistance grants and cooperative agreements as authorized under CERCLA Section 104(k)(6).
- In addition, EPA will continue to support the existing 28 showcase communities that demonstrate the benefits of interagency cooperative efforts in addressing environmental and economic issues related to Brownfields.

In 2003, the Brownfields program received an "Adequate" PART rating, citing a clear purpose and achievement of performance targets. The program is implementing performance improvement plans related to performance measures, data collection, and program reviews and is on schedule to meet implementation deadlines.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Brownfield properties assessed.	Data Available 2007	1,000	1,000	1,000	Assessments

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Acres of Brownfields properties made ready for reuse.				225	Acres

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Billions of dollars of cleanup and redevelopment funds leveraged at Brownfields sites.	Data Available 2007	1.0	0.9	1.0	Billion dollars

Performance goals and measures for the Brownfields Projects program are currently a component of the overall Brownfields program measures. As a result, the Brownfields EPM program also contributes to the achievement of these performance measures and the Brownfields Categorical Grant program contributes to the achievement of the “properties assessed” measure. This also contributes to EPA efforts to assess and clean up brownfields, as described in EPA’s 2006-2011 Strategic Plan.

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (-\$3,561.4) This decrease will reduce contractor support and for interagency agreements that support training, research and technical assistance grants awarded under Section 104 (k)(6). The reduction will not impede Agency efforts to maximize efficiency and effectiveness in carrying out its programs.
- (+\$3,700.0) This increase will support additional Assessment, Revolving Loan Fund (RLF), and Cleanup grants in FY 2008 by funding up to eight additional site assessment grants and capitalizing RLF and award cleanup grants for up to three additional communities.

Statutory Authority:

CERCLA as amended by SBLRBRA (P.L. 107-118); RCRA Section 8001; GMRA (1990); SWDA; FGCAA.

Program Area: Infrastructure Assistance

Infrastructure Assistance: Alaska Native Villages

Program Area: Infrastructure Assistance

Goal: Clean and Safe Water

Objective(s): Protect Water Quality

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$33,905.5</i>	<i>\$14,850.0</i>	<i>\$15,500.0</i>	<i>\$650.0</i>
Total Budget Authority / Obligations	\$33,905.5	\$14,850.0	\$15,500.0	\$650.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Alaska Rural and Native Village (ANV) Program addresses the lack of basic drinking water and sanitation infrastructure (i.e. flushing toilets and running water) in rural and Native Alaska communities. In many of these communities, honeybuckets and pit privies are the sole means of sewage collection and disposal. The grant to the State of Alaska provides funding to improve or construct drinking water and wastewater treatment facilities for these communities, thereby, improving the health and sanitation conditions. This program also supports training, technical assistance, and educational programs related to the operation and maintenance of sanitation systems.

(See <http://www.epa.gov/owm/mab/indian/anvrs.htm> for more information.)

FY 2008 Activities and Performance Plan:

The ANV Program is administered by the State of Alaska and provides infrastructure funding to Alaska Native Villages and rural Alaska communities which lack access to basic sanitation. The FY 2008 investment of \$15.5 million will leverage funding to provide an additional one percent of the serviceable homes in rural Alaska (total homes approximately 36,000) with wastewater service and drinking water that meets public health standards. In FY 2008, the Agency will continue to work with the State of Alaska to address sanitation conditions and determine how to maximize the Federal investment in rural Alaska.

During 2004, the Alaska Native Village Water Infrastructure program underwent a PART review and received a rating of “ineffective.” In response to the program deficiencies identified in the PART, the Agency has made personnel and policy changes to enable more focused and intensive oversight of the Alaska Native Village grant program, through cost analyses, post-award monitoring and project close-out. EPA also collaborated with Alaska to establish program goals and objectives which are now incorporated directly into the state priority system for selecting candidate projects. The FY 2005 Alaska State Single Audit concludes that all findings in the previous (FY 2004) audit have been addressed or significant progress was made in FY 2005, which should lead to completion of all recommendations by FY 2006. No new recommendations were made for the program by the auditors. In the 2006 PART reassessment,

the program received a rating of “adequate”. These findings help illustrate the potential effectiveness of new programmatic improvements.

The 2006 PART reassessment included a requirement for an enhancement of the State of Alaska web based reporting system. These enhancements have been initiated by the State and will be completed in 2007. In addition, the State of Alaska will complete an independent review of the Alaska Native Tribal Health Consortium financial process and records. The program is also addressing other 2006 PART findings and recommendations.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of serviceable rural Alaska homes with access to drinking water supply and wastewater disposal.				88	Homes

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Number of homes that received improved service per \$1,000,000 of State and Federal funding.				85	Households

Work under this program supports EPA’s Protect Water Quality objective.

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (+\$650.0) The increase will support the Agency’s efforts to address the sanitation infrastructure needs of rural communities and Alaska Native Villages.

Statutory Authority:

SDWA Amendments of 1996.

Infrastructure Assistance: Clean Water SRF

Program Area: Infrastructure Assistance

Goal: Clean and Safe Water

Objective(s): Protect Water Quality

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$905,435.8</i>	<i>\$687,555.0</i>	<i>\$687,554.0</i>	<i>(\$1.0)</i>
Total Budget Authority / Obligations	\$905,435.8	\$687,555.0	\$687,554.0	(\$1.0)
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Clean Water State Revolving Fund (CWSRF) program provides funds to capitalize state revolving loan funds that finance infrastructure improvements for public wastewater systems and projects to improve water quality. The CWSRF is the largest source of Federal funds for states to provide loans and other forms of assistance for construction of wastewater treatment facilities, implementation of nonpoint source management plans, and development and implementation of estuary conservation and management plans. This program also includes a provision for a set-aside of funding for Tribes to better address serious water infrastructure problems and attendant health impacts. The Federal investment is designed to be used in concert with other sources of funds to address water quality needs. (See <http://www.epa.gov/owm/cwfinance/cwsrf> for more information.)

State CWSRFs provide low interest loans to help finance wastewater treatment facilities and other water quality projects. These projects are critical to the continuation of the public health and water quality gains of the past 30 years. As of early 2007, the Federal government had invested more than \$24 billion in the state CWSRFs. The revolving nature of the funds and substantial additions from states has magnified that investment to make available \$61 billion for loans since the program's inception.¹ The CWSRF program measures and tracks the average national rate at which available funds are loaned, assuring that the fund is working hard to support water quality infrastructure.

FY 2008 Activities and Performance Plan:

Recognizing the substantial remaining need for wastewater infrastructure, EPA will provide annual capitalization to the CWSRFs through 2011, meeting its total capitalization target of \$6.8 billion for 2004-2011. This continued Federal investment, along with other traditional sources of financing (including increased local revenues), will result in substantial progress toward addressing the nation's wastewater treatment needs which will significantly contribute to the long-term environmental goal of watershed's attaining designated uses. EPA continues to work with states to meet several key objectives: fund projects designed as part of an integrated

¹ Clean Water State Revolving Fund National Information Management System. US EPA, Office of Water, National Information Management System Reports: Clean Water State Revolving Fund (CWSRF). Washington, DC.

watershed approach; link projects to environmental results; and maintain the CWSRFs' excellent fiduciary condition.

The 2002 World Summit in Johannesburg adopted the goal of reducing the number of people lacking access to safe drinking water and basic sanitation by 50 percent by 2015. EPA will support this goal through the CWSRF Indian Set-Aside, which will provide for the development of sanitation facilities for Tribes.

The Clean Water State Revolving Fund Grant Program underwent a PART assessment in 2003 and received an "adequate" rating. The PART review called for improved measures that capture a broad range of public health and environmental benefits provided by the program. In response, EPA has worked with its state partners to develop improved performance measures that link CWSRF financing to the protection and restoration of our nation's waters. This effort led to the development of a new CWSRF benefits reporting system designed to track progress in meeting public health and environmental goals of the program.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of waterbody segments identified by States in 2002 as not attaining standards, where water quality standards are now fully attained (cumulative).				1,100	Number of Segments

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent of all major publicly-owned treatment works (POTWs) that comply with their permitted wastewater discharge standards.				86	Percent POTWs

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Fund utilization rate for the CWSRF.	94.7	93.3	93.4	93.5	Rate

Nationally since 2001, fund utilization has remained relatively stable and strong at over 90%. The national ratio is an aggregate of fund activity in the 51 individual CWSRF programs (50 states and Puerto Rico). As such, small year-to-year fluctuations in the value of the national ratio are to be expected and reflect annual funding decisions made by each state based on its assessment and subsequent prioritization of state water quality needs and the availability of

financial resources. The Agency expects the loan commitment rate to continue to be strong. In addition, because the total capitalization remains relatively the same, the program is projected to meet its long-term revolving level target of \$3.4 billion. As of June 30, 2006, approximately \$3 billion was available for loans.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$1.0) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CWA.

Diesel Emissions Reduction Grant Program

Program Area: Infrastructure Assistance

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$0.0</i>	<i>\$49,500.0</i>	<i>\$35,000.0</i>	<i>(\$14,500.0)</i>
Total Budget Authority / Obligations	\$0.0	\$49,500.0	\$35,000.0	(\$14,500.0)
Total Workyears	0.0	0.0	0.0	0.0

* The Diesel Emissions Reduction Grant program has assumed all responsibilities formerly associated with Clean School Bus Grants program. The Budget Authority for the Clean School Bus Grants program is \$14,474.9K in the FY 2006 Actuals.

Program Project Description:

These grant funds authorized in Sections 791-797 of the Energy Policy Act of 2005 supports the National Clean Diesel program. Through this program EPA focuses on reducing particulate matter (PM) by up to 95% from existing diesel engines, including both on-highway and nonroad equipment. This program also reduces other smog-forming emissions such as nitrogen oxides and hydrocarbons. Existing diesel engines are not subject to new, more stringent emissions standards that take effect in 2007 and later. These engines often remain in service for 20 or more years, and this program will help provide immediate reductions by retrofitting these engines with emission control technologies sooner than would otherwise occur through normal turnover of the fleet.

This program also supports diesel engine retrofits, rebuilds and replacements, and anti-idling measures among other clean diesel strategies. Five sectors are targeted for emissions reductions from the existing U.S. fleet: freight, construction, school buses, agriculture, and ports. Grants will be provided to eligible entities in areas of the country that have air quality concerns. Up to 30 percent of the funds appropriated for diesel emissions reduction grants may be used to provide formula grants to states to establish and support state grant or loan programs.

FY 2008 Activities and Performance Plan:

With the 2008 funding, EPA expects to fund at least 200 new grants deploying technology in various sectors that use using diesel engines. Funds will continue to support the Agency's well established Clean School Bus Program. Specifically, a portion of these funds will be used to award competitive grants for replacing older buses, repowering and retrofitting them with emission control technology, such as diesel particulate filters (DPFs), with the potential of reducing PM emissions by up to 95 percent. Other strategies include anti-idling programs, which lower engine idling time and reduce harmful emissions.

Performance Targets:

Work under this program supports multiple performance objectives. Currently, there are no performance measures specific to this program.

Through the National Clean Diesel Campaign, EPA awarded a total of approximately 30 grants in FY05 and FY06. The Clean School Bus USA program awarded a total of approximately 70 grants in FY 2003 through FY 2005. By the end of FY 2006, approximately 10,000 buses will have been switched to a cleaner fuel, retrofitted with emissions control equipment, or replaced. EPA estimates that the \$35 million for National Clean Diesel Campaign grants will leverage at least an additional \$72 million in funding assistance and reduce PM by approximately 5,040 tons, achieving up to an estimated \$1.4 billion dollars in health benefits.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$14,500.0) This reflects a reduction which will continue to achieve significant reductions in PM emission levels and continue support for the Clean Diesel grants program. Programs similar to the Diesel Grants have been adopted in California and Texas and are expected to achieve similar results.

Statutory Authority:

CAA Amendments, Title I (NAAQS); CAA Amendments, Title III (Air Toxics); CAA, Sections 103, 105, and 106 (Grants), Energy Policy Act of 2005, Sections 741 and 791-797.

Infrastructure Assistance: Drinking Water SRF

Program Area: Infrastructure Assistance

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$813,735.3</i>	<i>\$841,500.0</i>	<i>\$842,167.0</i>	<i>\$667.0</i>
Total Budget Authority / Obligations	\$813,735.3	\$841,500.0	\$842,167.0	\$667.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Drinking Water State Revolving Fund (DWSRF) is designed to support states in helping public water systems finance the costs of infrastructure improvements needed to achieve or maintain compliance with Safe Drinking Water Act (SDWA) requirements and to protect public health. To reduce occurrences of serious public health threats and to ensure safe drinking water nationwide, EPA is authorized to make capitalization grants to states, so that they can provide low-cost loans and other assistance to eligible public water systems. The program emphasizes that states should provide funds to small and disadvantaged communities and to programs that encourage pollution prevention as a tool for ensuring safe drinking water. The Federal investment is designed to be used in concert with other sources of funds to address water quality needs. Capitalization grant funds also may be used by states to provide other types of assistance that promote prevention and encourage stronger drinking water system management programs. These optional state set-asides could potentially equal 31 percent of the state's capitalization grant. However, historically the states have set-aside a total of 16 percent of the funds awarded to them. For fiscal years 2006-2009, appropriated funds are allocated to the states in accordance with each state's proportion of total drinking water infrastructure need as determined by the 2003 Needs Survey and Assessment, with the statutory constraint that each state and the District of Columbia receive no less than one percent of the allotment and the Virgin Islands and Pacific Trust Territories together receive 0.33 percent.

Prior to allotting funds to the states, EPA is required by Section 1452(o) of the Safe Drinking Water Act (SDWA), as amended, to set-aside \$2.0 million to pay the costs of small system monitoring for unregulated contaminants. EPA also reserves 1.5 percent of appropriated funds for Indian Tribes and Alaska Native Villages, in accordance with Section 1452(i) of SDWA, as amended. These funds are awarded either directly to Tribes or, on behalf of Tribes, to the Indian Health Service through Interagency Agreements.

(See <http://www.epa.gov/safewater/dwsrf.html> for more information.)

FY 2008 Activities and Performance Plan:

Providing drinking water that meets health safety standards often requires an investment in the

construction or maintenance of drinking water infrastructure. The DWSRF program supports states in helping public water systems fund infrastructure improvements needed to protect public health and achieve or maintain compliance with the SDWA. Through this program, states offer low interest loans to help public water systems across the nation make improvements or upgrades to their infrastructure. Also, the DWSRF provides additional financial support to small and disadvantaged communities through low or zero-interest loans. Every state that administers DWSRF funds must provide a minimum of 15 percent of available funds for loans to small communities, and has the option of providing up to 30 percent of available funds to state-defined disadvantaged communities. For FY 2008, the DWSRF program has set a target of providing over 440 additional infrastructure improvement projects to public water systems.

The DWSRF Program underwent a PART assessment in 2002 and a reassessment in 2004. The program received a rating of “adequate” in 2004. The reassessment of the DWSRF program found that it had implemented acceptable performance measures. The program also tracks the national long-term average revolving level of the fund to assess long-term sustainability.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent population served by CWS that receive drinking water that meets all applicable health-based DW standards through approaches including effective treatment and source water protection.	89	93	94	90	Percent Population

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent community water systems that provide drinking water that meets all applicable health-based drinking water standards.	89.4	93	94	89.5	Percent Systems

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Number of additional projects initiating operations.	399	425	433	440	Projects

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Fund utilization rate for the DWSRF.	86.9	83.3	84	86	Percent Rate

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$667.0) The additional resources will further support attainment of the Agency's Water Safe to Drink Objective by providing additional capitalization of State Revolving Loan Funds. Currently, the program is on target to reach the long-term revolving level target of \$1.2 billion by 2018.

Statutory Authority:

SDWA.

Infrastructure Assistance: Mexico Border

Program Area: Infrastructure Assistance

Goal: Healthy Communities and Ecosystems

Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$49,013.5</i>	<i>\$24,750.0</i>	<i>\$10,000.0</i>	<i>(\$14,750.0)</i>
Total Budget Authority / Obligations	\$49,013.5	\$24,750.0	\$10,000.0	(\$14,750.0)
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The United States and Mexico share more than 2,000 miles of common border. More than 14.6 million people live in the border area, mostly in fifteen “sister city pairs.” The rapid increase in population and industrialization in the border cities has overwhelmed existing wastewater treatment and drinking water supply facilities. Untreated and industrial sewage often flows north into the U.S. from Tijuana, Mexicali, and Nogales, and into the Rio Grande. EPA works closely with the appropriate partners to evaluate environmental needs and to facilitate the construction of environmental infrastructure through the provision of grant funding for the planning, design, and construction of high priority water and wastewater treatment facilities along the border.

The U.S.–Mexico Border 2012 Program, a joint effort between the U.S. and Mexican governments, will continue to work with the 10 border states and local communities to improve the region’s public and environmental health. The U.S. and Mexican governments will work to improve water quality along the border through a range of pollution control sanitation projects, with the goal of restoring the quality of the majority of the currently impaired significant shared and transboundary surface waters by the year 2012. This effort will reduce health risks to residents who may currently lack access to safe drinking water. Similarly, by decreasing the number of homes without access to basic sanitation by the same amount, EPA and its partners will reduce the discharge of untreated domestic wastewater into surface and ground water.

(See <http://www.epa.gov/r6border/index.htm> for more information.)

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to support the construction of infrastructure that will connect and serve the homes of the border area residents with safe drinking water and wastewater treatment. The results of the recently implemented prioritization process indicate that the FY 2008 investment of \$10.0 million will fund 3-5 projects for clean and safe water serving approximately 30,000 people. Also, of the \$880 million in funds appropriated to EPA, there is an unobligated balance of approximately \$300 million of those funds at the North American Development Bank, which will provide additional funds to complete water and wastewater projects in various stages of construction. This level of funding will allow the program to meet

its annual targets in the stated PART performance measures below. The Agency also will continue to support the planned assessment of shared and transboundary surface waters to facilitate the collection, management, and exchange of environmental data essential for effective water management. In addition, the Agency will support the protection of public health at border area coastal beaches and improvements in efficiency of service provider operations.

The U.S.–Mexico Border Water Infrastructure Program underwent a PART evaluation for the first time in 2004 and received a rating of “adequate.” EPA took specific actions beginning in FY 2005 to strengthen the program and establish new controls to manage the Border Environment Infrastructure Fund (BEIF). These actions focus on improving fiscal management while improving project completion rates to ensure safe drinking water for communities along the border.

EPA has developed baselines and targets for performance measures established during the PART review as reflected in the tables below.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Additional people served per million dollars (US and Mexico federal expenditures).				3,200	People/\$M

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Number of additional homes provided adequate safe drinking water in the Mexican border area that lacked access to safe drinking water in 2003.				2,500	More homes

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Number of additional homes provided adequate wastewater sanitation in the Mexican border area that lacked access to wastewater sanitation in 2003.				15,000	More homes

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$14,750.0) This level of funding will allow the Agency to continue efforts toward providing access to safe drinking water and sanitary systems for underserved communities in the U.S.–Mexico Border area. EPA is closely monitoring fund disbursements and project completion rates to ensure sufficient funding for current and future projects.

Statutory Authority:

Treaty entitled “Agreement between the United States of America and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area, August 14, 1983”; CWA.

Infrastructure Assistance: Puerto Rico

Program Area: Infrastructure Assistance

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$0.0</i>	<i>\$990.0</i>	<i>\$0.0</i>	<i>(\$990.0)</i>
Total Budget Authority / Obligations	\$0.0	\$990.0	\$0.0	(\$990.0)
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

This program was created to contribute to the design for an upgrade of Metropolitano's Sergio Cuervas drinking water treatment plant in San Juan, Puerto Rico. EPA contributed funds based on a FY 2004 design cost estimate for bringing the plant into compliance with current regulatory requirements.

FY 2008 Activities and Performance Plan:

EPA is not requesting funding for this program project in FY 2008.

Performance Targets:

Work under this program supported multiple performance objectives. Currently, there are no performance measures specific to this program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$990.0) This decrease ends Federal funding for the program due to fulfillment of EPA's share of the design phase costs.

Statutory Authority:

SDWA.

Program Area: Categorical Grants

Categorical Grant: Beaches Protection

Program Area: Categorical Grants

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$9,707.3</i>	<i>\$9,900.0</i>	<i>\$9,900.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$9,707.3	\$9,900.0	\$9,900.0	\$0.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

EPA awards grants to eligible coastal and Great Lakes states, territories, and Tribes to improve water quality monitoring at beaches and to notify the public of beach warnings and closings. The Beach grant program is a collaborative effort between EPA and states, territories, local governments, and Tribes to help ensure that recreational waters are safe for swimming. Congress created the program with the passage of the Beaches Environmental Assessment and Coastal Health Act (BEACH Act) in October 2000 with the goal of improving water quality testing at beaches and to help beach managers better inform the public when there are water quality problems.

EPA awards grants to eligible states, territories, and Tribes using an allocation formula developed in consultation with states and other organizations. The allocation takes into consideration: beach season length, beach miles, and beach use.

(See <http://www.epa.gov/waterscience/> for more information.)

FY 2008 Activities and Performance Plan:

States and territories currently monitor 4,025 beaches. To continue making progress on monitoring beaches in FY 2008, EPA expects to:

- Make grant funds available to all 35 eligible states and territories to monitor beach water quality and to notify the public of beach warnings and closings;
- Continue to make available to the public, through EPA's Beach Advisory Closing On-line Notification (BEACON) system, information on the status of beach closings at all monitored beaches; and
- Continue to work with coastal and Great Lakes states, territories, and Tribes to address monitoring issues.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Days (of beach season) that coastal and Great Lakes beaches monitored by State beach safety programs are open and safe for swimming.	97	94	95	96	Percent Days/Season

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

CWA; BEACH Act of 2000.

Categorical Grant: Brownfields

Program Area: Categorical Grants

Goal: Healthy Communities and Ecosystems

Objective(s): Communities

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$51,377.9</i>	<i>\$49,494.9</i>	<i>\$49,495.0</i>	<i>\$0.1</i>
Total Budget Authority / Obligations	\$51,377.9	\$49,494.9	\$49,495.0	\$0.1
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Generally, brownfields, unlike Superfund sites, are not highly contaminated properties and, therefore, present lesser health risks. Economic changes over several decades have left thousands of communities with these contaminated properties and abandoned sites. The Agency's Brownfields program coordinates a Federal, state, Tribal, and local government approach to assist in addressing environmental site assessment and cleanup.

Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 128(a), grants are provided to states and Tribes for their response programs. The state and Tribal programs address contaminated sites that do not require Federal action, but need cleanup before the sites are considered for reuse. States and Tribes may use grant funding for a variety of purposes including developing a public record, capitalizing a Revolving Loan Fund for brownfields, purchasing environmental insurance, and conducting site-specific related activities such as assessments at brownfield sites. For more information, refer to http://www.epa.gov/docs/swerosps/bf/pubs/st_res_prog_report.htm.

FY 2008 Activities and Performance Plan:

Building the capacity of states and Tribes to oversee the cleanup and redevelopment of brownfields will mean more sustained success at the local level, and potentially even higher leveraging of Federal dollars to revitalize communities across the country. The Agency requests funds to establish or enhance state and Tribal response programs across 50 states, U.S. territories, and approximately 30 Tribes.

In the 2003 PART process, the Brownfields program received an "adequate" rating, citing a clear purpose and achievement of performance targets. The program is implementing performance improvement plans related to performance measures, data collection, and program reviews and is on schedule to meet implementation deadlines.

Performance Targets:

Work under this program supports EPA's communities' objective. Currently, there are no performance measures specific to this program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$0.1) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CERCLA as amended by SBLRBRA (P.L. 107-118); RCRA Section 8001; GMRA (1990); SWDA; FGCAA.

Categorical Grant: Environmental Information

Program Area: Categorical Grants

Goal: Compliance and Environmental Stewardship

Objective(s): Improve Environmental Performance through Pollution Prevention and Innovation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$19,308.2</i>	<i>\$14,850.0</i>	<i>\$12,850.0</i>	<i>(\$2,000.0)</i>
Total Budget Authority / Obligations	\$19,308.2	\$14,850.0	\$12,850.0	(\$2,000.0)
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

Exchange Network grants provide funding to states, territories, federally recognized Indian Tribes, and inter-Tribal consortia to support their participation in the Environmental Information Exchange Network. The Exchange Network is an internet and standards-based, secure information network that facilitates electronic reporting, sharing, integration, analysis, and use of environmental data from many different sources. The funding helps EPA's partners acquire and develop the hardware and software needed to connect to the Exchange Network, and to develop or acquire the data needed for decision making.

FY 2008 Activities and Performance Plan:

In FY 2008, the Exchange Network Grants Program will emphasize activities in three areas:

- 1) Developing Tribal and territorial infrastructure - Although ongoing, this aspect will start to be de-emphasized because all 50 states are expected to have operating nodes.
- 2) Supporting the development and exchange of regulatory and non-traditional data flows - Because all 50 states are expected to have operational nodes, the major emphasis of the Exchange Network Grant program will shift toward supporting all partners in the development and exchange of regulatory and non-traditional data flows. Exchange Network partners will continue to need support in the development of the data available through their nodes. These efforts will support the exchange of data for regulatory programs, but also support, for the important business needs of the Exchange Network partners in terms of facilitating better environmental and health decisions; and
- 3) Supporting multi-partner projects to plan, mentor, and train Exchange Network partners, and to develop and exchange data - These projects help encourage broader participation by existing and new partners, support innovation, and improve the quality of grant products because more input is obtained and the products are used by a greater number of partners.

Performance Targets:

Work under this program supports multiple strategic objectives. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$2,000.0) This reduction reflects the continued shift away from building infrastructure and toward adding data flows and web services.

Statutory Authority:

Authority for the Exchange Network Grant program to date has been provided in annual appropriations for the Departments of Veterans Affairs, Housing and Urban Development, and Independent Agencies, as follows: FY 2002, Public Law 107-73; FY 2003, Public Law 108-7; FY 2004, Public Law 108-199; FY 2005, Public Law 108-447; and FY 2007, Public Law 109-54.

Categorical Grant: Hazardous Waste Financial Assistance

Program Area: Categorical Grants

Goal: Land Preservation and Restoration

Objective(s): Preserve Land; Restore Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$103,364.9</i>	<i>\$103,345.5</i>	<i>\$103,346.0</i>	<i>\$0.5</i>
Total Budget Authority / Obligations	\$103,364.9	\$103,345.5	\$103,346.0	\$0.5
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) authorizes EPA to assist state programs through the Hazardous Waste Financial Assistance Grants program. The states propose legislation and upgrade regulations to achieve equivalence with the Federal Hazardous Waste Management program and then apply to EPA for authorization to administer the program. The state grants provide for the implementation of an authorized hazardous waste management program for the purpose of controlling the generation, transportation, treatment, storage, and disposal of hazardous wastes, including controlling and cleaning up past and continuing releases from hazardous waste management facilities through corrective action. This funding also provides for the direct implementation of the RCRA program for the States of Iowa and Alaska, which have not been authorized to operate in lieu of the Federal program. Funding distributed through these grants also supports Tribes, where appropriate, in conducting hazardous waste work on Tribal lands.

FY 2008 Activities and Performance Plan:

In FY 2008, the following activities will be accomplished by states and by EPA for Iowa and Alaska, using RCRA Hazardous Waste Financial Assistance funds:

- Increase the number of RCRA hazardous waste management facilities with permits or other approved controls to meet the FY 2008 goal of 95%. This includes the following activities:
 - Issue operating and post-closure permits or use appropriate enforcement mechanisms to address environmental risk at inactive land-based facilities.
 - Approve closure plans for interim status treatment and storage facilities that are not seeking permits to operate and work with the facilities to clean-close those units.
- Issue permit renewals for hazardous waste management facilities to keep permit controls up to date. Annually, 50 permit renewals are required for FYs 2006-2008.

- Issue permit modifications as needed.
- Operate comprehensive compliance monitoring and enforcement actions related to the RCRA hazardous waste program.
- Work with facilities to complete site assessments, control human exposures, control the migration of contaminated groundwater, and make determinations that construction of final remedies has been completed as part of the efforts toward meeting the FY 2008 goals for the RCRA Corrective Action Program.

This program was included in the 2004 PART review of the RCRA Base, Permits and Grants Program, which received an overall rating of “adequate.” During the PART, EPA developed an efficiency measure that will show, over time, the RCRA facilities under control per dollar of program cost. The FY 2005 baseline was set in July 2006, and the program anticipates developing efficiency measure target information in FY 2007.

Performance Targets:

Work under this program supports the objectives of preserving and restoring land. Currently, there are no performance measures specific to this program project.

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (+\$0.5) Change due to rounding in the FY 2008 President’s Budget.

Statutory Authority:

SDWA; Sections 3011 (a) and (c) as amended RCRA of 1976, as amended; Public Law 94-580, 42 U.S.C. 6901 et seq. Department of Veterans Affairs and Housing and Urban Development and Independent Agencies Appropriations Act; Public Law 105-276; 112 Stat, 2461, 2499 (1988).

Categorical Grant: Homeland Security

Program Area: Categorical Grants

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$4,283.1</i>	<i>\$4,950.0</i>	<i>\$4,950.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$4,283.1	\$4,950.0	\$4,950.0	\$0.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

EPA provides grants to states for coordination activities for critical water infrastructure security efforts. These activities include coordinating and providing technical assistance, training, and education within the state or territory on homeland security issues (particularly with homeland security offices and emergency response officials) relating to: ensuring the quality of drinking water systems' vulnerability assessments and associated security enhancements; and developing and overseeing emergency response and recovery plans. Emergency response and recovery plan implementation activities include table-top workshops, exercises, drills, response protocols, or other activities focusing on implementing security enhancements and improving the readiness of individuals and groups involved in first response at a drinking water system.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will award homeland security grants to states and territories to support their efforts to work with drinking water and wastewater systems to:

- Develop and enhance drinking water and wastewater utilities' and preparedness capabilities;
- Improve emergency response coordination and communications; and
- Develop specific materials focused on improving security.

EPA homeland security grants will be awarded to 56 states and territories. These grants will improve operations of drinking water utilities through training and improved emergency response coordination (e.g., mutual aid agreements), communications, and preparedness. In addition, these resources will facilitate the development of materials (e.g., documents, training materials) focused on improving security and emergency response.

(See <http://cfpub.epa.gov/safewater/watersecurity/financeassist.cfm> for more information.)

Performance Targets:

Work under this program supports EPA's protect human health objective. Currently, there are no performance measures specific to this program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

SDWA; CWA; and the Public Health Security and Bioterrorism Emergency and Response Act of 2002.

Categorical Grant: Lead

Program Area: Categorical Grants

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$15,115.2</i>	<i>\$13,563.1</i>	<i>\$13,564.0</i>	<i>\$0.9</i>
Total Budget Authority / Obligations	\$15,115.2	\$13,563.1	\$13,564.0	\$0.9
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

EPA's Lead Risk Reduction Program alleviates the threat to human health – particularly to young children – posed by exposure to lead-based paint and other sources of lead in the environment. This Categorical Grant program contributes to this effort by maintaining a national infrastructure of trained and certified lead remediation professionals.

FY 2008 Activities and Performance Plan:

The Lead Categorical Grant program will continue providing assistance to states, territories, the District of Columbia, and Tribes to develop and implement authorized programs for lead-based paint remediation. These programs provide specialized individual training, accreditation of training programs, and the certification of contractors engaged in lead-based paint remediation. This grant program, with its focus on reducing the number of childhood lead poisoning cases, is an Agency priority.

EPA will continue to implement the lead-based paint activities in the Training and Certification program through EPA-authorized state, territorial and Tribal programs and, in areas without authorization, through direct implementation by the Agency. Activities conducted as part of this program include the certification of individuals and firms engaged in lead-based paint abatement and inspection activities and the accreditation of qualified training providers. Since their inception in 1998, the state, Tribal and Federal programs have certified more than 24,000 individuals.

To meet the Federal goal of eliminating childhood lead poisoning as a public health concern by 2010, EPA recognizes that additional attention and assistance must be given to our most vulnerable populations – those with rates of lead poisoning in excess of the national average, and those areas where conditions indicate potentially high rates of lead poisoning but where screening has not yet occurred with sufficient frequency. To address this issue, in FY 2008 EPA will continue to award targeted grants to reduce childhood lead poisoning. These grants are available to a wide range of applicants, including state and local governments, Federally-recognized Indian Tribes and Tribal consortia, territories, institutions of higher learning, and nonprofit organizations. In addition, EPA will continue a grant program initiated in FY 2007

which focuses on low-income communities through grants to national organizations engaged in working with these communities. This grant program is designed to help national organizations and community organizations reach under-served populations that may have a disproportionate number of children with elevated blood lead levels.

The Lead program underwent its first PART in 2005, receiving a “moderately effective” rating. Through the PART, EPA introduced a new long-term measure and annual results measure (percent difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old), and a new efficiency measure (annual percentage of lead-based paint certification and refund applications that require less than 40 days of EPA effort to process) in the FY 2007 Budget Justification and Request. Through the PART Improvement Plan process, EPA improved the consistency of grantee and regional accountability and improved the linkage between program funding and program goals with an emphasis on program grant and contract funding. In FY 2008, the Agency will be implementing additional PART-recommended improvement plans to enhance program partners’ accountability and results and to target program resources and activities on populations that face a significant risk of being exposed to lead. For more information, visit <http://www.epa.gov/opptintr/lead/index.html>.

Performance Targets:

Work under this program supports PART measures listed under Toxic Substances: Lead Risk Reduction Program (EPM).

FY 2008 Change from FY 2007 Presidents Budget (Dollars in Thousands):

- (+\$0.9) Change due to rounding in the FY 2008 President’s Budget.

Statutory Authority:

TSCA.

Categorical Grant: Nonpoint Source (Sec. 319)

Program Area: Categorical Grants

Goal: Clean and Safe Water

Objective(s): Protect Water Quality

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$203,807.2</i>	<i>\$194,040.0</i>	<i>\$194,040.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$203,807.2	\$194,040.0	\$194,040.0	\$0.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

Nonpoint source pollution is the greatest remaining source of surface and ground water quality impairments and threats in the United States. Grants under Section 319 of the Clean Water Act (CWA) are provided to states, territories, and Tribes to help them implement their EPA-approved nonpoint source (NPS) management programs by remediating NPS pollution that has occurred in the past and by preventing or minimizing new NPS pollution.

Section 319 broadly authorizes states to use a range of tools to implement their programs, including: both regulatory and non-regulatory programs; technical assistance; financial assistance; education; training; technology transfer; and demonstration projects. States currently focus \$100 million of their Section 319 funds on the development and implementation of watershed-based plans that are designed to restore impaired waters (listed under Section 303(d)) to meet water quality standards. See <http://www.epa.gov/fedrgstr/EPA-WATER/2003/October/Day-23/w26755.htm> for more information.

FY 2008 Activities and Performance Plan:

The pervasiveness of nonpoint source pollution requires cooperation and involvement from EPA, other Federal agencies, the states, and concerned citizens to solve NPS pollution problems. In 2008 EPA will work closely with and support the many efforts of states, interstate agencies, Tribes, local governments and communities, watershed groups, and others to develop and implement their local watershed-based plans and restore surface and ground waters nationwide.

States will continue to develop and implement watershed-based plans to restore impaired waterbodies to meet water quality standards. These watershed-based plans, a key emphasis of the national nonpoint source control program, will move EPA toward the strategic goal of more waters attaining designated uses and enable states to determine the most cost-effective means to meet their water quality goals through the analysis of sources of pollutants of concern; the sources' relative significance; available cost-effective techniques to address those sources; availability of needed resources, authorities and community involvement to affect change; and monitoring that will enable states and local communities to track progress and make changes

over time as they deem necessary to meet their water quality goals. Full requirements for these plans are described in detail in the NPS program grant guidelines.

EPA will continue to forge and strengthen strategic partnerships with the agricultural and forestry communities, developers, and other groups that have an interest in achieving water quality goals in a cost-effective manner. Agricultural sources of pollution in the form of excess fertilizer or pesticides have had a particularly profound effect on water quality. Therefore, EPA will work closely with the U.S. Department of Agriculture (USDA) to ensure that Federal resources -- including both Section 319 grants and Farm Bill funds -- are managed in a coordinated manner to protect water quality from agricultural pollution sources. More broadly, EPA will work with states to ensure that they develop and implement their watershed-based plans in close cooperation with state conservationists, soil and water conservation districts, and all other interested parties within the watersheds.

EPA will continue to track the steady increases in the cumulative dollar value and number of projects financed with Clean Water State Revolving (CWSRF) loans to prevent polluted runoff. Properly managed onsite/decentralized systems are an important part of the nation's wastewater infrastructure, and EPA will encourage state, Tribal, and local governments to adopt effective management systems and use CWSRF to finance systems where appropriate.

In 2004, the Section 319 Nonpoint Source Program received an overall rating of "adequate" from OMB's Program Assessment Rating Tool (PART) review. The Nonpoint Source Program created three annual output measures and one long-term outcome measure. The annual output measures are to annually reduce the amount of runoff of phosphorus, nitrogen, and sediment through Section 319 funded projects by 4.5 million pounds, 8.5 million pounds, and 700,000 tons, respectively. These measures were met in 2003. In 2004, the measures were greatly exceeded with regard to nitrogen and sediment, but the phosphorus totals fell somewhat below the annual target. EPA believes that these differences reflect the natural variability of the type and scope of projects implemented each year. For example, some states are currently focusing on remediating waters that have been 303(d)-listed for other pollutants not amenable to load reduction calculations, like pathogens, temperature, or acidity.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Reduction in phosphorus loadings (millions of pounds).	Available in 2007	4.5	4.5	4.5	Pounds in Millions

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Additional pounds (in millions) of reduction to total nitrogen loadings.	Available in 2007	8.5	8.5	8.5	Pounds in Millions

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Additional tons of reduction to total sediment loadings.	Available in 2007	700,000	700,000	700,000	Pounds

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Section 319 funds (\$ million) expended per partially or fully restored waterbody.				2.8	Million Dollars

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of waterbodies identified by States (in 2000 or subsequent years) as being primarily NPS-impaired that are partially or fully restored.				250	Waterbodies

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

CWA.

Categorical Grant: Pesticides Enforcement

Program Area: Categorical Grants

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$19,876.7</i>	<i>\$18,711.0</i>	<i>\$18,711.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$19,876.7	\$18,711.0	\$18,711.0	\$0.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

Pesticide Enforcement grants ensure pesticide product and user compliance with provisions of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Areas of focus include problems relating to pesticide worker safety protection, ineffective antimicrobial products, food safety, adverse effects, and e-commerce. The program provides compliance assistance to the regulated community through such resources as EPA's National Agriculture Compliance Assistance Center, seminars, guidance documents, brochures, and outreach to foster knowledge of and compliance with environmental laws pertaining to pesticides.¹

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will award state and Tribal enforcement grants to assist in the implementation of the compliance and enforcement provisions of FIFRA. These grants support state and Tribal compliance and enforcement activities designed to protect the environment from harmful chemicals and pesticides. EPA's support to state and Tribal pesticide programs will emphasize pesticide worker protection standards, high risk pesticide activities including antimicrobials, pesticide misuse in urban areas, and the misapplication of structural pesticides. States also will continue to conduct compliance monitoring inspections on core pesticide requirements.

EPA refined PART measure data collection procedures with a Federal and state workgroup in 2005 for the EPA Pesticide Enforcement Grant Program that received an "ineffective" rating in 2004. EPA negotiated final commitments for the collection of new data for pesticide enforcement grant PART measures with states and Tribes in 2006 based on PART-approved measures. EPA began to receive this data in January 2007 and has started to analyze the data to develop three-year rolling average baselines and targets.

Performance Targets:

The "ineffective" PART rating for this program in 2004 reflected the absence of data needed to implement program outcome and efficiency measures called for by the PART. To address this

¹ For additional information, refer to: www.epa.gov/compliance/state/grants/fifra.html.

problem, new measures were developed by the program, and approved by OMB during the 2004 PART review. In FY 2005, EPA negotiated performance data collection requirements with grantees for the new outcome and efficiency measures. EPA began to receive the grantees' data in January 2007 and has started to analyze the information to develop program metrics for demonstrating results. EPA plans to incorporate these program outcome and efficiency program measures, with baselines and specified targets, in the FY 2010 Grant Guidance. No prior data exists to evaluate the performance of these measures over a multi-year period. Work under this program supports the objective to improve compliance under the compliance and environmental stewardship strategic goal.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

FIFRA.

Categorical Grant: Pesticides Program Implementation

Program Area: Categorical Grants

Goal: Healthy Communities and Ecosystems

Objective(s): Chemical and Pesticide Risks

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$13,749.8</i>	<i>\$12,968.9</i>	<i>\$12,970.0</i>	<i>\$1.1</i>
Total Budget Authority / Obligations	\$13,749.8	\$12,968.9	\$12,970.0	\$1.1
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Agency provides grants to states, Tribes, partners, and supporters for worker protection/certification and training, endangered species and Tribal activities and pesticide environmental stewardship. EPA's mission as related to pesticides is to protect human health and the environment from pesticide risk and to realize the value of pesticide availability by taking into account the economic, social and environmental costs and benefits of the use of any pesticide. The Agency achieves this task through implementation of our statutes and regulatory actions. Pesticides Program Implementation Grants ensure that pesticide regulatory decisions made at the national level are translated into results on the local level. States and Tribes provide essential support in implementing pesticides programs, giving input regarding effectiveness and soundness of regulatory decisions, and developing data to measure performance. Under pesticide statutes, responsibility for ensuring proper pesticide use is in large part delegated to states and Tribes. Grant resources allow states and Tribes to be effective regulatory partners. EPA's philosophy is to put the resources at the level closest to the location of potential risks from pesticides since they are in a position to better evaluate risks and implement risk reduction measures.

FY 2008 Activities and Performance Plan:

Certification and Training/Worker Protection

Through the Certification and Training/Worker Protection programs, EPA protects workers, pesticide applicators/handlers, employers, and the public from the potential risks posed by pesticides in their homes and work environments. EPA will continue to provide assistance and grants to implement the Certification and Training/Worker Protection programs. Grant funding will provide for maintenance and improvements in training networks, safety training to workers and handlers, development of *Train the Trainer* courses, workshops, and development and distribution of outreach materials. The Agency's partnership with states and Tribes in educating workers, farmers, and employers on the safe use of pesticides and worker safety will continue to be a major keystone in the success of the Agency to protect human health. For additional information please visit <http://www.epa.gov/oppfod01/safety/applicators/applicators.htm>.

Tribal

The Agency will support Tribal activities in implementing pesticide programs through grants. Tribal program outreach activities support Tribal capacity to protect human health by reducing risk from pesticides in Indian country. This task is challenging given that aspects of Native Americans' lifestyles, such as subsistence fishing or consumption of plants that were specifically grown as food and possibly exposed to pesticides not intended for food use may increase exposure to some chemicals or create unique chemical exposure scenarios. For additional information, please visit <http://www.epa.gov/oppfead1/tribes/>.

Endangered Species Protection Program (ESPP)

The ESPP protects animals and plants whose populations are threatened by risks associated with pesticide use. EPA complies with Endangered Species Act requirements to ensure that its regulatory decisions are not likely to jeopardize species listed as endangered and threatened, or harm habitat critical to those species' survival. EPA will provide grants to states and Tribes for projects supporting endangered species protection. Program implementation includes outreach, communications, education related to use limitations, county bulletins development and distribution, and mapping and development of endangered species protection plans. This initiative supports the Agency's challenge to protect the environment from pesticide risk.

Pesticide Environmental Stewardship Program (PESP):

The PESP is a grant program that forms partnerships with pesticide users to reduce pesticide use and risk through pollution prevention strategies and the use of Integrated Pest Management (IPM) techniques. Organizations committed to reducing pesticide risk are eligible to join PESP either as a partner or supporter. Partners are organizations that use pesticides or represent pesticide users that support voluntary partnerships among EPA and national, state, and local organizations for projects which reduce the risks from pesticide use in agricultural and nonagricultural settings.

PESP currently has 184 partner/supporter organizations ranging from federal partners (e.g., Department of Defense) to state partners (e.g., Maryland Department of Agriculture), to trade associates and even individual companies. EPA will continue to support risk reduction by providing grants promoting the use of safer alternatives to traditional chemical methods of pest control. EPA grants also will support the development and evaluation of new pest management technologies through Integrated Pest Management and PESP, thus contributing to reduction in both health and environmental risks from pesticide use. See <http://www.epa.gov/oppbpd1/PESP/index.htm> for additional information.

Performance Targets:

Work under this program supports the Chemical and Pesticide Risks objective. Currently there are no performance measures specific to this program.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+1.1) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

PRIA; FIFRA; FFDCA; FQPA; ESA.

Categorical Grant: Pollution Control (Sec. 106)

Program Area: Categorical Grants

Goal: Clean and Safe Water

Objective(s): Protect Water Quality

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$220,772.4</i>	<i>\$221,661.0</i>	<i>\$221,664.0</i>	<i>\$3.0</i>
Total Budget Authority / Obligations	\$220,772.4	\$221,661.0	\$221,664.0	\$3.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

Section 106 of the Clean Water Act (CWA) authorizes EPA to provide Federal assistance to states (including territories and the District of Columbia), Tribes qualified under Section 518(e), and interstate agencies to establish and maintain adequate measures for the prevention and control of surface and ground water pollution from point and nonpoint sources. Prevention and control measures supported through these grants include permitting, pollution control studies, water quality planning, monitoring and standards and Total Maximum Daily Load (TMDL) development, surveillance and enforcement, pretreatment programs, advice and assistance to local agencies, training, public information, and oil and hazardous materials response. The grants also may be used to fund services from non-profit organizations, through the Senior Environmental Employment (SEE) program, to assist Regional offices who are overseeing direct implementation programs. The grants may also be used to provide “in-kind” support through an EPA contract if a state or Tribe requests that part of their allotment be used to purchase equipment or services.

FY 2008 Activities and Performance Plan:

This program supports states, interstates, and Tribes in their efforts to implement key CWA programs that will restore and improve the quality of rivers, lakes and streams which will allow the Agency to achieve the long-term national goal of restoring over 2,250 impaired waters by 2012. Through the Section 106 grant program, the Agency continues to support prevention and control measures of state water quality management programs: standards development, monitoring, permitting and enforcement; advice and assistance to local agencies; and the provision of training and public information. The Water Pollution Control Program is helping to foster a watershed protection approach at the state level by encouraging states to address water quality problems holistically, thereby targeting the use of limited resources available for effective program management.

EPA will collaborate with state and Tribal partners to further enhance water monitoring programs consistent with comprehensive monitoring strategies and to collaborate on statistically valid surveys of the condition of the nation’s waters. In FY 2008, states and Tribes will be analyzing data on lake conditions for a report on baseline conditions of lakes due in 2009. The

intent is that surveys of the nation's waters will be repeated periodically to track trends in water quality, giving decision makers and the public the information they need to determine effectiveness of the Agency's investments in water quality protection. In FY 2008, \$18,500,000 will be designated for states and Tribes that participate in collecting this statistically valid water monitoring data and implement enhancements in their water monitoring programs.

States, interstate agencies, and Tribes continue to foster a "watershed approach" as the guiding principle of their clean water programs. Development of TMDLs for an impaired waterbody is a critical tool for meeting water restoration goals. In watersheds where quality standards are not attained, states will be developing TMDLs, watershed plans or other appropriate mechanisms that, when implemented, will result in attainment of water quality standards. States and EPA have made significant progress in the development and approval of TMDLs (cumulatively over 20,000 completed through FY 2006) and expect to develop more than 2,500 TMDLs in 2008. Resources in this program will continue to support TMDL implementation (including through issuance of permits that include limitations consistent with TMDLs); states will be encouraged to ensure that TMDLs are implemented.

The states and Tribes will continue to implement the "*Permitting for Environmental Results Strategy*," which focuses limited resources on the most critical environmental problems by targeting three key areas: developing and strengthening systems to ensure the integrity of the program; focusing on environmental results in the permitting program; and fostering efficiency in permitting program operations. Additionally, in FY 2007, EPA is expected to finalize a rule that incorporates financial incentives for states that implement adequate National Pollutant Discharge Elimination System (NPDES) fee systems. In FY 2008, States who are able to demonstrate that they have recouped a significant portion of their permit program costs through the collection of fees will receive additional funds to support their priority water quality activities.

New rules will be finalized in FY 2007 for discharges from Concentrated Animal Feeding Operations (CAFOs) and states will work to assure that permits cover most CAFOs by FY 2008. In addition, states will continue to work toward the FY 2008 goal of 100 percent of NPDES programs having issued general permits requiring storm water management programs for Phase II municipal separate storm sewer systems (MS4s) and requiring storm water pollution prevention plans for construction sites covered by Phase II of the storm water program.

States and authorized Tribes will continue to review and update their water quality standards as required by the CWA. The Agency's goal is that 87 percent of state and Tribal submissions will be approvable in FY 2008. EPA also encourages states to continually review and update water quality criteria in their standards to reflect the latest scientific information from EPA and other sources. EPA's goal for 2008 is that 68 percent of states will have updated their standards to reflect the latest scientific information in the past three years.

A key performance measure for the Surface Water Protection program is the percentage of water body segments, identified by States in 2002 as not attaining standards, where water quality standards are now attained. EPA state partners play a key role in developing and implementing plans and documenting progress made toward reaching the FY 2012 target for this measure.

EPA is working with States to develop detailed plans documenting how stakeholders will work together to achieve these goals.

(See <http://www.epa.gov/owm/cwfinance/pollutioncontrol.htm> for more information.)

This program underwent evaluation through the Program Assessment Rating Tool (PART) in 2005 and received a rating of “adequate.” The Agency has been successful in meeting or exceeding performance targets agreed to during this process. The PART review identified areas requiring improvement plans (follow-up actions). In response, the Agency:

- Continues to target, through an allocation formula, a portion of the appropriated funds to support of the national probabilistic monitoring survey; and
- Drafted a rule which will provide incentives, through a set-aside of appropriated funds, for states to implement or improve their permit fee programs, increasing the resources available for water quality programs. The proposed rule was published in the Federal Register on January 4, 2007.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Ouput	Number of TMDL's that are established by States and approved by EPA on schedule consistent with national policy (cumulative).	19,368	18,692	21,923	24,411	TMDLs

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Ouput	Percentage of high priority state NPDES permits that are scheduled to be reissued.	96.4	95	95	95	Percent Permits

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Cost per water segment restored.	576,618	1,358,351	636,744	685,611	Dollars per Water Segment

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Ouput	Percentage of majors in Significant	Data Available	22.5	22.5	22.5	Percent Majors

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
	Noncompliance (SNC) at any time during the fiscal year.	in 2007				

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of States & Territories that, within the preceding 3-yr. period, submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or sources not considered in previous standards.				68	Percent States & Territories

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of waterbody segments identified by States in 2002 as not attaining standards, where water quality standards are now fully attained (cumulative).				1,100	Number of Segments

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$3.0) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

CWA.

Categorical Grant: Pollution Prevention

Program Area: Categorical Grants

Goal: Compliance and Environmental Stewardship

Objective(s): Improve Environmental Performance through Pollution Prevention and Innovation

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$4,192.6</i>	<i>\$5,940.0</i>	<i>\$5,940.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$4,192.6	\$5,940.0	\$5,940.0	\$0.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

EPA's Pollution Prevention (P2) programs focus on approaches that merge business, community and consumer needs with environmental protection by identifying processes, products and opportunities that save time and money, as well as prevent pollution. The program employs a combination of collaborative efforts, innovative programs, and technical assistance and education to support stakeholder efforts to not just minimize adverse environmental impacts, but to prevent them.

This program provides grant funds to states and state entities (i.e., colleges and universities) and Federally-recognized Tribes and Intertribal Consortia in order to deliver pollution prevention technical assistance to small and medium-sized businesses. The goal of the grant program is to assist businesses and industries with identifying improved environmental strategies and solutions for reducing waste at the source. The program demonstrates that source reduction can be a cost-effective way of meeting or exceeding Federal and state regulatory requirements.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to provide grants to states and Tribes to support their pollution prevention efforts. The Agency also will continue to support the services of a network of regional centers, collectively called the Pollution Prevention Resource Exchange (P2Rx), that provides information and help to state technical assistance centers.

The program will focus on stronger review of the applicant's ability to measure the results of the grants, particularly environmental outcomes. EPA will require grant applicants to demonstrate and document either outcome or output measures. EPA will give preference to applicants whose work plans address outcome-based measures derived from the P2 targets in EPA's Strategic Plan. Within the national grant guidance, EPA will provide ranking criteria which will be used to evaluate the applicant's ability to measure expected results. Primarily, applicants will be evaluated on their use of the National Pollution Prevention Results System (a database of core P2 metrics being developed by EPA and state P2 organizations) or documentation in their work plan of past experience in measuring outcomes or outputs from previous grants. The following actions further reinforce EPA efforts to track environmental outcomes from P2 grants:

- EPA Regional managers certify that awards contribute to strategic targets and the annual performance commitments;
- The addition of the key P2 environmental outcome targets from EPA's Strategic Plan to the reporting measures in the annual program guidance for EPA's P2 grants managers; and,
- The revision of the GranTrack database, to add the core P2 metrics from the National Pollution Prevention Results System to its menu of grant information.

EPA's Pollution Prevention Program, including this Categorical Grant Program, underwent PART review in 2006 and received a "moderately effective" rating. The PART improvement plan recommended that EPA obtain and evaluate Science Advisory Board Report recommendations for improving performance measures to better demonstrate Pollution Prevention results, work to reduce barriers confronted by industry and others in attempting to implement source reduction, fully implement Grant Track and the P2 State Reporting System, and develop additional efficiency measures in time for inclusion in the FY 2009 budget. The Pollution Prevention Program has already developed one efficiency measure focusing on the Design for the Environment Program's formulators effort.

Performance Targets:

Activities for this appropriation support PART measures listed for Pollution Prevention Program funded under EPA's Environmental Program Management account.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

PPA; TSCA.

Categorical Grant: Public Water System Supervision (PWSS)

Program Area: Categorical Grants

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$98,590.8</i>	<i>\$99,099.0</i>	<i>\$99,100.0</i>	<i>\$1.0</i>
Total Budget Authority / Obligations	\$98,590.8	\$99,099.0	\$99,100.0	\$1.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Public Water System Supervision (PWSS) grant program provides grants to states with primary enforcement authority (primacy) to implement and enforce National Primary Drinking Water Regulations (NPDWRs). These grants help to ensure the safety of the nation's drinking water resources and thereby protect public health.

NPDWRs set forth monitoring, reporting, compliance tracking, and enforcement elements to ensure that the nation's drinking water supplies do not contain substances at levels that may pose adverse health effects. These grants are a key implementation tool under the Safe Drinking Water Act and support the states' role in a Federal/state partnership of providing safe drinking water supplies to the public. Grant funds are used by states to:

- Provide technical assistance to owners and operators of water systems;
- Maintain compliance data systems;
- Compile and analyze compliance information;
- Respond to violations;
- Certify laboratories;
- Conduct laboratory analyses;
- Conduct sanitary surveys;
- Draft new regulations and legislative provisions where necessary; and
- Build state capacity.

Not all states and Tribes have primary enforcement authority. Funds allocated to the State of Wyoming, the District of Columbia, and Indian Tribes without primacy are used to support direct implementation activities by EPA; for developmental grants; and for "treatment in a similar manner as a state" (TAS) grants to Indian Tribes to develop the PWSS program on Indian lands with the goal of Indian Tribal authorities achieving primacy.

(See <http://www.epa.gov/safewater/pws/pwss.html> for more information.)

FY 2008 Activities and Performance Plan:

EPA will continue to support state and Tribal efforts to meet new and existing drinking water standards through the Public Water Systems Supervision (PWSS) grant program. In FY 2008, the Agency will emphasize that states should use their PWSS funds to ensure that:

- 1) Drinking water systems of all sizes achieve or remain in compliance;
- 2) Drinking water systems of all sizes are meeting new health-based standards and are prepared for new regulatory requirements (*e.g.*, Long Term 2 Enhanced Surface Water Treatment Rule or “LT2”, Stage 2 Disinfectants and Disinfection Byproducts Rule or “Stage 2”); and
- 3) Data quality and other data issues have been addressed and resolved.

The states are the primary implementers of the national drinking water program and ensure that the systems within their jurisdiction are in compliance with drinking water rules. Thus, while there is not a separate measure for the PWSS grant program to the states, it directly contributes to the measure on the number of community water systems that supply drinking water meeting all health-based standards. The Public Water System Supervision Grant program was included in the 2004 PART review and received an overall rating of “adequate.”

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent population served by CWS that receive drinking water that meets all applicable health-based DW standards through approaches including effective treatment and source water protection.	89	93	94	90	Percent Population

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent community water systems will provide drinking water that meets all applicable health-based drinking water standards.	89.4	93	94	89.5	Percent Systems

FY 2008 Change from FY 2007 President’s Budget (Dollars in Thousands):

- (+\$1.0) Change due to rounding in the FY 2008 President’s Budget.

Statutory Authority:

SDWA.

Categorical Grant: Radon

Program Area: Categorical Grants

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Indoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	\$8,577.4	\$8,073.5	\$8,074.0	\$0.5
Total Budget Authority / Obligations	\$8,577.4	\$8,073.5	\$8,074.0	\$0.5
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

EPA assists states and tribes through the State Indoor Radon Grant Program (SIRG), which provides categorical grants to develop, implement, and enhance programs to assess and mitigate radon risks. States and tribes are the primary implementers of radon testing and mitigation programs.

FY 2008 Activities and Performance Plan:

In FY 2008 EPA will:

- Continue national partnerships and national outreach;
- Leverage the expertise of states, tribes, and localities with active and comprehensive radon programs through state partnerships to carry the radon message; and,
- Continue to work with partners to incorporate radon risk reduction as a normal part of doing business.

In FY 2008, states receiving SIRG funds will continue to focus their efforts on priority activities such as educating consumers, homeowners, the real estate and homebuilder communities and local governments to achieve risk reduction. SIRG funds should achieve the following results: homes mitigated, homes built with radon resistant new construction, and schools mitigated or built with radon resistant new construction. EPA is working with the states to align performance measures.

The Indoor Air program, assessed by OMB through the PART process, received a rating of “moderately effective.” The Indoor Air program is not regulatory; instead, EPA works toward its goal by conducting research and promoting appropriate risk reduction actions through voluntary education and outreach programs. The Agency will continue to focus on making efficiency improvements and plans to improve transparency by making all aspects of the State Indoor Radon Grant (SIRG) program performance/results data available to the public via our website or other easily accessible means.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Total Cost (public and private) per future premature lung cancer death prevented through lowered radon exposure.	Data Available 2007	450,000	No Target Established	No Target Established	Dollars

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Number of additional homes (new and existing) with radon reducing features	Data Available 2008	180,000	190,000	225,000	Homes

These program goals are a result of the total funding the program area receives through EPM, S&T, and SIRC funding. In FY 2008, EPA expects 225,000 additional homes to have radon reducing features bringing the cumulative number of U.S. homes with radon reducing features to over 2 million. EPA estimates that this cumulative number will result in approximately 800 future premature cancer deaths prevented (each year these radon reducing features are in place). EPA will track progress against the efficiency measure included in the table above triennially with the next planned report date in FY 2009.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$0.5) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

TSCA, Section 6, Titles II, and Title III (15 U.S.C. 2605 and 2641-2671), and Section 10.

Categorical Grant: Sector Program

Program Area: Categorical Grants

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$1,938.9</i>	<i>\$2,227.5</i>	<i>\$2,228.0</i>	<i>\$0.5</i>
Total Budget Authority / Obligations	\$1,938.9	\$2,227.5	\$2,228.0	\$0.5
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

A strong state and Tribal Enforcement and Compliance Assurance program is essential to EPA's long-term strategic objective: to identify and reduce significant noncompliance in high priority areas, while maintaining a strong enforcement presence in all regulatory program areas. Effective partnerships between EPA and government co-implementers are crucial for success in implementing sector approaches.

Sector program grants build environmental partnerships with states and Tribes to strengthen their ability to address environmental and public health threats, including contaminated drinking water, pollution caused by wet weather events, pesticides in food, toxic substances, and air pollution. These capacity building grants also support state agencies that are responsible for implementing authorized, delegated, or approved environmental programs.¹

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to support states and Tribes in their efforts to build, implement, or improve compliance capacity for authorized, delegated, or approved environmental programs. The sector program also seeks to foster innovation.

FY 2008 annual funding priorities for the multi-media grants program may include: 1) improving compliance data quality, 2) modernizing data systems, 3) improving public access to enforcement and compliance data, 4) improving outcome measurement, and 5) providing compliance training to Tribes to enhance their compliance monitoring capacity. The grants and/or cooperative agreements are competed for nationally and each funding priority is targeted towards enhancing state and Tribal capacity and capability. Additionally, funding priority is targeted towards addressing needs that may be identified by states, Tribes, or state and Tribal associations.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's

¹ For more information, refer to: www.epa.gov/compliance/state/grants/stag/index.html

direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Work under this program supports EPA's Improve Compliance objective. Currently, there are no performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$0.5) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

RLBPHRA; RCRA; CWA; SDWA; CAA; TSCA; EPCRA; FIFRA; ODA; NAAEC; LPA-US/MX- BR; NEPA; MPRSA.

Categorical Grant: State and Local Air Quality Management

Program Area: Categorical Grants

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$225,269.8</i>	<i>\$185,179.5</i>	<i>\$185,180.0</i>	<i>\$0.5</i>
Total Budget Authority / Obligations	\$225,269.8	\$185,179.5	\$185,180.0	\$0.5
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

This program includes funding for multi-state, state, and local air pollution control agencies. Section 103 of the Clean Air Act provides EPA with the authority to award grants to a variety of agencies, institutions, and organizations, including the air pollution control agencies funded from the STAG appropriation, to conduct and promote certain types of research, investigations, experiments, demonstrations, surveys, studies, and training related to air pollution. Section 105 of the Clean Air Act provides EPA with the authority to award grants to state and local air pollution control agencies to develop and implement continuing programs for the prevention and control of air pollution, and for the implementation of National Ambient Air Quality Standards (NAAQS) set to protect public health and the environment. Section 105 grants are also used by states to help fund monitoring networks. Section 106 of the Clean Air Act provides EPA with the authority to fund interstate air pollution transport commissions to develop or carry out plans for designated air quality control regions.

FY 2008 Activities and Performance Plan:

This program funds over 100 state and local air pollution control agencies, five RPOs, and one interstate air pollution transport commission to implement requirements of the Clean Air Act. In FY 2008, EPA will continue to work with these agencies to develop or implement state implementation plans (SIPs) for the 8-hour ozone standard, the fine particle (PM-2.5) standard, and regional haze. States must submit the SIPs for the 8-hour ozone NAAQS to EPA in FY 2007, and will continue with SIP implementation in FY 2008. States with areas classified as moderate and above for the 8-hour ozone NAAQS will implement SIP measures for reasonable further progress (RFP) and reasonably available control technology (RACT). States must submit regional haze SIPs to EPA in December 2007, and PM2.5 SIPs in April 2008. States will develop their regional haze SIPs using strategies and information provided by RPOs.

In 1999, EPA, at the direction of the Congress, established RPOs, to provide technical support to states in developing regional haze SIPs. Regional haze results primarily from the presence of common pollutants, such as PM2.5, sulfur dioxide (SO2), oxides of nitrogen (NOx), and volatile organic compounds (VOCs). To assess various control scenarios that would reduce regional haze, the RPOs analyzed pollutant data and conducted air quality modeling that incorporated

control alternatives for PM_{2.5}, SO₂, NO_x and VOCs. NO_x and VOCs also are precursors for the formation of ozone. The analyses and data systems developed by the RPOs potentially can be used to support PM and ozone control strategy development.

In October 2006, EPA issued final regulations that eliminated or reduced a number of specific minimum requirements for air quality monitoring, especially monitoring for four NAAQS pollutants: carbon monoxide, SO₂, nitrogen dioxide, and lead, for which violations of the standards are now extremely uncommon. These regulatory changes will allow the states, with EPA oversight, to streamline their monitoring networks for these four pollutants and reduce costs. Also, EPA expects less, but still significant, streamlining of PM₁₀ monitoring networks, even though the minimum requirements were not changed. The number of PM₁₀ monitors currently in place exceeds minimum requirements, and many monitors are located in areas with low PM₁₀ concentrations. EPA believes that ozone and PM_{2.5} networks should remain about their current size, with some shifting of sites for better data value.

The 2006 final rule established a new requirement for a small network of about 55 "NCore" multi-pollutant monitoring sites, which must be operational by 2011. Among other measurements, these sites are required to monitor for PM_{10-2.5} mass concentrations and speciation profiles, types of monitoring not previously required anywhere. EPA and states already have been working together on a voluntary basis to establish this network. In 2008, more states will start selecting the sites for this newly required form of monitoring, acquire new equipment, and become proficient in its operation. Also, the PM_{2.5} NAAQS for 24-hour concentrations was made more stringent by the final rule. In connection with NAAQS revision, about 50 existing PM_{2.5} monitoring sites must begin to sample for PM_{2.5} every day instead of every third day, to provide greater accuracy in eventual nonattainment designations. Although the final rule did not revise the required numbers of PM_{2.5} monitors or how they must be sited, in 2008 states may voluntarily shift monitoring equipment to new locations to investigate possible problem areas with respect to the revised NAAQS. Finally, as improved technologies for monitoring PM on a continuous basis are commercialized and approved as official methods, states are expected to transition to wider use of continuous methods in preference to older filter-based methods that have higher operating costs.

This program also supports state and local characterization of air toxics problems, and implementation of measures to reduce health risks. These measures include support for state efforts in implementing Maximum Available Control Technology (MACT) standards for major and area sources. Funding for the characterization work includes collection and analysis of emissions data, and a monitoring of ambient air toxics. In FY 2008, funds for air toxic ambient monitoring will support the National Air Toxics Trends Stations (NATTS), consisting of 24 air toxics monitoring sites operated and maintained by state and local air pollution control agencies across the country, and the associated quality assurance, data analysis, and methods support. These air toxics monitoring funds also support community scale monitoring projects aimed at helping state, local, and tribal air pollution agencies assess the degree to which their community is impacted by hazardous air pollutants.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.	Data Available 2007	17	21	26	Percentage

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$0.5) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority

C.A.A., Sections 103, 105, and 106.

Categorical Grant: Targeted Watersheds

Program Area: Categorical Grants

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$14,301.8</i>	<i>\$6,930.0</i>	<i>\$0.0</i>	<i>(\$6,930.0)</i>
Total Budget Authority / Obligations	\$14,301.8	\$6,930.0	\$0.0	(\$6,930.0)
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Targeted Watersheds Grant Program encourages successful community-based approaches and management techniques to protect and restore the nation's waters.

The Targeted Watersheds Grant Program enhances community watershed groups' efforts through two different types of competitive grants. Implementation grants provide monetary assistance directly to watershed organizations to implement restoration/protection activities within their watershed. Resources are used to stabilize stream banks, demonstrate nutrient management schemes, establish pollutant credits and trading projects, and work with local governments and private citizens to promote sustainable practices and strategies. Capacity building grants support established watershed service providers in their effort to increase the viability, sustainability and effectiveness of local watershed groups by providing tools, training, and education.

FY 2008 Activities and Performance Plan:

This program will be eliminated in order to focus on higher priority water quality programs and achieve administrative efficiencies.

Performance Targets:

This program has not been reviewed under the PART process.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$6,930.0) This program will be eliminated in order to focus on higher priority water quality programs and achieve administrative efficiencies.

Statutory Authority:

Department of the Interior, Environment, and Related Agencies Appropriations Act, 2006. Public Law 109-54.

Categorical Grant: Toxics Substances Compliance

Program Area: Categorical Grants

Goal: Compliance and Environmental Stewardship

Objective(s): Achieve Environmental Protection through Improved Compliance

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$6,347.5</i>	<i>\$5,098.5</i>	<i>\$5,099.0</i>	<i>\$0.5</i>
Total Budget Authority / Obligations	\$6,347.5	\$5,098.5	\$5,099.0	\$0.5
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Toxic Substances Compliance grants program builds environmental partnerships with states and Tribes to strengthen their ability to address environmental and public health threats from toxic substances such as Polychlorinated Biphenyls (PCBs), asbestos and lead. State grants are used to ensure compliance with standards for the proper use, storage and disposal of PCBs. Proper handling prevents persistent bio-accumulative toxic substances from contaminating food and water. The asbestos funds ensure compliance with standards to prevent exposure to school children, teachers and staff to asbestos fibers in school buildings. The program also assures that asbestos and lead abatement workers have received proper training and certification to ensure protection during the abatement process and minimize the public's exposure to these harmful toxic substances.

FY 2008 Activities and Performance Plan:

In FY 2008, EPA's Enforcement and Compliance Assurance program will continue to award state and Tribal compliance monitoring grants to assist in the implementation of compliance and enforcement provisions of the Toxic Substances Control Act (TSCA). These grants support state and Tribal compliance monitoring and enforcement activities to protect the public and the environment from PCBs, asbestos and lead.

The EPA Enforcement of Environmental Laws (Civil) PART program received an "adequate" rating in 2004 with the development of a measure implementation plan. In FY 2006, at OMB's direction, EPA conducted a review of enforcement and compliance measures used by states, other Federal agencies, and other countries, as well as consulting with academics and other measurement experts. The purpose of the review was to identify opportunities to improve measurement. As a result of this review, EPA is beginning to transition the Enforcement and Compliance Assurance program from a tool-oriented to a problem-oriented GPRA strategic architecture, and as new measures are developed they will replace existing measures in the Agency's Strategic Plan.

Performance Targets:

Work under this program supports EPA's Improve Compliance objective. Currently, there are no external performance measures specific for this program project. One of the primary performance results for the enforcement and compliance assurance program, pounds of pollutants reduced, looks at the overall reduction in pollution as a result of enforcement actions including toxic substances¹. Grant funding provided to states and tribes through this categorical grant for toxic substances helps states and tribes reduce lead, asbestos, and PCB pollution through state and tribal compliance monitoring and enforcement. The Agency is exploring methodologies to extend the measure by: 1) adding components that deal with pollutant hazard; and 2) identifying an indicator of the population that would have been exposed to the pollutant.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$0.5) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

TSCA.

¹ With the adoption of the Clean Air Interstate Rule, pollution reduction will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Categorical Grant: Tribal Air Quality Management

Program Area: Categorical Grants

Goal: Clean Air and Global Climate Change

Objective(s): Healthier Outdoor Air; Healthier Indoor Air

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$11,723.9</i>	<i>\$10,939.5</i>	<i>\$10,940.0</i>	<i>\$0.5</i>
Total Budget Authority / Obligations	\$11,723.9	\$10,939.5	\$10,940.0	\$0.5
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

This program includes funding for Tribal air pollution control agencies and/or Tribes. Through Clean Air Act (CAA) section 105 Grants, Tribes may develop and implement programs for the prevention and control of air pollution or implementation of national primary and secondary ambient air standards. Through CAA Section 103 grants, Tribal air pollution control agencies or tribes, colleges, universities, or multi-tribe jurisdictional air pollution control agencies and/or non-profit organizations may conduct and promote research, investigations, experiments, demonstrations, surveys, studies and training related to air pollution. Allowable activities are described in "Guidance for Funding Air and Radiation Activities Using the STAG Appropriation," issued by the Office of Air and Radiation on November 12, 1999.

FY 2008 Activities and Performance Highlights:

With EPA funding, Tribes will assess environmental and public health conditions on Tribal lands and, where appropriate, site and operate air quality monitors. Tribes will continue to develop and implement air pollution control programs for their reservations, acting "as states" to prevent and address air quality concerns. EPA will continue to fund organizations for the purpose of providing technical support, tools and training for Tribes to build capacity to develop and implement programs as appropriate.

The Air Quality Grants and Permitting Program, PARTed in 2005, received a rating of "ineffective."

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.	Data Available 2007	17	21	26	Percentage

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$0.5) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

Clean Air Act, Section 103 and 105.

Categorical Grant: Tribal General Assistance Program

Program Area: Categorical Grants

Goal: Compliance and Environmental Stewardship

Objective(s): Improve Human Health and the Environment in Indian Country

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$60,086.9</i>	<i>\$56,925.0</i>	<i>\$56,925.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$60,086.9	\$56,925.0	\$56,925.0	\$0.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

In 1992, Congress established the Indian Environmental General Assistance Program (GAP) to provide a mechanism for Federal efforts to assist Tribal governments in assuring environmental quality on Indian lands. The purpose of GAP is to support development of core Tribal environmental protection programs. (See <http://www.epa.gov/indian/laws3.htm> for more information.)

GAP provides general assistance grants to build capacity to administer environmental regulatory programs that may be authorized by EPA in Indian country, and to provide technical assistance in the development of multimedia programs to address environmental issues on Indian lands. GAP grants cover the costs of planning, developing, and establishing environmental protection programs consistent with other applicable provisions of law providing for enforcement of such laws by Indian Tribes on Indian lands. GAP funds are used to:

- Assess the status of a Tribe's environmental condition;
- Develop appropriate environmental programs and ordinances;
- Conduct public education and outreach efforts to ensure that Tribal communities are informed and able to participate in environmental decision-making; and
- Promote communication and coordination between Federal, state, local and Tribal environmental officials.

FY 2008 Activities and Performance Plan:

In FY 2008, GAP grants will build Tribal environmental capacity to assess environmental conditions, utilize available Federal information, and build an environmental program tailored to Tribes' needs. The grants will develop environmental education and outreach programs, develop and implement integrated solid waste management plans, and alert EPA to serious conditions that pose immediate public health and ecological threats. Through GAP program guidance, EPA emphasizes outcome based results.

The Tribal GAP program underwent a PART assessment in 2003 and received an overall rating of “adequate” from OMB. In FY 2005, EPA improved program accountability by implementing a new database system, the Goal 5 Objective 3 Reporting System, to standardize, centralize, and integrate regional data and assign accountability for data quality. Currently, EPA is working to develop and deploy the GAP Tracking System for improved data management and real-time access to grant information. EPA is revising the GAP program measures to strengthen their relevance and accuracy in preparation for an anticipated PART review in FY 2007. In FY 2008, EPA will continue to improve the program by conducting 4 reviews of Regional Program Operations, finalizing a performance evaluation of the GAP, and developing a standardized reporting format for program performance and accomplishments.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of tribes with EPA-approved multimedia workplans.	33	18	42	45	% Tribes

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of tribes with delegated and non-delegated programs (cumulative).	42	5	49	50	% Tribes

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percent of Tribes with EPA-reviewed monitoring and assessment occurring.	30.8	20	31	31	% Tribes

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Efficiency	Number of environmental programs implemented in Indian Country per million dollars.	12.3	13.7	12.5	12.5	Programs

The efficiency measure for the GAP program reads: “*Number of environmental programs implemented in Indian country per million dollars.*” This measure reflects environmental program implementation in Indian country in relation to the level of dollars available to Tribes under the EPA program statutorily targeted to this objective. It is expressed as a ratio between environmental programs implemented and million dollars of GAP funding available to Tribes.

- In FY 2008, EPA will operate at an efficiency of approximately 12.5 programs per million dollars. This efficiency level is consistent with prior fiscal years.

- In FY 2008, 517 Federally-recognized Tribes and Intertribal Consortia, or 90 percent of a universe of 572 eligible entities, will have access to an environmental presence.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

Indian General Assistance Program Act, 42 U.S.C. § 4368b (1992), as amended.

Categorical Grant: Underground Injection Control (UIC)

Program Area: Categorical Grants

Goal: Clean and Safe Water

Objective(s): Protect Human Health

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$10,591.5</i>	<i>\$10,890.0</i>	<i>\$10,891.0</i>	<i>\$1.0</i>
Total Budget Authority / Obligations	\$10,591.5	\$10,890.0	\$10,891.0	\$1.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Underground Injection Control (UIC) program is implemented by Federal, state, and local governments that oversee underground injection activities in order to prevent contamination of underground sources of drinking water. Underground injection is the disposal of fluids beneath the earth's surface in porous rock formations through wells or other similar conveyance systems.

When wells are properly sited, constructed, and operated, underground injection is an effective and environmentally safe method to dispose of fluids. The Safe Drinking Water Act established the UIC program to provide safeguards so that injection wells do not endanger current and future underground sources of drinking water. The most accessible underground fresh water is stored in shallow geological formations (*i.e.* shallow aquifers) and is the most vulnerable to contamination.

EPA provides financial assistance in the form of grants to states that have primary enforcement authority (primacy) to implement and maintain UIC programs. Eligible Indian Tribes who demonstrate intent to achieve primacy may also receive a grant for the initial development of UIC programs and be designated for treatment as a "state" if their programs are approved. Where a jurisdiction is unable or unwilling to assume primacy, EPA uses grant funds for direct implementation of Federal UIC requirements. EPA directly implements programs in ten states and shares responsibility in seven states.

(See <http://www.epa.gov/safewater/uic.html> for more information.)

FY 2008 Activities and Performance Plan:

Ensuring safe underground injection of fluids, including waste-fluids, is a fundamental component of a comprehensive source water protection program that, in turn, is a key element in the Agency's multi-barrier approach. The UIC program continues to manage or close the approximately 700,000 shallow injection wells (Class V) to protect our ground water resources.

In 2008, states and EPA (where EPA has primacy) will continue to carry out regulatory functions for all well types. In addition, states and EPA will process UIC permit applications for experimental carbon sequestration projects and gather information from these pilots to facilitate the permitting of large scale commercial carbon sequestration in the future. Similarly, states and EPA will process UIC permits for other nontraditional injection streams such as drinking water treatment residuals, desalination brines, and treated waters injected for storage and recovered at a later time.

The Underground Injection Control Grant program underwent a PART review in 2004. The program received a rating of “adequate” from OMB. The program is on track to develop by the end of 2007 an annual performance measure and efficiency measure to demonstrate the protection of source water quality.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Percent population served by CWS that receive drinking water that meets all applicable health-based DW standards through approaches including effective treatment and source water protection.	89	93	94	90	Percent Population

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of Class I, II, and III wells that maintain mechanical integrity without a failure that releases contaminants to underground sources of drinking water (under development)				98	Percent of Wells

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of identified Class V motor vehicle waste disposal wells closed or permitted				90	Percent of Wells

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Output	Percentage of prohibited Class IV and high-priority, identified, potentially endangering Class V wells closed or permitted in ground-water based source water areas (under development)				96	Percent of Wells

EPA also has developed annual measures for the UIC Program that support the long-term targets. These measures are indicators of the effectiveness of the UIC Program in preventing contamination of underground sources of drinking water (USDWs) and protecting public health. These measures are demonstrating how the UIC program is helping to reduce risk to underground sources of drinking water and protect public health.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (+\$1.0) Change due to rounding in FY 2008 President's Budget.

Statutory Authority:

SDWA.

Categorical Grant: Underground Storage Tanks

Program Area: Categorical Grants

Goal: Land Preservation and Restoration

Objective(s): Preserve Land

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$14,328.1</i>	<i>\$37,566.7</i>	<i>\$22,274.0</i>	<i>(\$15,292.7)</i>
Total Budget Authority / Obligations	\$14,328.1	\$37,566.7	\$22,274.0	(\$15,292.7)
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

EPA provides funding to states, Tribes, and/or Intertribal Consortia through the Underground Storage Tanks (UST) categorical grants to encourage owners and operators to properly operate and maintain their USTs. In FY 2008, EPA will make grants or cooperative agreements to states for new activities authorized by the Energy Policy Act (EPA) of 2005¹. In addition, EPA will use funds for direct implementation of release detection or release prevention (spill, overfill, and corrosion protection requirements) programs on Tribal lands where EPA carries out the UST program.

EPA recognizes that the size and diversity of the regulated community puts state authorities in the best position to regulate USTs and to set priorities. For more information, refer to <http://www.epa.gov/swrust1/overview.htm>. Major activities focus on ensuring that owners and operators routinely and correctly monitor all regulated tanks and piping in accordance with UST regulations and developing state programs with sufficient authority and enforcement capabilities to operate in lieu of the Federal program. For more information, refer to <http://www.epa.gov/OUST/fedlaws/cfr.htm>.

Prior to FY 2007, EPA provided funding to states under the authority of Section 2007(f)(2) of the Solid Waste Disposal Act (SWDA), and to Federally recognized Tribes, and/or Intertribal Consortia under Public Law (P.L.)105-276, through Performance Partnership Agreements and through the UST categorical grants for release detection and release prevention activities to encourage owners and operators to properly operate and maintain their USTs. In FY 2008, EPA will make grants or cooperative agreements for new activities authorized by the EPA, which were enacted as Title XV, Subtitle B of the EPA of 2005, that are not otherwise provided for in Section 2007 of the SWDA. Additionally, to ensure adequate funds are available for inspections required under the EPA of 2005, EPA will not use STAG funds for leaking underground storage tank cleanup activities that are authorized by Section 205 of the Superfund Amendments and Reauthorization Act of 1986, even if those activities are also authorized by the EPA.

¹ Refer to http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ058.109.pdf (scroll to Title XV - Ethanol And Motor Fuels, Subtitle B – Underground Storage Tank Compliance, on pages 500-513 of the pdf file).

FY 2008 Activities and Performance Plan:

In FY 2008, EPA will continue to assist states and Tribes in implementing the UST program and will provide assistance and alternative mechanisms to states to help them meet their new responsibilities authorized under the EPCRA². States will use the UST categorical grant funding to implement their leak prevention and detection programs. This will include implementing the EPCRA provisions, such as conducting more frequent inspections, prohibiting delivery to noncompliant tanks, and requiring either secondary containment for new tank systems or financial responsibility for manufacturers and installers.

In FY 2008, EPA is seeking a legislative amendment to provide states with an alternative mechanism to meet the three-year UST inspection requirement mandated in the EPCRA. Under the proposal, states would have the option to inspect a statistically valid number of random facilities, and compel all owners or operators to do a self-evaluation and certification of each UST. Under the existing law, states can inspect every facility every three years using government inspectors or third-party inspectors. Therefore, if the proposed alternative is passed, states would have three ways to meet the inspection mandate.

EPA has the primary responsibility for implementation of the UST Program in Indian country. In FY 2008, grants under P.L. 105-276 will continue to help Tribes develop the capacity to administer UST programs. For example, funding is used to support training for Tribal staff, educate owners and operators in Indian country about UST requirements, and maintain information on USTs located in Indian country. EPA will also implement the UST Tribal strategy³ developed in FY 2006 in Indian country. As specified in the EPCRA, EPA is required by August 8, 2007, and every three years thereafter, to conduct on-site inspections in Indian country of all tanks not inspected since 1998.

The UST (prevention) program received an overall rating of “moderately effective” in 2006. As a component of the program’s improvement plan, EPA will be working with its state partners to develop a measure of efficiency and consider various options to measure the activities associated with the 2005 Energy Policy Act.

The program has set a goal of increasing significant operational compliance (SOC) by one percent (1%) per year from the 2004 baseline of 64 percent. As states continue to inspect previously uninspected facilities, SOC rates may decline as states find more facilities that are not in compliance leaving EPA with challenging and ambitious targets for FYs 2007 and 2008. . As a result, the significant operational compliance rates may be lower than in previous years, making it more difficult to meet the targets for FYs 2007 and 2008.

² *Grant Guidelines To States For Implementing The Delivery Prohibition Provision Of The EPCRA Of 2005*, August 2006, EPA-510-R-06-003, http://www.epa.gov/oust/fedlaws/Delivery%20Prohibition_080706.pdf

³ Refer to *Strategy For An EPA/Tribal Partnership To Implement Section 1529 Of The EPCRA Of 2005*, August 2006, EPA-510-F-06-005, , http://www.epa.gov/oust/fedlaws/epact_05.htm#Final

The program also measures confirmed releases reported each year, with a goal of fewer than 10,000 releases each year. Between FY 1999 and FY 2006, confirmed UST releases averaged 10,534.

Performance goals and measures for the UST Categorical Grant program are currently a component of the overall LUST/UST program's measures. As a result, the LUST/UST EPM program also contributes to the achievement of these performance measures.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	No more than 10,000 confirmed releases per year.	8,361	<10,000	<10,000	<10,000	UST releases

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Increase the rate of significant operational compliance by 1% over the previous year's rate (target).	62	66	67	68	percent

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- (-\$15,293.0) This decrease reflects EPA's proposed legislative changes to provide states with an alternative mechanism to meet the Energy Policy three-year UST inspection requirement. With the legislative changes, the reduced level of funding is sufficient to enable the states to meet the three-year UST inspection requirement.
- (+\$0.3) Change due to rounding in the FY 2008 President's Budget.

Statutory Authority:

SWDA of 1976, as amended by the Superfund Reauthorization Amendments of 1986 (Subtitle I), Section 2007(f), 42 U.S.C. 6916(f)(2); EPAct of 2005, Title XV - Ethanol And Motor Fuels, Subtitle B - Underground Storage Tank Compliance, Sections 1521 - 1533, P.L. 109-58, 42 U.S.C. 15801; Tribal Grants: P.L. 105-276.

Categorical Grant: Wetlands Program Development

Program Area: Categorical Grants

Goal: Healthy Communities and Ecosystems

Objective(s): Restore and Protect Critical Ecosystems

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$13,360.5</i>	<i>\$16,830.0</i>	<i>\$16,830.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$13,360.5	\$16,830.0	\$16,830.0	\$0.0
Total Workyears	0.0	0.0	0.0	0.0

Program Project Description:

The Wetland Program Development Grants (WPDG) enable EPA to provide technical and financial support to assist states, Tribes, and local governments toward the national goal of an overall increase in the nation's wetlands. Grants are used to develop new or refine existing state and Tribal wetland protection, management, and restoration programs as well as to implement programs where environmental results can be demonstrated. Grants are awarded on a competitive basis under the authority of Section 104(b)(3) of the Clean Water Act (CWA). Grants support development of state and Tribal wetland programs that further the goals of the CWA and improve water quality in watersheds throughout the country. Many states and some Tribes have developed wetland protection programs that assist private landowners, educate local governments, and monitor and assess wetland quantity and quality. (See <http://www.epa.gov/owow/wetlands/initiative/#financial> for more information.)

FY 2008 Activities and Performance Plan:

Achieving the strategic goal and the Administration's wetlands commitment to increase wetlands necessitates stronger state, Tribal, and local programs to monitor, manage and protect wetlands and other aquatic resources. Resources in FY 2008 will assist states and Tribes to develop, enhance, implement, and administer wetland programs. This program will help states and Tribes build capacity in the areas of measuring and achieving a net gain of wetlands, and protection of vulnerable wetlands.

The WPDG Program encourages states, Tribes, territories, and local governments to pursue projects that will develop one or more of the six core elements (monitoring, regulation, water quality standards, mitigation compliance, and partnership building) that EPA has identified as comprising a comprehensive wetland program. Further explanation of these core areas can be found at <http://www.epa.gov/owow/wetlands/initiative/fy02elements.html>. In addition, EPA will be completing and analyzing the results of the state/Tribal Environmental Outcome Wetland Demonstration Pilot (WDP). The WDP is a three-year pilot, started in 2005, designed to demonstrate effectiveness of using Wetland Program Development Grants for program implementation. The pilot is part of EPA's effort to strengthen state/Tribal capacity to protect their wetlands.

The 2006 National Wetlands Inventory Status and Trends Report, released by the U.S. Fish and Wildlife Service (FWS), reports the quantity and type of wetlands in the conterminous United States. The report shows that overall gains in wetland acres exceeded overall losses from 1998 through 2004 at a rate of 32,000 acres per year. This gain is primarily attributable to an increase in unvegetated freshwater ponds, which may have varying functional value. Additional wetland data provided in a report titled Preserving America's Wetlands, Implementing the President's Goal (Council on Environmental Quality, April 2006), indicates that since April 2004, 1,797,000 acres have been restored, created, protected or improved. For more information consult <http://www.whitehouse.gov/ceq/>.

Performance Targets:

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Working with partners, achieve a net increase in wetlands.	Data Available 2011	200,000	100,000	100,000	Acres/year

Measure Type	Measure	FY 2006 Actual	FY 2006 Target	FY 2007 Target	FY 2008 Target	Units
Outcome	Annually, in partnership with the Corps of Engineers and States, achieve no net loss of wetlands in the Clean Water Act Section 404 regulatory program.	Data Available 2011	No Net Loss	No Net Loss	No Net Loss	Acres

This program has not been reviewed under the PART process.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

1990 Great Lakes Critical Programs Act; 2002 Great Lakes and Lake Champlain Act; CWA; Coastal Wetlands Planning, Protection, and Restoration Act of 1990; Estuaries and Clean Waters Act of 2000; North American Wetlands Conservation Act; WRDA; 1909 The Boundary Waters Treaty; 1978 GLWQA; 1987 GLWQA; 1996 Habitat Agenda; 1997 Canada-U.S. Great Lakes Bi-national Toxics Strategy; U.S.-Canada Agreements.

Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification

Table of Contents - Program Performance and Assessment

Program Assessment Rating Tool (PART) OMB Report	1
Program Assessment Rating Tool (PART) Supplemental Information	19
Annual Performance Goals and Measures – Environmental Programs	28
GOAL 1: Clean Air and Global Climate Change	27
GOAL 2: Clean and Safe Water	40
GOAL 3: Land Preservation and Restoration	48
GOAL 4: Healthy Communities and Ecosystems	56
GOAL 5: Compliance and Environmental Stewardship	79
Annual Performance Goals and Measures – Enabling Support Programs	86
NPM: Office of Administration and Resources Management	86
NPM: Office of Environmental Information	88
NPM: Office of the Inspector General	90

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

This table lists PART Follow-Up Actions, also known as Improvement Plans, that EPA programs are implementing in response to PART assessments.

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2006	Air Quality Grants and Permitting	Develop a measure that assesses the State permitting programs' quality, efficiency, and compliance.	Action taken, but not completed
2006	Air Quality Grants and Permitting	Develop at least one efficiency measure that adequately reflects program efficiency.	Action taken, but not completed
2006	Air Quality Grants and Permitting	Develop policy and criteria for transitioning the fine particulate matter (PM2.5) monitoring program from Clean Air Act Section 103 grant funding to Clean Air Act Section 105 grant funding.	Action taken, but not completed
2006	Air Quality Grants and Permitting	Review and update current grant allocation processes to ensure resources are properly targeted.	Action taken, but not completed
2006	Alaska Native Village Water Infrastructure	Correcting incomplete data fields and reporting deficiencies in database to support analysis for cost effectiveness and efficiency by January 30, 2007.	Action taken, but not completed
2006	Alaska Native Village Water Infrastructure	Finalizing web based project reporting system to include all projects funded by EPA dollars by April 30, 2007.	Action taken, but not completed
2006	Alaska Native Village Water Infrastructure	EPA will develop regulations for the management and oversight of the program, including all grant funds to the State of Alaska and any subsidiary recipients of EPA funds via the State of Alaska. By March 1, 2007, EPA shall provide a draft regulation to OMB for review and comment.	No action taken
2006	Alaska Native Village Water Infrastructure	The program will issue a contract for an independent review of the Alaska Native Tribal Health Consortium financial processes and records. The independent review will begin in January 2007.	Action taken, but not completed
2005	Brownfields Revitalization	Complete performance measures that are under development including a new cross-agency measure that tracks brownfields redevelopment.	Action taken, but not completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2005	Brownfields Revitalization	Conduct regional program reviews to share and implement best practices among regional offices that will improve the program's overall performance and efficiency.	Action taken, but not completed
2005	Brownfields Revitalization	Improve grantee use of electronic reporting systems to reduce data lags in performance information.	Action taken, but not completed
2006	Chesapeake Bay Program	Investigating potential methods to more transparently characterize the uncertainty of the watershed and water quality models, ideally leading to implementation of a method, if feasible.	Action taken, but not completed
2006	Chesapeake Bay Program	Developing a comprehensive implementation strategy that is coordinated between program partners and accurately accounts for available resources.	Action taken, but not completed
2006	Chesapeake Bay Program	Promoting and tracking implementation of the most cost effective restoration activities to maximize water quality improvements.	Action taken, but not completed
2004	Clean Water State Revolving Fund	EPA will focus on improving the quality and breadth of CWSRF performance data. In particular, EPA needs to focus on collecting data on minor systems, which receive a significant proportion of CWSRF funding, and waterborne disease.	Action taken, but not completed
2006	Drinking Water Protection Program	Developing a long-term outcome performance measure to assess the public health impacts of improvements in drinking water compliance.	Action taken, but not completed
2006	Drinking Water Protection Program	Revising the current drinking water small system affordability methodology to address negative distributional impacts.	Action taken, but not completed
2006	Drinking Water Protection Program	Implementing data quality review recommendations to improve the overall quality of the data in EPA's drinking water compliance reporting system.	Action taken, but not completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2006	Drinking Water Protection Program	The program is developing an efficiency measure that is more useful and meaningful for tracking annual programmatic efficiency.	No action taken
2006	Drinking Water Research	Develop a performance measure which tracks the efficiency with which the program delivers its services to its primary client, the EPA Office of Water.	Action taken, but not completed
2006	Drinking Water Research	Develop baselines and targets for all long term and annual performance measures. These will allow the program to set quantitative goals and assess progress through time.	Action taken, but not completed
2006	Drinking Water Research	Improve oversight of non-grant partners and require non-grant partners to work towards the annual and long term goals of the program.	Action taken, but not completed
2005	Drinking Water State Revolving Fund	Develop a new long-term outcome performance measure to assess the impact of drinking water compliance improvements on public health.	Action taken, but not completed
2005	Drinking Water State Revolving Fund	Implement recommendations from the second triennial drinking water data quality review which are designed to improve the overall quality of the data in EPA's drinking water compliance reporting system.	Action taken, but not completed
2005	Endocrine Disruptors	Articulate clearly R&D priorities to ensure compelling, merit-based justifications for funding allocations.	Completed
2005	Endocrine Disruptors	By the end of CY 2006, develop baseline data for an efficiency measure that compares dollars/labor hours in validating chemical assays.	Completed
2005	Endocrine Disruptors	Maintain funding at approximately the FY 2005 President's Budget level.	Completed
2006	Endocrine Disruptors	By the end of CY 2007, collect data for first year of new contracts and compare to baseline efficiency measures.	Action taken, but not completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2004	EPA Acid Rain Program	Remove statutory requirements that prevent program from having more impact including (but not limited to) barriers that; set maximum emissions reduction targets, exempt certain viable facilities from contributing, and limit the scope of emission reduction credit trading. The Administration's Clear Skies proposal adequately addresses these and other statutory impediments. Program should work as appropriate to promote the enactment of the Clear Skies legislation.	Action taken, but not completed
2004	EPA Acid Rain Program	Program should develop efficiency measures to track and improve overall program efficiency. Measures should consider the full cost of the program, not just the federal contribution.	Action taken, but not completed
2005	EPA Climate Change Programs	EPA will complete an assessment and comparison of the potential benefits and efforts of the Clean Automotive Technology program to other agency's efforts with similar goals by April 1, 2005.	Action taken, but not completed
2005	EPA Climate Change Programs	The Clean Automotive Technology program will work to develop better performance measures that more clearly link to greenhouse gas reduction potential in the near term.	Action taken, but not completed
2006	EPA Ecological Research	Develop a program-specific customer survey to improve the program's utility to the Agency.	Action taken, but not completed
2006	EPA Ecological Research	Link budget resources to annual and long-term performance targets by requesting and reporting Human Health Research and Ecosystem Research funding separately.	Action taken, but not completed
2006	EPA Ecological Research	Refine the questions used in independent scientific reviews to improve EPA's understanding of program utility and performance in relationship to environmental outcomes.	Action taken, but not completed
2003	EPA Enforcement of Environmental Laws (Civil)	Continue to expand and improve use of statistically valid non-compliance rates.	Action taken, but not completed

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2003	EPA Enforcement of Environmental Laws (Civil)	Develop meaningful baseline and targets for outcome oriented performance measures, with particular emphasis on pounds of pollutants reduced characterized for risk.	Action taken, but not completed
2004	EPA Enforcement of Environmental Laws (Civil)	Direct funds toward completion of the Permit Compliance System (PCS)	Action taken, but not completed
2004	EPA Enforcement of Environmental Laws (Civil)	Target resources based on workload analysis and take into account recommendations by the intra-agency Superfund Review completed in April 2004.	Action taken, but not completed
2005	EPA Enforcement of Environmental Laws (Civil)	EPA will consider contracting for an independent evaluation of the program that can serve as the basis for further improvements.	Action taken, but not completed
2005	EPA Enforcement of Environmental Laws (Civil)	Calculate and evaluate recidivism rates.	Action taken, but not completed
2006	EPA Enforcement of Environmental Laws (Civil)	Begin to transition from a tool-oriented to a problem-oriented GPRA Architecture; and incorporate in the next EPA Strategic Plan.	Action taken, but not completed
2004	EPA Enforcement of Environmental Laws (Criminal)	Created standardized definitions (completed) and merging data bases from within the agency to allow easier implementation and evaluation of measures.	Action taken, but not completed
2004	EPA Enforcement of Environmental Laws (Criminal)	Developing baselines and targets to measure recidivism.	Action taken, but not completed
2004	EPA Enforcement of Environmental Laws (Criminal)	Developing a baseline and targets for the outcome measure, pounds of pollutants reduced, that is characterized as to risk.	Action taken, but not completed
2006	EPA Environmental Education	The administration is continuing its recommendation to terminate the program at EPA and rely on NSF programs to fulfill scientific education initiatives.	Action taken, but not completed
2003	EPA Existing Chemicals Program	Develop a long-term outcome efficiency measure.	Action taken, but not completed
2003	EPA Existing Chemicals Program	Maintain funding at the 2004 President's Budget level.	Completed
2005	EPA Existing Chemicals Program	Develop a cost efficiency measure for management of the Toxic Substances Control Act 8(e) Hazard Notification process.	Action taken, but not completed

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2006	EPA Existing Chemicals Program	Develop a long-term outcome measure for the PFOA Stewardship Initiative for inclusion in the FY 2009 OMB Submission.	Action taken, but not completed
2006	EPA Existing Chemicals Program	Assess initial year actual data for the AEGL efficiency measure to identify issues requiring resolution prior to second year implementation of the measure in the FY 2008 Annual Plan.	Action taken, but not completed
2006	EPA Existing Chemicals Program	Update baseline data for TSCA 8(e) efficiency measure through FY 2007.	Action taken, but not completed
2006	EPA Existing Chemicals Program	Develop an efficiency measure for Acute Exposure Guideline Levels	Action taken, but not completed
2006	EPA Human Health Research	Develop ambitious long-term performance targets that clearly define what outcomes would represent a successful program.	Action taken, but not completed
2006	EPA Human Health Research	Improve ability to link budget resources to annual and long-term performance targets by requesting and reporting Human Health research and Ecosystem research funding as separate program-projects.	Action taken, but not completed
2006	EPA Human Health Research	Implement follow up recommendations resulting from external expert review by the Human Health Subcommittee of the Board of Scientific Counselors (BOSC). Follow up actions are those actions committed to in the Human Health Research program's formal response to the BOSC in September 2005.	Action taken, but not completed
2006	EPA Indoor Air Quality	Improve transparency by making State radon grantee performance data available to the public via a website or other easily accessible means.	Action taken, but not completed
2006	EPA Indoor Air Quality	Link budget requests more explicitly to accomplishment of performance goals, specifically by stipulating how adjustments to resource levels would impact performance.	Action taken, but not completed
2006	EPA Indoor Air Quality	Use efficiency measures to demonstrate improved efficiencies or cost effectiveness in achieving program goals.	Action taken, but not completed

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2006	EPA Lead-Based Paint Risk Reduction Program	Develop and implement a method of measuring the impacts of the program's outreach and education efforts.	Action taken, but not completed
2006	EPA Lead-Based Paint Risk Reduction Program	Improve the consistency of grantee and regional office accountability mechanisms and develop a system that ensures all relevant performance data from grantees and the Regional offices is being collected for the purposes of focusing program actions.	Completed
2006	EPA Lead-Based Paint Risk Reduction Program	Improve the linkage between program funding and the associated contributions towards progress in achieving program goals, especially for program grant and contractor funding.	Completed
2006	EPA Lead-Based Paint Risk Reduction Program	Refine/Improve measures used in State Grant Reporting Template to improve accountability of program partners for achievement of program goals.	Action taken, but not completed
2006	EPA Lead-Based Paint Risk Reduction Program	Further improve results reporting from program partners.	Action taken, but not completed
2003	EPA New Chemicals Program	Establish targets and timeframes for its measures, including efficiency measures.	Completed
2003	EPA New Chemicals Program	Maintain funding at the 2004 President's Budget level.	Completed
2003	EPA New Chemicals Program	Propose appropriations language to change the Toxic Substances Control Act to lift the cap on fees that the Agency can collect for new chemical reviews.	Completed
2005	EPA New Chemicals Program	Develop an efficiency measure to target improvements in the initial phases of EPA's management of Pre-Manufacture Notices (PMNs).	Completed
2006	EPA New Chemicals Program	Develop a long-term/annual output measure addressing the program's recognition of PMN submissions for advancing pollution prevention, or a suitable alternative measure, for inclusion in the FY 2009 OMB Submission.	Action taken, but not completed

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2006	EPA New Chemicals Program	Develop baselines and targets for the efficiency measure targeting improvements in the initial phases of EPA's management of Pre-Manufacture Notices (PMNs).	Action taken, but not completed
2006	EPA Oil Spill Control	Develop a forum for sharing and implementing best practices among regional offices that will improve the program's overall performance and efficiency.	Action taken, but not completed
2006	EPA Oil Spill Control	Develop a second long-term outcome measure and at least one annual outcome measure.	Action taken, but not completed
2006	EPA Oil Spill Control	Develop stronger strategic planning procedures to ensure continuous improvement in the program, including regular procedures that will track and document key decisions and work products.	Action taken, but not completed
2006	EPA Oil Spill Control	Evaluate the data quality of key data sources used by the program to improve the accuracy and reliability of performance information.	Action taken, but not completed
2005	EPA Pesticide Enforcement Grant Program	Develop targets and baselines.	Action taken, but not completed
2005	EPA Pesticide Enforcement Grant Program	Evaluate why cost effectiveness appears inversely proportional to amount of Federal funding.	Action taken, but not completed
2005	EPA Pesticide Enforcement Grant Program	Work to develop appropriate outcome performance measures.	Completed
2006	EPA Support for Cleanup of Federal Facilities	Conduct one evaluation on an aspect of the program to identify areas and means for program improvements.	Completed
2006	EPA Support for Cleanup of Federal Facilities	Work with other Federal agencies to support attainment of long-term environmental and human health goals.	Completed
2003	EPA Tribal General Assistance Program	EPA will develop ambitious performance targets for its annual and efficiency measures.	Action taken, but not completed
2003	EPA Tribal General Assistance Program	EPA will improve the program's accountability.	Completed
2006	EPA Tribal General Assistance Program	Improving data quality both in terms of scope and reliability to assist in setting meaningful targets for program improvement.	Action taken, but not completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2006	EPA Tribal General Assistance Program	Work to increase the implementation and delegation of environmental programs on Indian lands.	Action taken, but not completed
2005	EPA's Recycling, Waste Minimization, and Waste Management Program	Continuously improving the program by identifying where compliance costs are excessive and reducing the cost of compliance where appropriate (i.e. RCRA manifest rule).	Action taken, but not completed
2005	EPA's Recycling, Waste Minimization, and Waste Management Program	Develop an efficiency measure for the waste minimization component of the RCRA base program.	Action taken, but not completed
2006	EPA's Recycling, Waste Minimization, and Waste Management Program	Develop a new regulatory definition of solid waste that satisfies the judicial requirements while ensuring that costs are not inappropriately shifted to the Superfund or other corrective action programs by narrowing the exclusion of previously regulated substances.	Action taken, but not completed
2006	Global Change Research	Finalize ambitious long-term outcome measures that assess the utility of the program's research products and services with respect to the outcome goals of its clients.	Action taken, but not completed
2006	Global Change Research	More clearly define the program's framework and mission to help focus assessment efforts and provide structure for setting priorities.	Action taken, but not completed
2006	Global Change Research	Develop an efficiency measure that captures the cost effectiveness of research activities.	Action taken, but not completed
2006	Global Change Research	Develop and implement a protocol for more frequent review and use of financial and performance tracking data to improve budget-performance integration.	Action taken, but not completed
2006	Human Health Risk Assessment Program	Expand efficiency measure to include all major work products.	No action taken
2006	Human Health Risk Assessment Program	Implement new IRIS review process.	Action taken, but not completed
2006	Human Health Risk Assessment Program	Implement regular, independent evaluations that assess the program's effectiveness specifically related to its influence on key risk management decisions made by the Agency's environmental media offices.	Action taken, but not completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2006	Human Health Risk Assessment Program	Investigate alternative approaches for measuring progress related to providing timely, high quality scientific assessments.	No action taken
2006	Land Protection and Restoration Research	Finalize ambitious, long-term outcome performance measures that assess the utility of the program's research products and services with respect to the outcome goals of its clients.	Action taken, but not completed
2006	Land Protection and Restoration Research	Develop and implement a protocol for more frequent review and use of financial and performance tracking data to improve budget-performance integration.	Action taken, but not completed
2006	Land Protection and Restoration Research	Develop a new efficiency measure that captures the cost effectiveness of research activities.	Action taken, but not completed
2003	Leaking Underground Storage Tank Cleanup Program	In response to initial findings that the program needed better long-term outcome goals with adequate baselines and targets, the program will conduct a baseline characterization study.	Completed
2005	Leaking Underground Storage Tank Cleanup Program	Programs initiative on performance indicators. The program has proposed new measures for this reassessment.	Completed
2005	Leaking Underground Storage Tank Cleanup Program	Seek out regular independent evaluations and a systematic process to review the program's strategic planning.	Action taken, but not completed
2005	Mobile Source Air Pollution Standards and Certification	Begin collecting data to support two new efficiency measures - one long and one short-term - to enable the program to measure further efficiency improvements.	Action taken, but not completed
2005	Mobile Source Air Pollution Standards and Certification	Request \$66 million for EPA's mobile source programs, \$1.5 million more than the 2005 President's Budget request.	Completed
2005	Mobile Source Air Pollution Standards and Certification	Systematically review existing regulations to maintain consistency and ensure that regulations maximize net benefits. Conduct thorough ex ante economic analyses and evaluations of alternatives in support of regulatory development.	Action taken, but not completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2006	National Ambient Air Quality Standards and Regional Haze Programs	Develop at least one efficiency measure that adequately reflects program efficiency.	Completed
2006	National Ambient Air Quality Standards and Regional Haze Programs	Implement improvements within current statutory limitations that address deficiencies in design and implementation and identify and evaluate needed improvements that are beyond current statutory authority.	Action taken, but not completed
2006	National Ambient Air Quality Standards and Regional Haze Programs	Improve the linkage between program funding and the associated contributions towards progress in achieving program goals.	Action taken, but not completed
2006	National Ambient Air Quality Standards Research	Develop an annual measure that more directly demonstrates progress on toward the long-term goal of reducing uncertainty in identified research areas of high priority.	Action taken, but not completed
2006	National Ambient Air Quality Standards Research	Develop and implement adequate methods for determining progress on the program's two new long-term measures (uncertainty and source-to-health linkage measures) as well as for the new annual measure (customer survey measure).	Action taken, but not completed
2006	National Ambient Air Quality Standards Research	Improve multi-year plan (MYP) and financial data tracking systems and procedures to better and more transparently integrate grantee and program performance with financial information.	Action taken, but not completed
2006	National Ambient Air Quality Standards Research	The program must develop at least one efficiency measure that adequately reflects the efficiency of the program.	Action taken, but not completed
2006	National Ambient Air Quality Standards Research	Convene annual program reviews in which extramural expert discipline scientists and clients will assess the state of ORD science, ensure progress toward outcome goals, and determine the need for strategic mid-course adjustments to maximize program efficiency and assist with outyear planning.	Action taken, but not completed
2005	Nonpoint Source Pollution Control Grants	EPA will consider contracting for an independent evaluation of the program that can serve as the basis for further improvements.	Action taken, but not completed

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2005	Nonpoint Source Pollution Control Grants	To continue to improve this program and meet its long-term goals, EPA will focus on ensuring its funds are used for the most beneficial projects.	Action taken, but not completed
2006	Ocean, Coastal, and Estuary Protection	Develop an additional performance measure for non-estuary program activities.	Action taken, but not completed
2006	Ocean, Coastal, and Estuary Protection	Develop an annual performance measure for the Ocean Dumping Program.	Action taken, but not completed
2006	Ocean, Coastal, and Estuary Protection	Developing more ambitious targets for the National Estuary Program's annual and long term measures on habitat acres protected and restored.	Action taken, but not completed
2005	Pesticide Field Programs	Develop and implement a method of compiling and disseminating Field Programs grantee performance data in a manner easily accessible to the public. EPA worked with states to develop a simplified, electronic, EOY reporting system for worker safety activities. Will expand to other field programs by EOY 2007.	Completed
2005	Pesticide Field Programs	Develop and implement annual goals and efficiency measures and continue development of baselines and targets for long-term outcome measures for all Field Programs.	Completed
2005	Pesticide Field Programs	Make the Field Programs budgeting more transparent and more clearly link to adequate and relevant program-specific measures.	Completed
2005	Pesticide Field Programs	Include a \$1 million reduction in funding for the Field Programs, WQ program in the FY2006 President's Budget. EPA must ensure that WQ program activities affected by this reduction are adequately addressed in the Office of Water's Surface Water Protection program.	Completed
2006	Pesticide Field Programs	Implement new strategic plan architecture into FY 08 management activities and day-to-day operations.	Action taken, but not completed
2006	Pesticide Field Programs	Establish executive leads to provide senior leadership for each of the 3 mission areas in the new Strategic Plan.	Action taken, but not completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2006	Pesticide Field Programs	Brief staff on new Strategic Plan in order to incorporate stronger alignment between Strategic Plan individual Performance Agreement and Recognition System (PARS) agreements.	Action taken, but not completed
2003	Pesticide Registration	The Administration recommends maintaining funding at the 2004 President's Budget level adjusted for the annual pay increase.	Completed
2003	Pesticide Registration	The program will also work on long-term outcome efficiency measures.	Completed
2003	Pesticide Registration	The program will develop long-term risk-based outcome performance measures that will supplement the existing long-term measures.	Completed
2006	Pesticide Registration	Implement new strategic plan architecture into FY 08 management activities and day-to-day operations.	Action taken, but not completed
2006	Pesticide Registration	Establish executive leads to provide senior leadership for each of the 3 mission areas in the new Strategic Plan.	Action taken, but not completed
2006	Pesticide Registration	Brief staff on new Strategic Plan in order to incorporate stronger alignment between Strategic Plan individual Performance Agreement and Recognition System (PARS) agreements.	Action taken, but not completed
2004	Pesticide Reregistration	Per the Agency targets develop and finalize appropriate regional performance targets.	Completed
2004	Pesticide Reregistration	To address the issue of not meeting annual targets and concerns about meeting statutorily-required deadlines, the program did use additional resources for reviewing antimicrobial pesticides and inert ingredients as proposed in the FY 2004 President's Budget.	Completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2004	Pesticide Reregistration	The original PART assessment found that the program was not measuring its level of efficiency. As a result, the program has proposed new output efficiency measures that will promote better management and a more direct focus on efficiently achieving outcomes. (Management/Performance)	Completed
2006	Pesticide Reregistration	Implement new strategic plan architecture into FY 08 management activities and day-to-day operations.	Action taken, but not completed
2006	Pesticide Reregistration	Establish executive leads to provide senior leadership for each of the 3 mission areas in the new Strategic Plan.	Action taken, but not completed
2006	Pesticide Reregistration	Brief staff on new Strategic Plan in order to incorporate stronger alignment between Strategic Plan individual Performance Agreement and Recognition System (PARS) agreements.	Action taken, but not completed
2004	Pollution Prevention and New Technologies Research	Establish performance measures, including efficiency measures.	Action taken, but not completed
2004	Pollution Prevention and New Technologies Research	Shift funding from this research program to another Environmental Protection Agency pollution prevention program that has shown results (see New Chemicals PART).	Completed
2004	Pollution Prevention and New Technologies Research	Improve the program's strategic planning. These improvements should include a plan for independent evaluation of the program, responses to previous evaluations, and should clearly explain why the program should pursue projects instead of other capable parties.	Completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2005	Pollution Prevention and New Technologies Research	Develop and publish a revised multi-year research plan with an improved strategic focus and clear goals and priorities. This plan must include explicit statements of: specific issues motivating the program; broad goals and more specific tasks meant to address the issue; priorities among goals and activities; human and capital resources anticipated; and intended program outcomes against which success may later be assessed.	Action taken, but not completed
2006	Pollution Prevention and New Technologies Research	Institute a plan for regular, external reviews of the quality of the program's research and research performers, including a plan to use the results from these reviews to guide future program decisions.	Action taken, but not completed
2006	Pollution Prevention Program	Evaluate Science Advisory Board Report recommendations for improving performance measures to better demonstrate P2 results.	Action taken, but not completed
2006	Pollution Prevention Program	Identifying and reducing barriers associated with core EPA activities that limit implementation of pollution prevention practices by industry.	Action taken, but not completed
2006	Pollution Prevention Program	Developing additional P2 Program efficiency measures to expand the portion of the program's resources that are addressed.	Action taken, but not completed
2006	Pollution Prevention Program	Fully implement Grant Track and P2 State Reporting System. Obtain consistent 2007 results from Regions.	Action taken, but not completed
2005	Public Water System Supervision Grant Program	Develop a new long-term outcome performance measure to assess the impact of drinking water compliance improvements on public health.	Action taken, but not completed
2005	Public Water System Supervision Grant Program	Implement recommendations from the second triennial drinking water data quality review which are designed to improve the overall quality of the data in EPA's drinking water compliance reporting system.	Action taken, but not completed

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2004	Resource Conservation and Recovery Act Corrective Action	Program must define a new baseline for performance measures and establish appropriate annual targets to make goals more ambitious in achieving long-term objectives of the program.	Completed
2004	Resource Conservation and Recovery Act Corrective Action	Program should establish appropriate efficiency measures to adequately track program efficiency over time.	Action taken, but not completed
2005	Stratospheric Ozone Protection	Continue to monitor progress to ensure that the program is on track to meet goals.	Action taken, but not completed
2005	Stratospheric Ozone Protection	Continue to support the Multilateral Fund for the Implementation of the Montreal Protocol.	Action taken, but not completed
2005	Stratospheric Ozone Protection	Convert long-term health effects measure into a rate of skin cancer prevalence so that an actual baseline can be established once statistics are available.	Completed
2006	Stratospheric Ozone Protection	Program will develop a long-term performance measure and set ambitious targets for reduced incidence of non-melanoma skin cancers.	Action taken, but not completed
2006	Stratospheric Ozone Protection	Program will develop a performance measure and targets to track intermediate outcomes by measuring "thickness" of the ozone layer in the atmosphere. Many of the program's outcome performance measures are extremely long-term, so it is important to establish measurable performance objectives for the near term.	Action taken, but not completed
2005	Superfund Remedial Action	Implement the recommendations of the Agency's 120-day study on management of the Superfund program.	Action taken, but not completed
2005	Superfund Remedial Action	Modernize the program's data repository (CERCLIS) to ensure accurate and complete information on program performance and financial management.	Action taken, but not completed
2005	Superfund Remedial Action	Validate the reporting method for performance data and develop a new Superfund cleanup efficiency measure.	Action taken, but not completed

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2003	Superfund Removal	Investigate the feasibility of outcome oriented measures that test the linkage between program activities and impacts on human health and the environment.	Action taken, but not completed
2003	Superfund Removal	Modernize the program's data repository (CERCLIS) to ensure accurate and complete information on program performance and financial management.	Action taken, but not completed
2006	Superfund Removal	Develop a plan for regular, comprehensive and independent assessments of program performance.	Action taken, but not completed
2006	Surface Water Protection	Require that 106 State workplans and performance data are formatted and reported consistently and directly support specific goals in EPA's strategic plan.	Action taken, but not completed
2006	Surface Water Protection	Working with States and other partners, EPA will assess 100% of rivers, lakes, and streams in the lower 48 states using statistically-valid surveys by 2010.	Action taken, but not completed
2006	Surface Water Protection	Working with States and other partners, EPA will issue water quality reports based on the statistically-valid surveys in the lower 48 states by 2011.	Action taken, but not completed
2003	Toxic Air Pollutants - Regulations and Federal Support	Establish better performance measures, including an appropriate efficiency measure.	Action taken, but not completed
2003	Toxic Air Pollutants - Regulations and Federal Support	Focus on maximizing programmatic net benefits and minimizing the cost per deleterious health effect avoided.	Action taken, but not completed
2003	Toxic Air Pollutants - Regulations and Federal Support	Increase funding for toxic air pollutant programs by \$7 million in State grants for monitoring to help fill data gaps.	Completed
2006	Toxic Air Pollutants - Regulations and Federal Support	Use the newly developed efficiency measure to demonstrate efficiency improvements.	No action taken
2005	U. S.-Mexico Border Water Infrastructure	Develop baselines and targets for its long-term and efficiency measures.	Completed
2005	U. S.-Mexico Border Water Infrastructure	Follow-up on the results of the business process review to help EPA implement program changes that could improve effectiveness.	Completed

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

PROGRAM ASSESSMENT RATING TOOL (PART) OMB REPORT			
Year Work Started	PART Program Title	Follow-Up Action	Action Taken**
2005	Underground Injection Control Grant Program	Develop an outcome-based annual performance measure and an efficiency measure, which demonstrate the protection of source water quality.	Action taken, but not completed
2005	Underground Injection Control Grant Program	Implement recommendations from the second triennial drinking water data quality review which are designed to improve the overall quality of the data in EPA's drinking water compliance reporting system.	Action taken, but not completed
2006	Water Pollution Control Grants	Provide incentives for States to implement or improve their permit fee programs, increasing the resources available for water quality programs.	Action taken, but not completed
2006	Water Pollution Control Grants	Require that State workplans and performance data are formatted and reported consistently and directly support specific goals in EPA's strategic plan.	Action taken, but not completed
2006	Water Pollution Control Grants	Target additional program funding to States implementing probabilistic monitoring activities in support of the national probabilistic monitoring survey.	Action taken, but not completed
2006	Water Quality Research	Finalize ambitious long-term outcome performance measures, which assess the utility of the program's research products and services with respect to the outcome goals of its clients.	Action taken, but not completed
2006	Water Quality Research	Developing and implementing a protocol for more frequent review and use of financial and performance tracking data to improve budget and performance integration.	Action taken, but not completed
2006	Water Quality Research	Develop a new outcome efficiency measure that captures the cost effectiveness of research activities.	Action taken, but not completed
2006	Water Quality Research	Improve the collection of partner performance information to more clearly link to programmatic goals so managers can take appropriate actions to improve overall program performance.	Action taken, but not completed

EPA updated the PART Follow-Up Status following completion of Fall PARTWeb Update on December 15, 2006.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

This table includes PART performance measures that do not report annual results (long-term performance measures) or that have targets under development (UD). The annual and efficiency measures included in this table will be incorporated into EPA's budget and GPRA documents as data become available. The "Year Data Available" column provides the most current estimate for the date EPA expects to report on each measure.

PROGRAM ASSESSMENT RATING TOOL (PART) SUPPLEMENTAL INFORMATION		
PART Program	PART Measures	Year Data Available
Goal 1:	Clean Air and Global Climate Change	
	<i>Long-Term Performance Measure</i>	
EPA Acid Rain Program	Percent of change in number of chronically acidic waterbodies in acid sensitive regions.	FY 2030
EPA Acid Rain Program	Tons of sulfur dioxide emissions reduced from electric power generating sources.	FY 2010
EPA Climate Change Programs	Million metric tons of carbon equivalent (mmtce) of greenhouse gas in the building sector.	FY 2012
EPA Climate Change Programs	Million metric tons of carbon equivalent (mmtce) of greenhouse gas in the industry sector.	FY 2012
EPA Climate Change Programs	Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the transportation sector.	FY 2012
Mobile Source Air Pollution Standards and Certification	Millions of tons of nitrogen oxides (NOX) reduced since 2000 from mobile sources.	FY 2010
Mobile Source Air Pollution Standards and Certification	Millions of tons of volcanic organic compounds (VOCs) reduced since 2000 from mobile sources.	FY 2010
Mobile Source Air Pollution Standards and Certification	Tons of fine particulate matter (PM2.5) reduced since 2000 from mobile sources.	FY 2010
EPA Indoor Air Quality	Estimated future premature lung cancer deaths prevented annually through lowered radon exposure.	FY 2012
EPA Indoor Air Quality	Total number of schools implementing an effective Indoor Air Quality Plan.	FY 2009
NAAQS and Regional Haze Programs	Percent improvement in visibility on 20% worst days, on average for all eastern Class I areas.	FY 2018
NAAQS and Regional Haze Programs	Percent improvement in visibility on 20% worst days, on average to western Class I areas.	FY 2018

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) SUPPLEMENTAL INFORMATION		
PART Program	PART Measures	Year Data Available
NAAQS and Regional Haze Program, Air Quality Grants and Permitting	Percent reduction in population-weighted ambient concentration of fine particulate matter (PM 2.5) in all monitored counties from 2003 baseline.	FY 2015
NAAQS and Regional Haze Program, Air Quality Grants and Permitting	Percent reduction in population-weighted ambient concentration of ozone in all monitored counties from 2003 baseline.	FY 2015
National Ambient Air Quality Standards Research	Percentage of ORD-developed outputs appearing in the Office of Air and Radiation National Ambient Air Quality Standard Staff Paper (SP)	FY 2010
National Ambient Air Quality Standards Research	Progress in assessing the linkage between health impacts and air pollutant sources and reducing the uncertainties that impede the understanding and usefulness of these linkages.	FY 2009
National Ambient Air Quality Standards Research	Progress toward reducing uncertainty in the science that supports standard setting and air quality management decisions.	FY 2009
Stratospheric Ozone Protection	By 2011, total equivalent stratospheric chlorine will have reached its peak, and begun its gradual decline to a value less than 3.4 parts per billion of air by volume.	FY 2011
Stratospheric Ozone Protection	Elimination of U.S. consumption of Class II Ozone Depleting substances measured in tons/yr. of Ozone Depleting Potential (ODP).	FY 2010
Stratospheric Ozone Protection	Reduced incidence of melanoma skin cancers, measured by new skin cancer cases avoided per 100,000 population.	FY 2050
Toxic Air Pollutants	Percentage reduction in tons toxicity-weighted cancer risk emissions from 1993 baseline.	FY 2010
Toxic Air Pollutants	Percentage reduction in tons toxicity-weighted of non-cancer risk emissions from 1993 baseline.	FY 2010
	<i>Annual Performance Measure</i>	
Air Quality Grants and Permitting	Average number of days during the ozone season that the ozone standard is exceeded in baseline non-attainment areas, weighted by population.	UD
National Ambient Air Quality Standards Research	Percentage of program publications rated as highly cited papers.	FY 2007
	<i>Efficiency Performance Measure</i>	

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) SUPPLEMENTAL INFORMATION		
PART Program	PART Measures	Year Data Available
Mobile Source Air Pollution Standards and Certification	Percent reduction in time (days) per certificate approval for large engines (nonroad ci, Heavy duty gas and diesel engines).	FY 2012
Mobile Source Air Pollution Standards and Certification	Tons of pollutants (VOC, NOX, PM, CO) reduced per total emission reduction dollars spent.	UD
NAAQS and Regional Haze Programs	Cumulative percent reduction in the number of days to process State Implementation Plan revisions, weighted by complexity	FY 2008
Toxic Air Pollutants – Regulations and Regional Support	Tons of toxicity-weighted (for cancer and noncancer risk) emissions reduced per total cost (\$).	UD
Goal 2:	Clean and Safe Water	
	<i>Long-Term Performance Measure</i>	
Alaska Native Villages	100% of serviceable rural Alaska homes will have access to drinking water supply and wastewater disposal by 2011.	FY 2011
Alaska Native Villages	100% of Alaska rural population served by public water systems in compliance with the Safe Drinking Water Act regulatory requirements by 2011.	FY 2011
Clean Water State Revolving Fund	CWSRF Long-Term Revolving Level (\$billions/yr)	FY 2011
Drinking Water Research	Indep. Exp. Rev. Panel summary score on tool designed to measure the use of ORD data, tools, and technologies for key decisions leading to scientifically-sound 6 Year Review Decisions made by OW	FY 2010
Drinking Water Research	Indep. Exp. Rev. Panel summary score on tool designed to measure the use of ORD data, tools, and technologies for key decisions leading to scientifically-sound CCL decisions made by the OW	FY 2010
Drinking Water State Revolving Fund	DWSRF Long-Term Revolving Level (\$billions/yr)	FY 2018
Nonpoint Source	Number of waterbodies identified by states (in 2000 or subsequent years) as being primarily NPS-impaired that are partially or fully restored.	FY 2011
Tribal General Assistance Program	Percent decrease in the number of homes on tribal lands lacking access to safe drinking water.	FY 2007
Tribal General Assistance Program	Percent decrease in the number of homes in Indian Country with inadequate wastewater sanitation systems.	FY 2007
Tribal General Assistance Program	Show an improvement for each of four parameters—total nitrogen, total phosphorus, dissolved oxygen, and fecal coliforms—at not fewer than 90 monitoring stations in tribal waters.	UD

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) SUPPLEMENTAL INFORMATION		
PART Program	PART Measures	Year Data Available
Underground Injection Control	Percent of CWS for which minimized risk to public health through source water protection is achieved.	FY 2011
Water Quality Research	Percentage of WQRP publications rated as highly cited publications.	FY 2008
Water Quality Research	Percentage of WQRP publications in “high impact” journals.	FY 2008
	<i>Annual Performance Measure</i>	
Drinking Water Protection Program	Percent of data for violations of health-based standards at public water systems that is accurate and complete in SDWIS/FED for all MCL and TT rules.	UD
Drinking Water Research	Percentage of research products used by the Office of Water as the basis of or in support of Contaminant Candidate List Decisions.	UD
Drinking Water Research	Percentage of research products used by the Office of Water as the basis of or in support of Six Year Review Decisions.	UD
	<i>Efficiency Performance Measure</i>	
Drinking Water State Revolving Fund	Average funding (millions of dollars) per project initiating operations	FY 2008
Underground Injection Control Grant Program	Dollars per well to move Class V wells back into compliance	FY 2011
Goal 3:	Land Preservation and Restoration	
	<i>Long-Term Performance Measure</i>	
EPA’s Recycling, Waste Minimization, and Waste Management Program	By 2008, update controls for preventing releases at 150 RCRA HWM facilities due for permit renewal.	FY 2008
EPA Support for Cleanup of Federal Facilities	Federal Facility Superfund sites with contaminated groundwater under control (exposure pathways eliminated or potential exposures under health-based levels for current use of land/water resources).	FY 2011
EPA Support for Cleanup of Federal Facilities	Federal Facility Superfund sites with human exposures under control (exposure pathways are eliminated or potential exposures are under health-based levels for current use of land or water resources).	FY 2011
Land Protection and Restoration Research	Percentage of Land research publications rated as highly cited publications.	FY 2008
Land Protection and Restoration Research	Percentage of Land publications in “high impact” journals.	FY 2008

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) SUPPLEMENTAL INFORMATION		
PART Program	PART Measures	Year Data Available
Leaking Underground Storage Tank Cleanup Program	Increase the number of cleanups that meet state risk-based standards for human exposure and groundwater migration on Indian County.	FY 2011
Leaking Underground Storage Tank Cleanup Program	Increase the number of cleanups that meet state risk-based standards for human exposure and groundwater migration.	FY 2011
Oil Spill Control	Gallons of oil spilled to navigable waters by facilities subject to the Facility Response Plan (FRP) regulations.	FY 2011
Superfund Remedial Action	Superfund sites with contaminated groundwater migration under control.	FY 2011
Superfund Remedial Action	Acres of land ready for re-use at Superfund sites.	FY 2010
Superfund Remedial Action	Superfund sites with human health protection achieved (exposure pathways are eliminated or potential exposures are under health-based levels for current use of land or water resources.	FY 2011
Superfund Removal	Total Superfund-lead removal actions completed.	FY 2011
Superfund Removal	Total voluntary removal actions, overseen by EPA, completed.	FY 2011
	<i>Efficiency Performance Measure</i>	
EPA's Recycling, Waste Minimization, and Waste Management Program	Tons of municipal solid waste recycled over total net costs of recovery.	UD
Leaking Underground Storage Tank Cleanup Program	Cleanups complete (3-year rolling average) per total cleanup dollars.	UD
Goal 4:	Healthy Communities and Ecosystems	
	<i>Long-Term Performance Measure</i>	
Brownfields Revitalization	Assessed or cleaned Brownfields properties redeveloped.	UD
Chesapeake Bay Program	Percent of Submerged Aquatic Vegetation goal of 185,000 acres achieved, based on annual monitoring from prior year.	FY 2011
Chesapeake Bay Program	Percent of Dissolved Oxygen goal of 100% standards attainment achieved, based on annual monitoring from the previous calendar year and the preceding 2 years.	FY 2011
Ecological Research	States use a common monitoring design and appropriate indicators to determine the status and trends of ecological resources and the effectiveness of programs and policies.	FY 2008

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) SUPPLEMENTAL INFORMATION		
PART Program	PART Measures	Year Data Available
Ecological Research	States, tribes and EPA offices improved their ability to determine causes of eco degradation through the application of recently developed (within 5 years) ORD causal diagnostic tools and methods	FY 2009
Ecological Research	States, tribes and EPA offices improved their ability to forecast eco impacts of actions through the application of recently developed (within 5 years) ORD environmental forecasting tools and methods	FY 2009
Ecological Research	States, tribes and EPA offices improved their ability to protect/restore eco condition and services through the application of recently dev. (within 5 years) ORD environ. restoration tools and methods	FY 2009
Endocrine Disruptors	Determination of the extent of the impact of endocrine disruptors on humans, wildlife, and the environment to better inform the federal and scientific communities.	FY 2009
Endocrine Disruptors	Reduction in uncertainty regarding the effects, exposure, assessment, and management of endocrine disruptors so that EPA has a sound scientific foundation for environmental decision-making	FY 2009
Human Health Research	Percentage of peer-reviewed EPA RAs where ORD methods, models or data for assessing risk to susceptible subpops is cited as supporting a decision to move away from or apply default risk assessment assumptions	FY 2009
Human Health Research	Percentage of peer-reviewed EPA risk assessments in which ORD's characterization of aggregate/cumulative risk is cited as supporting a decision to move away from or to apply default risk assessment assumptions	FY 2009
Human Health Research	Percentage of human health program publications rated as highly cited papers.	FY 2007
Human Health Research	Percentage of peer-reviewed EPA risk assessments in which ORD's mechanistic information is cited as supporting a decision to move away from or to apply default risk assessment assumptions.	FY 2009
Human Health Research	Risk assessors and risk managers use ORD's methods and models to evaluate the effectiveness of public health outcomes (as evaluated by external expert review).	FY 2009
Human Health Research	Risk assessors and risk managers use ORD's methods, models and data to characterize aggregate and cumulative risk in order to manage risk of humans exposed to multiple environmental stressors.	FY 2009
Human Health Research	Risk assessors and risk managers use ORD's methods, models and data to characterize and provide adequate protection of susceptible subpopulations (as evaluated by external expert review).	FY 2009
Human Health Research	Risk assessors and risk managers use ORD's methods, models and data to use mechanistic (mode of action) information to reduce uncertainty in risk assessment (as evaluated by external expert review).	FY 2009

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) SUPPLEMENTAL INFORMATION		
PART Program	PART Measures	Year Data Available
Human Health Risk Assessment	Percentage of regulatory decisions in which decision-makers used HHRA peer-reviewed health assessments	FY 2008
Human Health Risk Assessment	Usefulness of HHRA's Air Quality Criteria Documents (AQCDs), represented by the number of days between the completion of AQCD peer review and publication of the EPA staff document that relies on AQCD findings	FY 2007
Lead-Based Paint Risk Reduction Program	Number of cases of children (aged 1-5 years) with elevated blood lead levels (>10ug/dl).	FY 2010
Pesticide Registration	Percent of agricultural watersheds that exceed EPA aquatic life benchmarks for two key pesticides.	FY 2011
Pollution Prevention Program	Cumulative pounds of hazardous materials reduced by P2 program participants.	FY 2011
Pollution Prevention Program	Cumulative business, institutional and government costs reduced by P2 program participants.	FY 2011
U.S.-Mexico Border Water Infrastructure	Percentage of water quality standards met in shared and transboundary surface waters.	FY 2012
U.S.-Mexico Border Water Infrastructure	Number of additional homes provided adequate wastewater sanitation in the Mexican Border area that lacked access to adequate wastewater sanitation in 2003.	FY 2011
U.S.-Mexico Border Water Infrastructure	Number of additional homes provided safe drinking water in the Mexican Border area that lacked access to safe drinking water in 2003.	FY 2011
	<i>Efficiency Performance Measure</i>	
Brownfields Revitalization	Acres of brownfields made ready for reuse per million dollars.	UD
New Chemicals	Review costs per chemical (for EPA and industry)	UD
Pesticide Field Program	Average cost and average time to produce or update an Endangered Species List.	FY 2011
Pesticide Field Program	Reduced cost per pesticide occupational incident avoided.	FY 2011
Pesticide Reregistration	Reduction in cost per Reregistration Eligibility Decision	FY 2008
Goal 5:	Compliance and Environmental Stewardship	
	<i>Long-Term Performance Measure</i>	
EPA Enforcement of Environmental Laws (Civil)	Pounds of pollution reduced, treated, or eliminated. (civil enforcement)	FY 2007

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) SUPPLEMENTAL INFORMATION		
PART Program	PART Measures	Year Data Available
EPA Enforcement of Environmental Laws (Criminal)	Pounds of pollution reduced, treated, or eliminated. (criminal enforcement)	FY 2007
EPA Enforcement of Environmental Laws (Criminal)	Reduction in recidivism. (criminal enforcement)	FY 2007
EPA Enforcement of Environmental Laws (Criminal)	Change in behavior to use Improved management practices. (criminal enforcement)	FY 2007
EPA Environmental Education	Number of states adopting or aligning Guidelines for Learning curricula and standards to state academic standards or number of states developing new environmental education standards based on Guidelines for Learning.	FY 2008
EPA Environmental Education	Percent of all students and teachers targeted demonstrate increased environmental knowledge, as measured by Guidelines for Learning K-12, developed by North American Assoc for Environmental Education.	FY 2008
EPA's Recycling, Waste Minimization, and Waste Management Program	By 2008, reduce priority list chemicals in hazardous waste streams reported by businesses to the Toxic Release Inventory by 10% (8.4 million tons) from a 2001 baseline.	FY 2008
EPA Tribal General Assistance Program	Show improvement for each of 4 parameters –total nitrogen, total phosphorus, DO, and fecal coliforms—at not fewer than 90 monitoring stations in tribal waters for which baseline data are available.	FY 2012
	<i>Annual Performance Measure</i>	
EPA Enforcement of Environmental Laws (Criminal)	Change in behavior to use Improved Management practices. (criminal enforcement)	FY 2007
EPA Enforcement of Environmental Laws (Criminal)	Pollutant impact.	FY2008
EPA Enforcement of Environmental Laws (Criminal)	Pounds of pollution reduced, treated or eliminated. (criminal enforcement)	FY 2007
EPA Enforcement of Environmental Laws (Criminal)	Reduction in recidivism (criminal enforcement).	FY 2007
EPA Environmental Education	Number of NNEMS fellows who pursue environmental careers.	FY 2007

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

PROGRAM ASSESSMENT RATING TOOL (PART) SUPPLEMENTAL INFORMATION		
PART Program	PART Measures	Year Data Available
EPA Pesticide Enforcement Grant Program	Percent of compliance actions taken as a result of inspection/enforcement. (pesticide enforcement)	FY 2007
EPA Pesticide Enforcement Grant Program	Percent of violators committing subsequent violations. (pesticide enforcement)	FY 2007
	<i>Efficiency Performance Measure</i>	
EPA Enforcement of Environmental Laws (Civil)	Pounds of pollutants reduced, treated, or eliminated per FTE. (civil enforcement)	FY 2007
EPA Enforcement of Environmental Laws (Criminal)	Pounds of pollutant reduction per FTE. (criminal enforcement)	FY 2007
EPA Environmental Education	Ratio of number of students/teachers that have improved environmental knowledge per total dollars expended.	FY 2008
EPA Pesticide Enforcement Grant Program	Number of enforcement actions taken (Federal + State) per million dollars of cost (Federal + State). (pesticide enforcement)	FY 2007
EPA's Recycling, Waste Minimization, and Waste Management Program	Pounds of priority chemicals reduced in waste streams per federal and private sector costs.	UD

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

ANNUAL PERFORMANCE GOALS AND MEASURES

Environmental Programs

INTRODUCTION:

The table included in this appendix presents targets and results for all of EPA's annual performance goals (APGs) and measures for FY 2005 and FY 2006 and targets for FY 2007 and FY 2008. It contains the most current performance data and targets available.

As EPA has continued to improve and refine its performance measures, it has changed some APGs and measures over the years. As a result, targets and data may not be available for all four fiscal years included in the table, and some cells will appear blank.

The table groups performance measures first by Goal, then by Strategic Objective, and finally under the APGs to which they apply. Measures that are not currently used for the Office of Management and Budget's Program Assessment Rating Tool (PART) assessments appear in italics. The background information included with APGs provides context for EPA's statement of intended performance with respect to its past accomplishments and progress towards longer-term strategic objectives.

Data that EPA has used to measure its performance are described in the "Supplemental Information" to this report, provided on the internet at www.epa.gov/ocfo/budget/2008/verify_validation.pdf.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

GOAL 1: CLEAN AIR AND GLOBAL CLIMATE CHANGE

Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.

OBJECTIVE: HEALTHIER OUTDOOR AIR

Through 2011, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.

Air Quality Index

In 2008 Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.

In 2007 Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.

In 2006 Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.

In 2005 Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.	13	32.1	17	Data Avail 2007	21	26	Percent

Background: Baseline was zero in 2003.

Reduce Exposure to Unhealthy PM Levels - PM-10

In 2008 Tons of particulate matter (PM-10) reduced since 2000 from mobile sources.

In 2007 Tons of particulate matter (PM-10) reduced since 2000 from mobile sources.

In 2006 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-10 standard will increase by 4% (relative to 2005) for a cumulative total of 11% (relative to 1992).

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

In 2005 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-10 standard will increase by 1% (relative to 2004) for a cumulative total of 7% (relative to 1992).

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Tons of PM-10 Reduced since 2000 from Mobile Sources	62,161	62,161	74,594	Data Avail 2007	87,026	99,458	Tons

Background: Beginning in FY 2005, the 2000 Mobile6 inventory is used as the baseline for mobile source emissions. The 2000 baseline for PM-10 from mobile source is 613,000 tons.

Reduce Exposure to Unhealthy Ozone Levels - 8 Hour

In 2008 Cumulative percent reduction in population-weighted ambient concentration of ozone in all monitored counties from 2003 baseline.

In 2007 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 8-hour ozone standard.

In 2006 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 8-hour ozone standard will increase by 1% (relative to 2005) for a cumulative total of 8% (relative to 2001).

In 2005 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 8-hour ozone standard will increase by 4% (relative to 2004) for a cumulative total of 7% (relative to 2001).

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Cumulative percent reduction in population-weighted ambient concentration of ozone in monitored counties from 2003 baseline.	3	6	5	Data Avail 2007	6	8	Percent
Limit the increase of CO emissions (in tons) from mobile sources compared to a 2000 baseline.	0.84	0.84	1.01	Data Avail 2007	1.18	1.35	Million Tons
Millions of Tons of Volatile Organic Compounds (VOCs) Reduced since 2000 from Mobile Sources	0.86	0.86	1.03	Data Avail 2007	1.20	1.37	Million Tons
Millions of Tons of Nitrogen Oxides (NOx) Reduced since 2000 Reduced from Mobile Sources	1.69	1.69	2.03	Data Avail 2007	2.37	2.71	Million Tons

GOAL 1: CLEAN AIR AND GLOBAL CLIMATE CHANGE

PPA-30

Measures that are not currently used for the Office of Management and Budget's Program Assessment Rating Tool (PART) assessments appear in italics.

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

Background: The ozone concentration measure reflects improvements (reductions) in ambient ozone concentrations across all monitored counties, weighted by the populations in those areas. To calculate the weighting, pollutant concentrations in monitored counties are multiplied by the associated county populations. The units for this measure are therefore, "million people parts per billion. The 2003 baseline is 15,972 million people-ppb. The 1995 baseline was 8.1M tons for mobile source VOC emissions, and 12.0M tons for mobile source NOx emissions. Beginning in FY 2005, the Mobile6 inventory is used as the baseline year for mobile source emissions. The 2000 baseline was 7.7M tons for mobile source VOC emissions, 11.8M tons for mobile source NOx emissions, and 79.2 M tons for CO.

Reduce Exposure to Unhealthy PM Levels - PM- 2.5

In 2008 Cumulative percent reduction in population-weighted ambient concentration of fine particulate matter (PM-2.5) in all monitored counties from 2003 baseline.

In 2007 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-2.5 standard.

In 2006 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-2.5 standard will increase by 1% (relative to 2005) for a cumulative total of less than 1% (relative to 2001).

In 2005 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-2.5 standard will increase by 1% (relative to 2003) for a cumulative total of less than 1% (relative to 2001).

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Cumulative percent reduction in population-weighted ambient concentration of fine particulate matter (PM-2.5) in all monitored counties from 2003 baseline.	2	Data Avail 2007	2	Data Avail 2007	3	4	Percent
Tons of PM-2.5 Reduced since 2000 from Mobile Sources	61,217	61,217	73,460	Data Avail 2007	85,704	97,947	Tons
Background:	The PM 2.5 concentration reduction annual measure reflects improvements (reductions) in the ambient concentration of fine particulate matter PM2.5 pollution across all monitored counties, weighted by the populations in those areas. To calculate this weighting, pollutant concentrations in monitored counties are multiplied by the associated county populations. Therefore, the units for this measure are "million people micrograms per meter cubed: (million people ug/mg3. The 2003 baseline is 2.581 baseline is 2,581 million people-ug/mg3. Beginning in FY 2005, the 2000 Mobile6 inventory is used as the baseline for mobile source emissions. The 2000 baseline for PM 2.5 from mobile sources is 510,550 tons.						

Acid Rain

In 2008 Keep annual emissions below level authorized by allowance holdings and make progress towards achieving the year 2010 SO2 emissions cap for utilities. Annual emissions reduction target is 8.0 million tons from the 1980 baseline.

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

In 2007	Keep annual emissions below level authorized by allowance holdings and make progress towards achieving the year 2010 SO2 emissions cap for utilities. Annual emissions reduction target is 7.5 million tons from the 1980 baseline.
In 2007	Reduce total annual average nitrogen deposition and total ambient nitrate concentrations 10% from baseline. Baseline for annual targets up through 2010 is 1990 monitored levels.
In 2007	Reduce total annual average sulfur deposition and ambient sulfate concentrations 29% from baseline.
In 2006	Keep annual emissions below level authorized by allowance holdings and make progress towards achieving the year 2010 SO2 emissions cap for utilities. Annual emissions reduction target is 7.0 million tons from the 1980 baseline.
In 2005	Keep annual emissions below level authorized by allowance holdings and make progress towards achieving the year 2010 SO2 emissions cap for utilities. Annual emissions reduction target is 6.9 million tons from the 1980 baseline.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Tons of sulfur dioxide emissions from electric power generation sources	6,900,000	7,200,000	7,000,000	Data Avail 2007	7,500,000	8,000,000	Tons Reduced
Percent change in average nitrogen deposition and mean total ambient nitrate concentrations reduced.					10	No Targets Established ¹	Percentage
Percent change in average sulfur deposition and mean ambient sulfate concentrations reduced.					29	No Targets Established ²	Percentage

Background: The baseline year is 1980. The 1980 SO2 emissions inventory totals 17.4 million tons for electric utility sources. This inventory was developed by National Acid Precipitation Assessment Program (NAPAP) and is used as the basis for reductions in Title IV of the Clean Air Act Amendments. This data is also contained in EPA's National Air Pollutant Emissions Trends Report. Statutory SO2 emissions cap for year 2010 and later is at 8.95 million tons, approximately 8.5 million tons below 1980 emissions level. "Allowable SO2 emission level" consists of allowance allocations granted to sources each year under several provisions of the Act and additional allowances carried over, or banked, from previous years. Sulfur and nitrogen deposition contribute to acidification of lakes and streams, making them unable to support fish and other aquatic life. Reductions in sulfur and nitrogen deposition are critical to reducing the number of chronically acidic water bodies. Ambient sulfate and ambient nitrate ("acid rain" particulate") contribute to unhealthy air and respiratory problems in humans, especially children and other sensitive populations. The baseline is established from monitored site

¹ EPA will track progress against this performance metric triennially with the next planned report date in FY 2010. There is no performance target for FY 2008.

² EPA will track progress against this performance metric triennially with the next planned report date in FY 2010. There is no performance target for FY 2008.

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

levels based on consolidated map of 1989-1991 showing a three year of deposition levels produced from the CASTNET sites (<http://www.epa.gov/castnet/sites.html>).

Air Toxicity-Weighted

In 2008 Cumulative reduction in tons of toxicity-weighted for non-cancer emissions of air toxics from 1993 baseline.

In 2008 Cumulative reduction in tons of toxicity-weighted for cancer emissions of air toxics from 1993 baseline.

In 2007 Reduction in tons of toxicity-weighted for cancer and non-cancer emissions of air toxics from 1993 baseline.

In 2006 Reduction in tons of toxicity-weighted for cancer and non-cancer emissions of air toxics from 1993 baseline.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics from 1993 baseline.			34	Data Avail 2007	35	35	Percent
Cumulative percentage reduction in tons of toxicity-weighted (for noncancer risk) emissions of air toxics from 1993 baseline.			58	Data Avail 2007	58	59	Percent

Background: The toxicity-weighted emission inventory will utilize the National Emissions Inventory (NEI) for air toxics along with the Agency's compendium of cancer and noncancer health risk criteria to develop a risk metric that can be tabulated and tracked on an annual basis. The baseline is based on emission inventory data from 1990-1993. The baseline is in 1993. Air toxics emissions data are revised every three years to generate inventories for the NEI, which replaced the National Toxics Inventory (NTI). In intervening years between updates of the NEI, the model EMS-HAP (Emissions Modeling System for Hazardous Air Pollutants) is used to estimate and project annual emissions of air toxics. As new inventories are completed and improved inventory data is added, the baseline (or total tons of air toxics) is adjusted. The toxicity-weighted emission inventory will also utilize the NEI for air toxics along with the Agency's compendium of cancer and noncancer health risk criteria to develop a risk metric that can be tabulated and tracked on an annual basis. the baseline is based on emission inventory data from 1990-1993.

New Source Review

In 2008 Percent of major NSR permits issued within one year of receiving a complete permit application.

In 2007 Percent of major NSR permits issued within one year of receiving a complete permit application.

In 2006 Percent of major NSR permits issued within one year of receiving a complete permit application.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

In 2005 Percent of major NSR permits issued within one year of receiving a complete permit application.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Percent of major NSR permits issued within one year of receiving a complete permit application.	65	69	70	Data Avail 2007	75	78	Percent

Background: The baseline for NSR permits issued within one year of receiving a complete permit application is 61% in 2004.

Title V

In 2008 Percent of significant and new Title V operating permit revisions issued within 18 months of receiving a complete permit application.

In 2007 Percent of significant and new Title V operating permit revisions issued within 18 months of receiving a complete permit application.

In 2006 Percent of significant and new Title V operating permit revisions issued within 18 months of receiving a complete permit application.

In 2005 Percent of significant and new Title V operating permit revisions issued within 18 months of receiving a complete permit application.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Percent of significant Title V operating permit revisions issued within 18 months of receiving a complete permit application.	88	88	91	Data Avail 2007	94	97	Percentage
Percent of new Title V operating permits issued within 18 months of receiving a complete permit application.	79	79	83	Data Avail 2007	87	91	Percentage

Background: The 2004 baseline for significant title V operating permit revisions issued within 18 months of receiving a complete permit application is 85% and the baseline for new title V operating permits issued within 18 months of receiving a complete permit application.

OBJECTIVE: HEALTHIER INDOOR AIR

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

Through 2012, working with partners, reduce human health risks by reducing exposure to indoor air contaminants through the promotion of voluntary actions by the public.

Healthier Residential Indoor Air

In 2008 Additional people will be living in homes with healthier indoor air.

In 2007 Additional people will be living in homes with healthier indoor air.

In 2006 850,000 additional people will be living in homes with healthier indoor air.

In 2005 Additional people will be living in homes with healthier indoor air.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Number of additional homes (new and existing) with radon reducing features	173,000	Data Avail 2007	180,000	Data Avail 2007	190,000	225,000	Homes
Number of people taking all essential actions to reduce exposure to indoor environmental asthma triggers.			4,100,000	Data Avail 2007	No Target Established ³	No Target Established ⁴	Number
Percent of public that is aware of the asthma program's media campaign.	31	31	>20	33	>20	>20	Percentage
Additional health care professionals trained annually by EPA and its partner on the environmental management of asthma triggers.	3380	3380	2000	Data Avail 2007	2000	2000	Number

Background: This performance measure includes EPA radon and asthma work. By 2008, the number of people living in homes built (new or existing) with radon reducing features will be 225,000. The baseline for the performance measure is 1996 (107,000 homes). Annual Surveys are conducted by our partners to gather information such as types of houses built, lot sizes, foundation designs, types of lumber used, types of doors and windows used, etc. Also, the surveys gather information on the use of radon-resistant design features in new houses. Each year, the survey of building practices is mailed to home builders. The survey responses are analyzed, with respect to State market areas and Census Division in the U.S., to assess the percentage and number of homes built each year that incorporate radon-reducing features. The data are also used to assess the percentage and number of homes built with radon-

³ EPA will track performance against this metric triennially with the next planned report date in FY 2009. There are no performance targets for FY 2007 and FY 2008.

⁴ EPA will track performance against this metric triennially with the next planned report date in FY 2009. There are no performance targets for FY 2007 and FY 2008.

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

reducing features in high radon potential areas in the United States (high risk areas). Other analyses include radon-reducing features as a function of housing type, foundation type, and different techniques for radon-resistant new home construction.

Healthier Indoor Air in Schools

In 2008 Students, faculty and staff will experience improved indoor air quality in their schools.

In 2007 Students, faculty and staff will experience improved indoor air quality in their schools.

In 2006 630,000 students, faculty and staff will experience improved indoor air quality in their schools.

In 2005 Students, faculty and staff will experience improved indoor air quality in their schools.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Estimated annual number of schools establishing indoor air quality programs based on EPA's Tools for Schools guidance.	3000	3000	1200	Data Avail 2007	1100	1100	Number
Background:	The nation has approximately 118,000 (updated to include new construction) schools. Each school has an average of 525 students, faculty, and staff for a total estimated population of 62,000,000. The IAQ "Tools for Schools" Guidance implementation began in 1997. Results from a 2002 IAQ practices in schools survey suggest that approximately 20-22% of U.S. schools report an adequate effective IAQ management plan that is in accordance with EPA guidelines.						

OBJECTIVE: PROTECT THE OZONE LAYER

By 2030, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and overexposure to ultraviolet radiation, particularly among susceptible subpopulations, such as children, will be reduced.

Restrict Domestic Consumption of Class II HCFCs

In 2008 Remaining U.S. consumption of class II HCFCs will be below 9,900 ODP-weighted metric tonnes (ODP MTs) .

In 2007 Remaining U.S. consumption of class II HCFCs will be below 9,900 ODP-weighted metric tonnes (ODP MTs).

In 2006 Restrict domestic annual consumption of class II HCFCs below 9,906 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

In 2005 Restrict domestic annual consumption of class II HCFCs below 9,906 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Remaining U.S. Consumption of HCFCs in tons of Ozone Depleting Potential (ODP).	<9,900	Data Avail 2007	<9,900	Data Avail 2008	<9,900	<9,900	ODP MTs

Background: The base of comparison for assessing progress on the 2005 annual performance goal is the domestic consumption cap of class II HCFCs as set by the Parties to the Montreal Protocol. Each Ozone Depleting Substance (ODS) is weighted based on the damage it does to the stratospheric ozone - this is its ozone-depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8 percent of the domestic ODP-weighted consumption of CFCs in 1989 plus the ODP-weighted level of HCFCs in 1989. Consumption equals production plus import minus export.

OBJECTIVE: RADIATION

Through 2011, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.

EPA is developing new outcome-oriented performance measures for this program in preparation for a 2007 PART assessment. The program will have new performance measures to report in FY 2009. EPA will continue to track progress on routine program indicators such as preparedness and response capability for radiological incidents.

OBJECTIVE: REDUCE GREENHOUSE GAS INTENSITY

Through EPA's voluntary climate protection programs, contribute 80 million metric tons of carbon equivalent (MMTCE) annually to the President's 18 percent greenhouse gas (GHG) intensity goal by 2012. (An additional 24 MMTCE to result from the sustained growth in the climate programs are reflected in the Administration's business-as-usual projection for GHG intensity improvement.)

Reduce Greenhouse Gas Emissions

In 2008 Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the building, industrial, and transportation sectors.

In 2007 Greenhouse gas emissions will be reduced from projected levels by approximately 96.2 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations.

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

In 2006 Greenhouse gas emissions will be reduced from projected levels by approximately 102 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations.

In 2005 Greenhouse gas emissions will be reduced from projected levels by approximately 90 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the buildings sector.	23.8	29.9	26.5	Data Avail 2007	29.4	32	MMTCE
Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the transportation sector.	2.9	2.9	1.2	Data Avail 2007	1.6	1.5	MMTCE
Million metric tons of carbon equivalent (mmtce) of greenhouse gas reductions in the industry sector.	53.5	58.7	58	Data Avail 2007	62.6	68	MMCTE

Background: The baseline for evaluating program performance is a projection of U.S. greenhouse gas emissions in the absence of the U.S. climate change programs. The baseline was developed as part of an interagency evaluation of the U.S. climate change programs in 2002, which built on similar baseline forecasts developed in 1997 and 1993. Baseline data for carbon emissions related to energy use is based on data from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model of the U.S. electric power sector. Baseline data for non-carbon dioxide (CO2) emissions, including nitrous oxide and other high global warming potential gases are maintained by EPA. Baseline information is discussed at length in the U.S. Climate Action Report 2002 (<http://yosemite.epa.gov/oar/GlobalWarming.nsf/content/ResourceCenterPublicationsUSClimateActionReport.html>), which provides a discussion of differences in assumptions between the 1997 baseline and the 2002 update, including which portion of energy efficiency programs are included in the estimates. EPA develops the non-CO2 emissions baselines and projections using information from partners and other sources. EPA continues to develop annual inventories as well as update methodologies as new information becomes available.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2011, provide and apply sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 1.

Research

Clean Air Research

In 2008 Increased use of clean air research program products.

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

- In 2007 Increased use of particulate matter research program products.
- In 2006 By 2006, develop and report on new data on the effects of different PM sizes or components to improve understanding of the health risks associated with short-term exposure to PM in healthy and select susceptible populations so that, by 2010, the Office of Air and Radiation (OAR) has improved assessments of health risks to develop PM standards that maximize protection of human health, as determined by independent expert review.
- In 2005 By FY 2005, deliver and transfer improved receptor models and data on chemical compounds emitted from sources so that, by 2006, EPA's Office of Air and Radiation and the states have the necessary new data and tools to predict, measure, and reduce ambient PM and PM emissions to attain the existing PM National Ambient Air Quality Standards (NAAQS) for the protection of public health.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Percent progress toward completion of a hierarchy of air pollutant sources based on the risk they pose to human health. (Research)	Baseline	5	10	10	30	50	Percent
Percent planned actions accomplished toward the long-term goal of reducing uncertainty in the science that support standard setting and air quality management decisions. (Research)	91	94	100	94	100	100	Percent

Background: By FY 2006, the program established 10% of a hierarchy of air pollutant sources based on the risk they pose to human health. By FY 2008, the program plans to complete 50% of this hierarchy. Additionally, the program plans to meet 100% of its planned actions in FY 2008, an improvement from 94% completion in FY 2005. In achieving these targets, the program will contribute to EPA's goal of developing a better understanding and characterization of human health and environmental outcomes related to clean air.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

GOAL 2: CLEAN AND SAFE WATER

Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.

OBJECTIVE: PROTECT HUMAN HEALTH

Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters.

Safe Drinking Water

In 2008	90% of the population served by community water systems that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection.
In 2007	94% of the population will be served by community water systems in compliance with health-based drinking water standards.
In 2006	90% of the population served by community water systems in Indian country will receive drinking water that meets all applicable health-based drinking water standards.
In 2006	93% of the population served by community water systems will receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection.
In 2005	93% of the population served by community water systems will receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>Percent of the population served by community water systems in Indian country that receives drinking water that meets all applicable health-based drinking water standards.</i>	86.3	86.3	90	86.6	93	86	% Population
% population served by CWS that receive drinking water that meets all applicable health-based DW standards through approaches including effective treatment and source water protection.	88.5	88.5	93	89	94	90	% population

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Fund utilization rate for the DWSRF	81.9	84.7	83.3	86.9	84	86	% Rate
Number of additional projects initiating operations	415	43.9	425	399	433	440	Projects
Percent of community water systems that have undergone a sanitary survey within the past three years (five years for outstanding performance).	94	94	98	94	98	95	% CWS
Percentage of identified Class V motor vehicle waste disposal wells closed or permitted.						90	Wells
Percentage of Class I, II, and III wells that maintain mechanical integrity without a failure that releases contaminants to underground sources of drinking water (under development).						98	Wells
Percentage of prohibited Class IV and high-priority, identified, potentially endangering Class V wells closed or permitted in ground-water based source water areas (under development).						96	Wells
Percent of community water systems that meet all applicable health-based standards through approaches that include effective treatment and source water protection.	93	89	93	89	94	89.5	% Systems
Percent of person months during which community water systems provide drinking water that meets all applicable health-based standards.						95	% CWS
Background:	In 1998, 85% of the population that was served by community water systems and 96% of the population served by non-community, non-transient drinking water systems received drinking water for which no violations of Federally enforceable health standards had occurred during the year. Year-to-year performance is expected to change as new standards take effect. Covered standards include: Stage 1 disinfection by-products/interim enhanced surface water treatment rule/long-term enhanced surface water treatment rule/arsenic.						

River/Lake Assessments for Fish Consumption

In 2008	Improve the quality of recreation waters.
In 2008	Reduce public health risk and allow increased consumption of fish and shellfish.

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

In 2007 Coastal and Great Lakes beaches monitored by State beach safety programs will be open and safe for swimming in over 95% of the days of the beach season.

In 2006 Coastal and Great Lakes beaches monitored by State beach safety programs will be open and safe for swimming in over 94% of the days of the beach season.

In 2005 Coastal and Great Lakes beaches monitored by State beach safety programs will be open and safe for swimming in over 94% of the days of the beach season.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>Percentage of women of childbearing age having mercury levels in blood above the level of concern.</i>						5.5	% of women
<i>Percent of state-monitored shellfish-growing acres impacted by anthropogenic sources that are approved or conditionally approved for use.</i>						65-85	% Areas
<i>Maintain the number of waterborne disease outbreaks attributable to swimming in or other recreational contact with coastal and Great Lakes waters measured as a 5-year average.</i>						2	Outbreaks
<i>Days (of beach season) that coastal and Great Lakes beaches monitored by State beach safety programs are open and safe for swimming.</i>	96	96	94	97	95	96	% Days/Season

Background: In 1999, 7% of the Nation's rivers and 15% of the Nation's lakes were assessed to determine if they contained fish that should not be eaten or should be eaten in only limited quantities. In September 1999, 25 states/tribes are monitoring and conducting assessments based on the national guidance to establish nationally consistent fish advisories. In the 2000 Report to Congress on the National Water Quality Inventory, 69% of assessed river and stream miles; 63% of assessed lake, reservoir, and pond acres; and 53% of assessed estuary square miles supported their designated use for fish consumption. For shell fish consumption, 77% of assessed estuary square miles met this designated use.

OBJECTIVE: PROTECT WATER QUALITY

Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Watershed Protection

In 2008 Use pollution prevention and restoration approaches to protect the quality of rivers, lakes, and streams on a watershed basis.

In 2007 Water quality standards are fully attained in over 25% of miles/acres of waters by 2012, with an interim milestone of restoring 8.0% of these waters - identified in 2000 as not attaining standards - by 2005.

In 2006 Water quality standards are fully attained in over 25% of miles/acres of waters by 2012, with an interim milestone of restoring 5% of these waters - identified in 2000 as not attaining standards - by 2005.

In 2005 Water quality standards are fully attained in over 25% of miles/acres of waters by 2012, with an interim milestone of restoring 2% of these waters - identified in 2000 as not attaining standards - by 2005.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Number of waterbody segments identified by States in 2002 as not attaining standards, where water quality standards are now fully attained (cumulative).						1100	Number of Segments
Fund utilization rate for the CWSRF	90	95.4	93.3	94.7	93.4	93.5	Rate
Percentage of all major publicly-owned treatment works (POTWs) that comply with their permitted wastewater discharge standards.						86	POTWs
Reduction in phosphorus loadings (millions of pounds).			4.5	Data Avail 2007	4.5	4.5	lbs in millions
Additional pounds (in millions) of reduction to total nitrogen loadings.			8.5	Data Avail 2007	8.5	8.5	lbs in millions
Additional tons of reduction to total sediment loadings.			700,000	Data Avail 2007	700,000	700,000	lbs
Number of waterbodies identified by States (in 2000 or subsequent years) as being primarily NPS-impaired that are partially or fully restored.						250	waterbodies
Number of TMDLs that are established by States and approved by EPA on schedule consistent with national policy. (cumulative)	14,462	15,338	18,692	19,368	21,923	24,411	TMDLs

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Percentage of high priority state NPDES permits that are scheduled to be reissued.	95	104	95	96.4	95	95	% permits
Percentage of majors in Significant Noncompliance (SNC) at any time during the fiscal year.	19.7	19.70	22.5	Data Avail 2007	22.5	22.5	% majors
Percentage of submissions of new or revised water quality standards from States, and Territories that are approved by EPA.	89.5	83.5	90.9	89	85	87	% submissions
Number of TMDLs required that are established or approved by EPA on a schedule consistent with national policy. (cumulative)	17,767	18,660	20,501	23,185	25,811	28,401	TMDLs
Percentage of waters accessed using statistically valid surveys.	38	38	54	54	54	54	% waters
Percent of high priority EPA and state NPDES permits that are reissued on schedule.	95	100	95	98.5	95	95	% permits
% of S & Terr. that, within the preceding 3-yr. period, submitted new or revised wq criteria acceptable to EPA that reflect new scientific info from EPA or sources not considered in prev std.						68	% wq criteria

Background: As of 2002, states report 453 watersheds had met the criteria that greater than 80% of assessed waters met all water quality standards. For a watershed to be counted toward this goal, at least 25% of the segments in the watershed must be assessed within the past 4 years consistent with assessment guidelines developed pursuant to section 305(b) of the Clean Water Act. In 2002, 0% of the 255,408 miles/and 6,803,419 acres of waters identified on 1998/2000 lists of impaired waters developed by States and approved by EPA under section 303(d) of the Clean Water Act.

Coastal and Ocean Waters

In 2008	Improve National Coastal Condition Report (NCCR) score for overall aquatic ecosystem health of coastal waters nationally (1-5 scale.)
In 2007	Scores for overall aquatic system health of coastal waters nationally, and in each coastal region, is improved on the (good/fair/poor) scale of the National Coastal Condition Report by at least 0.1 point
In 2006	Scores for overall aquatic system health of coastal waters nationally, and in each coastal region, is improved on the (good/fair/poor) scale of the National Coastal Condition Report by at least 0.1 point

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

In 2005 Scores for overall aquatic system health of coastal waters nationally, and in each coastal region, is improved on the "good/fair/poor" scale of the National Coastal Condition Report by at least 0.1 point

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
National Coastal Condition Report (NCCR) score for overall aquatic ecosystem health of coastal waters nationally (1-5 scale).	2.7	Data Avail 2008	2.7	Data Avail 2008	2.8	2.8	Scale score
Active dredged material ocean dumping sites will have achieved environmentally acceptable conditions (as reflected in each site's management plans.)						95	% Sites

Background: National rating of "fair/poor" or 2.4 where the rating is based on a 5-point system where 1 is poor and 5 is good and is expressed as an aerially weighted mean of regional scores using the National Coastal Condition Report indicators [i.e., water clarity, dissolved oxygen, coastal wetlands loss, eutrophic conditions, sediment contamination, benthic health, and fish tissue contamination]. The 2002 National Coastal Condition Report indicated 4.3 for water clarity and 4.5 for dissolved oxygen, 1.4 for coastal wetlands loss; 1.3 for contamination of sediments in coastal waters; 1.4 for benthic quality; & 1.7 for eutrophic condition.

Alaska Native Villages

In 2008 Percent serviceable rural Alaska homes with access to drinking water supply and wastewater disposal.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Percent of serviceable rural Alaska homes with access to drinking water supply and wastewater disposal.						88	Homes

Background: In 2003, 77% of serviceable rural Alaska homes had access to drinking water supply and wastewater disposal.

OBJECTIVE: ENHANCE RESEARCH TO SUPPORT CLEAN AND SAFE WATER

By 2011, conduct leading-edge, sound scientific research to support the protection of human health through the reduction of human exposure to contaminants in drinking water, fish and shellfish, and recreational waters and to support the protection of aquatic ecosystems-specifically, the quality of rivers, lakes, and streams, and coastal and ocean waters.

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

Research

Drinking Water Research

In 2008	Increased use of drinking water research products
In 2007	Increased use of drinking water research products
In 2006	By 2006, provide results of full-scale treatment demonstration projects and evaluations of other approaches for managing arsenic in drinking water, so that by 2010, the Office of Water, states, local authorities and utilities have scientifically sound data and approaches to manage risks to human health posed by exposure to arsenic, as determined by independent expert review.
In 2005	Increased use of drinking water research products

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Percentage of planned outputs delivered in support of Six Year Review decisions. (Research)	100	90	100	94	100	100	Percent
Percentage of planned outputs delivered in support of Contaminate Candidate List Decisions. (Research)	100	60	100	100	100	100	Percent
Background:	In FY 2008, the program plans to deliver 100% of its planned outputs in support of both Contaminant Candidate List and Six Year Review decisions. In 2006, the program completed 100% and 94% of its planned outputs in these areas, respectively. In achieving its 2008 targets, the program will contribute to EPA's goal of supporting the protection of human health through the reduction of human exposure to contaminants in drinking water.						

Water Quality Research

In 2008	Increased use of water quality research products
In 2007	Increased use of water quality research products
In 2006	By 2006, provide demonstrations of bioassessment methods for Mid-Western U.S. rivers, so that, by 2010, the Office of Water, states, and tribes have approaches and methods to develop and apply criteria for habitat alteration, nutrients, suspended and bedded sediments, pathogens, and toxic chemicals that will support designated uses for aquatic ecosystems, as determined by independent expert review.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

In 2005 By 2005, provide methods for developing water quality criteria so that, by 2008, approaches and methods are available to States and Tribes for their use in developing and applying criteria for habitat alteration, nutrients, suspended and bedded sediments, pathogens and toxic chemicals that will support designated uses for aquatic ecosystems and increase the scientific basis for listing and delisting impaired water bodies under Section 303(d) of the Clean Water Act.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Percentage of planned outputs (in support of WQRP long-term goal #1) delivered. (Research)	100	100	100	100	100	100	Percent
Percentage of planned outputs (in support of WQRP long-term goal #2) delivered. (Research)	100	67	100	100	100	100	Percent
Percentage of planned outputs (in support of WQRP long-term goal #3) delivered. (Research)	100	71	100	92	100	100	Percent

Background: In FY 2008, the program plans to deliver 100% of its planned outputs in support of each of its long-term goals. In FY 2006, the program completed 100% of its planned outputs in support of two of its long-term goals, and 92% of its planned outputs in support of its third. In achieving its FY 2008 targets, the program will contribute to EPA's goal of supporting the protection of human health through the reduction of human exposure to contaminants in fish, shellfish, and recreational waters, and to support the protection of aquatic ecosystems.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

GOAL 3: LAND PRESERVATION AND RESTORATION

Preserve and restore the land by using innovative waste management practices and cleaning up contaminated properties to reduce risks posed by releases of harmful substances.

OBJECTIVE: PRESERVE LAND

By 2011, reduce adverse effects to land by reducing waste generation, increasing recycling, and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.

Municipal Solid Waste Source Reduction

In 2008	Divert 35% (87.3 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.
In 2008	Increase reuse and recycling of construction and demolition debris.
In 2008	Increase the number of tribes covered by an adequate and recently-approved integrated solid waste management plan, and close, clean up, or upgrade open dumps in Indian Country and on other tribal lands.
In 2008	Increase use of coal combustion ash rather than disposing of it.
In 2007	Divert 34.2% (85.2 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.
In 2007	Increase reuse and recycling of construction and demolition debris.
In 2007	Increase the number of tribes covered by an adequate and recently-approved integrated solid waste management plan, and close, clean up, or upgrade open dumps in Indian Country and on other tribal lands.
In 2007	Increase use of coal combustion ash rather and disposing of it.
In 2006	Divert 33.4% (83.1 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.
In 2005	Divert an additional 1% (for a cumulative total of 35% or 81 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
<i>Percentage of construction and demolition debris that is reused or recycled.</i>					62	62.8	percent
Millions of tons of municipal solid waste diverted.	81	79	83.1	Data Avail 2008	85.2	87.3	million tons
<i>Percentage of coal combustion ash that is used instead of disposed.</i>					1.8	1.8	percent
Daily per capita generation of municipal solid waste.	4.5	4.5	4.5	Data Avail 2008	4.5	4.5	lbs. MSW
<i>Number of closed, cleaned up, or upgraded open dumps in Indian Country or on other tribal lands.</i>					30	30	open dumps
<i>Number of tribes covered by an adequate and recently-approved integrated solid waste management plan.</i>					27	26	tribes

Background: An analysis conducted at the end of FY 2005 shows approximately 79 million tons (33%) of municipal solid waste diverted and 4.5 lbs of MSW per person daily generation. There is a two-year data lag in reporting these data. In terms of construction and demolition debris, in 2003, 164 million tons was generated from buildings (of which 28% was recycled), and 167.3 million tons was generated from roads (of which 88% was recycled). The total C&D debris generated was 331.3 million tons with 59% recycled (or 195.3 million tons). Debris from bridges, land clearing and excavations are not included in EPA's characterization. The annual percentage increase in C&D debris reuse and recycling is expected despite an anticipated increase in debris generation. There is a two-year data lag in reporting these data. For coal combustion ash, approximately 125 millions tons are generated annually, and in 2001, 32% was used rather than landfilled. The annual increase in use is targeted although associated increases in generation are also expected annually. There is a one-year data lag in reporting these data. With respect to the tribal data, targets are established relative to 2006 when new criteria for reporting were identified.

Waste and Petroleum Management Controls

In 2008	Reduce releases to the environment by managing hazardous wastes and petroleum products properly.
In 2007	Reduce releases to the environment by managing hazardous wastes and petroleum products properly.
In 2006	Reduce releases to the environment by managing hazardous wastes and petroleum products properly.
In 2005	Reduce releases to the environment by managing hazardous wastes and petroleum products properly.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Annual increase in the percentage of RCRA hazardous waste management facilities with permits or other approved controls.	2.8	3.1	2.5	4.3	2.4	1.8	percent
No more than 10,000 confirmed releases per year.	<10,000	7,421	<10,000	8,361	<10,000	<10,000	UST releases
Increase the rate of significant operational compliance by 1% over the previous year's rate (target).	65	66	66	62	67	68	percent

Background: FY 2004 was the first year that states and regional offices reported the percentage of UST facilities that are in significant operational compliance with both release detection and release prevention (spill, overfill, and corrosion protection) requirements, out of a total estimated universe of approximately 256,000 facilities. At the end of FY 2006, 62 percent of USTs were in significant operational compliance with both release detection and release prevention requirements. Given the inspection requirements of the Energy Policy Act of 2005, some states are now targeting previously un-inspected facilities, and these are more likely to be out-of-compliance. Between FY 1999 and FY 2006, confirmed UST releases averaged 10,534. At the end of FY 2006, the percentage of hazardous waste management facilities with permits or other approved controls nationwide was 91.4 percent.

OBJECTIVE: RESTORE LAND

By 2011, control the risks to human health and the environment by mitigating the impact of accidental or intentional releases and by cleaning up and restoring contaminated sites or properties to appropriate levels.

Superfund Cost Recovery

In 2008	Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.
In 2007	Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.
In 2006	Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.
In 2005	Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.

GOAL 3: LAND PRESERVATION AND RESTORATION

PPA-50

Measures that are not currently used for the Office of Management and Budget's Program Assessment Rating Tool (PART) assessments appear in italics.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
<i>Refer to DOJ, settle, or write off 100% of Statute of Limitations (SOLs) cases for SF sites with total unaddressed past costs equal to or greater than \$200,000 and report value of costs recovered.</i>	100	99	100	100	100	100	Percent

Background: In FY 1998 the Agency will have addressed 100% of Cost Recovery at all NPL & non-NPL sites with total past costs equal or greater than \$200,000.

Superfund Potentially Responsible Party Participation

In 2008	Reach a settlement or take an enforcement action by the time of the Remedial Action start at 95 percent of non-Federal Superfund sites that have viable, liable parties.
In 2007	Reach a settlement or take an enforcement action by the time of the Remedial Action start at 95 percent of non-Federal Superfund sites that have viable, liable parties.
In 2005	Reach a settlement or take an enforcement action by the time of the Remedial Action start at 90 percent of non-Federal Superfund sites that have viable, liable parties.
In 2005	Reach a settlement or take an enforcement action by the time of the Remedial Action start at 90 percent of non-Federal Superfund sites that have viable, liable parties.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
<i>Percentage of Superfund sites at which settlement or enforcement action taken before the start of RA.</i>	90	100	90	100	95	95	Percent

Background: In FY 1998 approximately 70% of new remedial work at NPL sites (excluding Federal facilities) was initiated by private parties. In FY 2003, a settlement was reached or an enforcement action was taken with non-Federal PRPs before the start of the remedial action at approximately 90 percent of Superfund sites.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Assess and Cleanup Contaminated Land

In 2008	Control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.
In 2007	Control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.
In 2006	Control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.
In 2005	Control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Number of cleanups that meet state risk-based standards for human exposure and groundwater migration (tracked as the number LUST cleanups completed).	14,500	14,583	13,600	14,493	13,000	13,000	cleanups
Number of cleanups that meet risk-based standards for human exposure and groundwater migration on Indian Country.	30	53.	30	43	30	30	cleanups
Superfund final site assessment decisions completed.	500	551	419	518	350	272	assessments
Annual number of Superfund sites with remedy construction completed.	40	40	40	40	24	30	completions
Superfund sites with human health protection achieved (exposure pathways are eliminated or potential exposures are under health-based levels for current use of land or water resources).	10	no data*	10	34	10	10	sites
Superfund sites with contaminated groundwater migration under control.	10	23	10	21	10	15	sites
Number of Federal Facility Superfund sites where all remedies have completed construction.	46	47	51	55	56	60	sites
Number of Federal Facility Superfund sites where the	56	61	61	70	76	81	remedies

GOAL 3: LAND PRESERVATION AND RESTORATION

PPA-52

Measures that are not currently used for the Office of Management and Budget's Program Assessment Rating Tool (PART) assessments appear in italics.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
final remedial decision for contaminants at the site has been determined.							
Percent of RCRA construction completions using 2008 baseline.			13	22	25	27	percent
Percentage of RCRA CA facilities with current human exposures under control (using 2008 baseline).			82	89	92	95	percent
Percentage of RCRA CA facilities with migration of contaminated groundwater under control (using 2008 baseline).			68	74	77	81	percent
<i>Number of Superfund sites ready for reuse site-wide.</i>					30	30	sites

Background: In FY 2004, Superfund controlled human exposures at 83% (1,242 of 1,493) of eligible NPL sites and controlled groundwater migration at 67% (875 of 1,306) of eligible NPL sites, completed construction at 62% (926 of 1,498) of the eligible NPL sites, selected final remedies at 67% (1,003 of 1,498) of the eligible NPL sites. Of the 1,714 RCRA Corrective Action high priority facilities, 84% (1,440) have human exposures controlled and 70% (1,199) have groundwater migration controlled, reflecting the strong EPA/state partnership in this program. The new performance measures for the RCRA program reflect establishment of a new facility baseline (1,968 facilities) established in October 2004. In FY 2004, EPA completed 317,405 leaking underground storage tank cleanups by the end of FY 2004. The Agency has worked with state partners to evaluate multi-year cleanup goals in light of new pressures that have slowed the pace of cleanup in recent years. The result of this process has been a reduction of multi-year goals to a target number that better reflects the current challenges. (*In 2005, EPA conducted a comprehensive reassessment of the data used to determine the number of Superfund sites with human exposure controlled in order to improve how actual conditions are accounted for at these sites. As a result, the definition of the measure was revised to include achieving more permanent, long-term control and protection at these sites, which included a new baseline from which to measure. Thus, there is no result for FY 2005.)

Prepare/Respond to Accidental/Intentional Release

In 2008	Reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies.
In 2007	Reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies.
In 2006	Reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies.

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

In 2005 Reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Superfund-lead removal actions completed annually.	195	172	195	157	195	195	removals
Voluntary removal actions, overseen by EPA, completed.	105	137	115	93	120	125	removals
<i>Number of inspections and exercises conducted at oil storage facilities that are required to have Facility Response Plans.</i>	360	335	100	345	200	250	inspections/ exercises
Percentage of inspected facilities subject to Spill Prevention, Control and Countermeasures (SPCC) regulations found to be in compliance.	100	100	100	50	53	55	percent
Percentage of inspected facilities subject to Facility Response Plan (FRP) regulations found to be in compliance.	100	77	100	71	75	78	percent
<i>Average state of emergency response readiness as determined by readiness criteria.</i>					55	65	percent
Background:	By the end of FY 2004, there have been cumulative total of over 8,280 Superfund removal response actions initiated since 1980. EPA exceeded its FY 2004 expectations for readiness by reducing the core emergency response readiness deficit by 56%. EPA was involved in 308 oil spill responses in FY 2004. The Agency typically responds to or monitors 300 oil spill cleanups per year.						

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2011, provide and apply sound science for protecting and restoring land by conducting leading-edge research, which through collaboration, leads to preferred environmental outcomes

Research

Land Protection and Restoration Research

In 2008 Increased use of land protection and restoration research products

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

In 2007 Increased use of land protection and restoration research products

In 2006 Document the performance, including cost savings, of innovative characterization and remediation options, so that newer approaches with cost or performance advantages are applied for Superfund and other cleanup projects.

In 2005 In FY 2005, complete at least four SITE demonstrations, with emphasis on NAPLs and sediments, in order to, by 2010, develop or evaluate 40 scientific tools, technologies, methods, and models, and provide technical support that enable practitioners to 1) characterize the nature and extent of multimedia contamination; 2) assess, predict, and communicate risks to human health and the environment; 3) employ improved remediation options; and 4) respond to oil spills effectively.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Percentage of planned outputs delivered in support of the management of material streams, conserve resources and appropriately manage waste long-term goal.	100	100	100	100	100	100	Percent
Percentage of planned outputs delivered in support of the mitigation, management and long-term stewardship of contaminated sites long-term goal.	100	70	100	96	100	100	Percent

Background: In FY 2008, the program plans to deliver 100% of its planned outputs in support of each of its long-term goals. In FY 2006, the program completed 100% of its planned outputs in support of its two long-term goals. In achieving its FY 2008 targets, the program will contribute to EPA's goal of applying sound science in the protection and restoration of land.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

GOAL 4: HEALTHY COMMUNITIES AND ECOSYSTEMS

Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

OBJECTIVE: CHEMICAL AND PESTICIDE RISKS

By 2011, prevent and reduce pesticide and industrial chemical risks to humans, communities, and ecosystems.

Protect Human Health from Pesticide Risk

In 2008	Decrease cost per pesticide occupational incident avoided.
In 2008	Ensure new pesticide registration actions (including new active ingredients, new uses) meet new health standards and are environmentally safe.
In 2008	Improve the health of those who work in or around pesticides by reaching a 50% reduction in moderate to severe incidents for six acutely toxic agricultural pesticides with the highest incident rate.
In 2008	Percentage of acre treatments that will use applications of reduced-risk pesticides.
In 2008	Protect those occupationally exposed to pesticides by improving or maintaining a rate of 3.5 or less incidents per 100,000 potential risk events.
In 2008	Reduce concentration of pesticides detected in general population.
In 2008	Reduce decision times for registration of reduced risk chemicals.
In 2008	Register reduced risk pesticides, including biopesticides.
In 2007	Decrease cost per pesticide occupational incident avoided.
In 2007	Ensure new pesticide registration actions (including new active ingredients, new uses) meet new health standards and are environmentally safe.
In 2007	Improve the health of those who work in or around pesticides by reducing moderate to severe incidents for six acutely toxic agricultural pesticides with the highest incident rate.
In 2007	Percentage of acre treatments that will use applications of reduced-risk pesticides.
In 2007	Reduce concentration of pesticides detected in general population.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

In 2007 Reduce decision times for registration of reduced risk chemicals.

In 2007 Register reduced risk pesticides, including biopesticides.

In 2006 Ensure new pesticide registration actions (including new active ingredients, new uses) meet new health standards and are environmentally safe.

In 2006 Percentage of acre treatments that will use applications of reduced-risk pesticides

In 2006 Reduce decision times for registration of reduced risk chemicals.

In 2006 Register reduced risk pesticides, including biopesticides.

In 2005 Ensure new pesticide registration actions (including new active ingredients, new uses) meet new health standards and are environmentally safe.

In 2005 Percentage of acre treatments that will use applications of reduced-risk pesticides

In 2005 Reduce decision times for registration of reduced risk chemicals.

In 2005 Register reduced risk pesticides, including biopesticides.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>Register reduced risk pesticides, including biopesticides.</i>	14	14	14	15	14	14	Registrations
<i>New Chemicals (Active Ingredients)</i>	8	3	8	19	8	8	Registrations
<i>New Uses</i>	200	164	200	235	200	200	Actions
Percentage of agricultural acres treated with reduced-risk pesticides.	13.5	16	17	Data Avail 2007	18.0	18.0	% Acre- Treatments
Incidents per 100,000 potential risk events in population occupationally exposed to pesticides.						<= 3.5	Incidents per 100,000
Percent reduction in concentrations of pesticides detected in general population.					10	Bi-Annual	% Reduction
Percent reduction in moderate to severe incidents for six acutely toxic agricultural pesticides with the highest incident rate.					10	Bi-Annual	% Reduction

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

Background: The baseline for registration of reduced risk pesticides, new chemicals, and new uses, is zero in 1996 (the year FQPA was enacted). Cumulative actuals in FY 2006 for reduced risk pesticides are 172 registrations, 101 new chemicals (AI) and 3,541 new use actions. These performance measures are now counted on an annual basis in order to better address PRIA requirements.

The baseline for reducing registration decision times for reduced risk chemicals is 32.5 months in 2002.

According to NHANES data for 1999-2002 the concentration of pesticides residues detected in blood samples from the general population are: Dimethylphosphaste = 0.41 ug/L; Dimethylthiophosphate = 1.06 ug/L; Dimethyldithiophosphate = 0.07 ug/L; Diethylphosphate = 0.78 ug/L; Diethylthiophosphate = 0.5 ug/L; Diethyldithiophosphate = 0.07 ug/L; and 3,5,6-Trichloro-2-pyridinol = 1.9 ug/L. There were 1,385 incidents out of 39,850,000 potential risk events for those occupationally exposed to pesticides in 2003. The rates for moderate to severe incidents for exposure to agricultural pesticides with the highest incident rates base on 1999 -2003 data were: diazinon, 51 incidents; malathion, 36 incidents; pyrethrins, 29 incidents; 2, 4-D, 27 incidents; carbofuran, 24 incidents; based on data from Poison Control Centers' Toxic Exposure Surveillance System (TESS), and NIOSH's Sentinel Event Notification System for Occupational Risk (SENSOR).

Protect the Environment from Pesticide Risk

In 2008	Ensure that through ongoing data reviews, pesticide active ingredients, and products that contain them are reviewed to assure adequate protection for human health and the environment, taking into consideration exposure scenarios such as subsistence lifestyles of the Native Americans
In 2008	Reduce the average cost and average time to produce or update an Endangered Species Bulletin.
In 2008	Reduce the percent of urban watersheds sampled that exceeds EPA aquatic life benchmarks for three key pesticides of concern (diazinon, chlorpyrifos, malathion).
In 2007	Ensure that through ongoing data reviews, pesticide active ingredients, and products that contain them are reviewed to assure adequate protection for human health and the environment, taking into consideration exposure scenarios such as subsistence lifestyles of the Native Americans
In 2007	Reduce the average cost and average time to produce or update an Endangered Species Bulletin.
In 2006	Ensure that through ongoing data reviews, pesticide active ingredients, and products that contain them are reviewed to assure adequate protection for human health and the environment, taking into consideration exposure scenarios such as subsistence lifestyles of the Native Americans
In 2005	Ensure that through ongoing data reviews, pesticide active ingredients, and products that contain them are reviewed to assure adequate protection for human health and the environment, taking into consideration exposure scenarios such as subsistence lifestyles of the Native Americans

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>Product Reregistration</i>	400	501	545	545	545	545	Actions

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Percent of urban watersheds that exceeds EPA aquatic life benchmarks for three key pesticides of concern.						25, 25, 30	% Watersheds

Background: The baseline for REDs is completion of 612 REDs by 2008. A total of 7,358 product reregistrations were completed by 2006. Reregistration decision time baseline is 30 months in 2002.

Based on 1992 - 2001 data, 40% of urban watersheds exceeded aquatic life benchmarks for diazinon, 37% for chlorpyrifos, and 30% of urban watersheds exceeded aquatic life benchmarks malathion. Based on 1992 - 2001 data, 18% percent of agricultural watersheds exceeded aquatic life benchmarks for azinphos-methyl and 18% of agricultural watersheds exceeded aquatic life benchmarks for chlorpyrifos.

In 2004, the average cost per Endangered Species Bulletin produced or updated was \$4,000 and 100 hours.

Endocrine Disruptors

In 2008 Endocrine Disruptor Screening Program will continue its progress toward completing the validation of endocrine test methods.

In 2007 Endocrine Disruptor Screening Program will continue its progress toward completing the validation of endocrine test methods.

In 2006 Endocrine Disruptor Screening Program will continue its progress toward completing the validation of endocrine test methods.

In 2005 Standardization and validation of screening assays

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Cumulative number of assays validated.			11/20	2/21	8/20	13/20	Assays

Background: The Food Quality Protection Act of 1996 (FQPA) requires EPA to use validated assays to screen chemicals for their potential to affect the endocrine system. The development and validation of assays is currently the principal effort in implementing the Endocrine Disruptor Screening Program (EDSP). The validation process consists of several discrete steps: Detailed Review Paper is the first stage of the overall validation process. It is a review of the scientific literature relevant to an assay and discusses the scientific principles on which the assay is based, reviews candidate protocols and makes recommendations as to which is most suitable as a starting point for assay refinement and validation. Prevalidation consists of studies to optimize and standardize the protocol and verify the ability of the protocol to accurately measure the endpoints of concern. Validation determines the transferability of the protocol to other laboratories and determines inter-laboratory variability. Peer review is the review by an independent group of experts of the scientific work establishing the validity of the protocol.

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

Realize the Value from Pesticide Availability

In 2008 Maintain timeliness of S18 decisions.

In 2008 Number of acres using reduced risk pest management practices compared to the grant and/or contract funds expended on environmental stewardship.

In 2007 Maintain timeliness of S18 decisions.

In 2006 Maintain timeliness of S18 decisions.

In 2005 Maintain timeliness of S18 decisions.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
<i>Maintain timeliness of S18 decisions</i>	45	42	45	48	45	45	Days
Millions of dollars in termite structural damage avoided annually by ensuring safe and effective pesticides are registered/re-registered and available for termite treatment.						900	Million dollars
Billions of dollars in crop loss avoided by ensuring that effective pesticides are available to address pest infestations.						1.5	Billion dollars loss avoided
Background:	The Section 18's 2005 baseline is 45 days. EPA's FY 2006 response time for Section 18 decisions (emergency pesticide use exemptions for pest infestations) was slightly higher than the target of 45 days because the program's focus was diverted to address Homeland Security and food security concerns associated with soybean rust.						
	According to EPA and USDA data for the years 2000-2005, emergency exemptions issued by EPA resulted in \$1.5 billion in avoided crop loss. In a similar manner, based on U.S Census housing data, industry data, and academic studies on damage valuation, EPA calculates that in 2003 there were \$900 million in annual savings from structural damage avoided due to availability of registered termiticides. For 2005, funding of Strategic Agriculture Initiative grants resulted in \$2.63 per acre impacted.						

Lead Gasoline Phase-Out

In 2008 Eliminate use of lead in gasoline in remaining countries that still use lead as an additive, affecting more than 700 million people.

In 2008 Increase access to low-sulfur fuels in developing countries.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
<i>Number of countries completing phase out of leaded gasoline. (incremental)</i>						7	Countries
<i>Number of countries introducing low sulfur in fuels. (incremental)</i>						2	Countries
Background:	As of June 2005, 122 countries have phased out the use of lead in gasoline. As of 2005, United States, Japan, Canada, and the European Community have introduced low-sulfur fuels.						

Exposure to Industrial / Commercial Chemicals

In 2008	Reduce exposure to and health effects from priority industrial/commercial chemicals
In 2007	Reduce exposure to and health effects from priority industrial/commercial chemicals
In 2006	Reduce exposure to and health effects from priority industrial/commercial chemicals
In 2005	Reduce exposure to and health effects from priority industrial / commercial chemicals

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Percent difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old.	29	Data Available 2009	29	Data Available 2009	Biannual Data	29	Percent
Number of cases of children (aged 1-5 years) with elevated blood lead levels (>10ug/dl).	38,700	Data Available 2009	216,000	Data Available 2009	199,000	90,000	Children
Background:	Baseline for percentage of lead-based paint certification and refund applications that require less than 40 days of EPA effort to process is 54% in 2004. Baseline for percent difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old is 37% in 1991-1994.						

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

Data released by CDC from the National Health and Nutritional Evaluation Survey (NHANES) in May of 2005 estimated a population of 310,000 children aged 1 - 5 with lead poisoning (blood lead levels of 10 ug/dl or greater). EPA has incorporated into its Strategic Plan the federal government goal to eliminate childhood lead poisoning as a public health concern by 2010.

Risks from Industrial / Commercial Chemicals

In 2008 Identify, restrict, and reduce risks associated with industrial/commercial chemicals.

In 2007 Identify, restrict, and reduce risks associated with industrial/commercial chemicals.

In 2006 Identify, restrict, and reduce risks associated with industrial/commercial chemicals.

In 2005 Identify, restrict, and reduce risks associated with industrial/commercial chemicals.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Cumulative number of chemicals with proposed, interim, and/or final values for Acute Exposure Guidelines Levels (AEGL).	125	165	145	185	209	233	Total number chemicals
<i>Percent of chemicals or organisms introduced into commerce that do not pose unreasonable risks to workers, consumers, or the environment.</i>			100	100	100	100	Percent
<i>Percentage of HPV chemicals identified as priority concerns through assessment of Screening Information Data Sets (SIDS) and other information with risks eliminated or effectively managed.</i>	TBD		100	100	100	100	% of HPV Chemicals
<i>Cumulative number of chemicals for which VCCEP data needs documents are issued by EPA in response to Industry sponsored Tier 1 risk assessments.</i>	TBD		8	6	9	10	Cumulative Chemicals
Reduction in the current year production-adjusted risk-based score of releases and toxic transfers.	2	Data Available 2008	3	Data Available 2008	2.5	2.5	% RSEI relative risk
<i>Percent reduction from prior year in total EPA cost per chemical for which proposed AEGL value sets are developed.</i>					34,160 (2)	34,160 (2)	Cost savings (%)
<i>Percent change from prior year in cost savings due to</i>						6.7	% cost savings

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
<i>new chemical prescreening.</i>							
Background:	In 2006, additional 23 chemicals with proposed, interim, or final AEGL Values were reported for the AEGL Program (annual count).						
	The baseline for percent of chemicals or organisms introduced into commerce that do not pose unreasonable risks to workers, consumers, or the environment in 2004 and 2005 is100%.						
	The baseline for HPV measure is zero chemicals in 1998. EPA screening of data obtained through the HPV Challenge Program is commencing in 2006; actions to obtain additional information needed to assess risks will commence subsequently as chemicals are identified as priority concerns through the screening process.						
	Baseline for the VCCEP Program is 0 for FY 2003.						
	Baseline for the Risk Screening Environmental Indicators Model Program is based on the cumulative reduction that was reported in 2002-2003 and is 6.6 percent.						

Chemical Facility Risk Reduction

In 2008	Protect human health, communities, and ecosystems from chemical risks and releases through facility risk reduction efforts and building community infrastructures.
In 2007	Protect human health, communities, and ecosystems from chemical risks and releases through facility risk reduction efforts and building community infrastructures.
In 2006	Protect human health, communities, and ecosystems from chemical risks and releases through facility risk reduction efforts and building community infrastructures.
In 2005	Protect human health, communities, and ecosystems from chemical risks and releases through facility risk reduction efforts and building community infrastructures.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
<i>Number of risk management plan audits completed.</i>	400	885	400	550	400	400	Audits

Background: 1,059 Risk Management Plan audits were completed between FY 2000 and FY 2003.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

OBJECTIVE: COMMUNITIES

Sustain, clean up, and restore communities and the ecological systems that support them.

U.S. - Mexico Border Water/Wastewater Infrastructure

In 2008 Sustain and restore the environmental health along the United States-Mexico Border through implementation of the "Border 2012" plan.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Number of additional homes provided adequate safe drinking water in the Mexican border area that lacked access to wastewater sanitation in 2003.						2,500	More homes
Number of additional homes provided adequate wastewater sanitation in the Mexican border area that lacked access to wastewater sanitation in 2003.						15,000	More homes
Background:	The US-Mexico border region extends more than 3,100 kilometers (2,000 miles) from the Gulf of Mexico to the Pacific Ocean, and 62.5 miles on each side of the international border. More than 11.8 million people reside along the border and this figure is expected to increase to 19.4 million by 2020. Ninety percent of the population reside in the 14 impaired, interdependent sister cities. Rapid population growth in urban areas has resulted in unplanned development, greater demand for land and energy, increased traffic congestion, increased waste generation, overburdened or unavailable waste treatment and disposal facilities, and more frequent chemical emergencies. Rural areas suffer from exposure to airborne dust, pesticide use, and inadequate water supply and treatment facilities. EPA, other US Federal agencies, and the Government of Mexico have partnered to address these environmental problems.						

Environmental Justice

In 2008 In FY 08, four communities with potential environmental justice concerns will achieve significant measurable environmental or public health improvement through collaborative problem-solving strategies.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
<i>Communities with Environmental Justice Concerns</i>						4	Communities
Background:	The Agency works to address issues affecting disproportionately exposed and under-represented populations from adverse health or environmental effects. EPA identifies problem areas through: public comments received during the National Environmental Justice Advisory Committee (NEJAC)						

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

meetings; reviewing Environmental Impact Statements (EIS) filed under the National Environmental Policy Act (NEPA) in which environmental justice (EJ) indicators occur; concern from communities about new or renewals of permits under RCRA, CWA, CAA, etc.; and complaints filed under Title VI of the Civil Rights Act. EPA also works to address these issues through the Federal Interagency Working Group on Environmental Justice and by awarding grants to communities for addressing environmental problems.

Reducing POPs

In 2008 Reduce mean maternal blood levels of chlordane in indigenous populations in the Arctic

In 2008 Reduce mean maternal blood levels of polychlorinated biphenyls (PCBs) in indigenous populations in the Arctic

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>Mean maternal blood levels of polychlorinated biphenyls (PCBs) (measured as Aroclor 1260) in indigenous populations in the Arctic. (cumulative)</i>				6.3		6.15	ug / l
<i>Mean maternal blood levels of chlordane (measured as the metabolites oxychlordane and trans-nonachlor) in indigenous populations in the Arctic. (cumulative)</i>				1.3		1.25	ug / l

Background: Data for these measures are not available annually because of the long biological residence of the selected congeners of about 3-5 years. With the signing of the global POPs convention in May 2001 EPA will work on domestic implementing legislation (e.g., a FIFRA amendment) and projects to support implementation by key developing countries (e.g., China). In FY2001 EPA worked with UNEP to identify regions (e.g., Sub-Saharan Africa, Central America, Southeast Asia) which would benefit from such support from EPA, and we have started projects on the basis of available funding. Whenever possible EPA will support projects, which also promote compliance with the global Prior Informed Consent (PIC) regime and the international commitment to improve chemicals management capabilities, as set out in the Bahia Declaration from the Third Session of the Intergovernmental Forum on Chemical Safety in October 2000.

Mexico Border Outreach

In 2008 Cleanup waste sites in the United States-Mexico border region

In 2006 Develop air quality assessments and programs to improve air quality standards in border communities.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>Cleanup waste sites in the United States-Mexico border</i>						1	Sites

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

	FY 2005		FY 2006		FY 2007	FY 2008	
Performance Measures	Target	Actual	Target	Actual	Pres Bud	Pres Bud	Unit
<hr/>							
<i>region. (incremental)</i>							
Background:	In 2004, there are no border communities monitoring for pollutants that have not previously been monitored in their community. There are 17 monitoring stations along the US-Mexico Border (source: US-Mexico Border XXI Program: Progress Report 1996-2000). Monitoring for: carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, particulate matter 2.5 micrometers or less in diameter U.S. only, particulate matter 10 micrometers or less in diameter, total suspended particulate matter Mexico only, lead.						

Revitalize Properties

In 2008	Assess, clean up and promote the reuse of Brownfields properties, and leverage jobs and cleanup/redevelopment funding.
In 2007	Assess, clean up and promote the reuse of Brownfields properties, and leverage jobs and cleanup/redevelopment funding.
In 2006	Assess, clean up and promote the reuse of Brownfields properties, and leverage jobs and cleanup/redevelopment funding.
In 2005	Leverage jobs by assessing, promoting the cleanup and reuse of Brownfields properties.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Brownfield properties assessed.	1,000	1,381.00	1,000	Data Available 2007	1,000	1,000	Assessments
Acres of Brownfields properties made ready for reuse.						225	Acres
<i>Jobs leveraged from Brownfields activities.</i>	5,000	6,128.00	5,000	Data Available 2007	5,000	5,000	Jobs
Billions of dollars of cleanup and redevelopment funds leveraged at Brownfields sites.	0.9	1.00	1.0	Data Available 2007	0.9	0.9	Billion dollars funds
Background:	By the end of FY 2005, the Brownfields program assessed 1,381 properties, leveraged 6,128 jobs, and leveraged \$1.0B in cleanup and redevelopment funding.						

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

Pacific Island Territories

In 2008 Sustain and restore the environmental health of the U.S. Pacific Island Territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI).

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>% of population in each of U.S. Pacific Island Territories served by CWS will receive drinking water that meets all applicable health-based drinking water standards throughout the year.</i>						72	% Population
<i>The sewage treatment plants in the U.S. Pacific Island Territories will comply with permit limits for biochemical oxygen demand (BOD) and total suspended solids (TSS).</i>						67	% Time
<i>Beaches in each of the U.S. Pacific Island Territories monitored under the Beach Safety Program will be open and safe for swimming during the beach season.</i>						70	% Days

Background: In 2005, 95% of the population in American Samoa, 10% in the Commonwealth of the Northern Mariana Islands (CNMI) and 80% of Guam served by CWS received drinking water that meets all applicable health-based standards. The sewage treatment plants in the Pacific Island Territories compiled 59% of the time with BOD & TSS permit limits. Beaches were open and safe 64% of the beach season in American Samoa, 97% in the CNMI & 76% in Guam.

OBJECTIVE: RESTORE AND PROTECT CRITICAL ECOSYSTEMS

Protect, sustain, and restore the health of critical natural habitats and ecosystems.

Protecting and Enhancing Estuaries

In 2008 Working with partners, protect or restore additional (i.e., measuring from 2008 forward) acres of habitat within the study area for the 28 estuaries that are part of the National Estuary Program.

In 2007 Working with NEP partners, protect or restore an additional 25,000 acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program (NEP).

In 2006 Working with NEP partners, protect or restore an additional 25,000 acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program (NEP).

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

In 2005 Working with NEP partners, protect or restore an additional 25,000 acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program (NEP).

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Acres protected or restored in NEP study areas.	25,000	103,959	25,000	140,033	75,000	50,000	Acres

Background: 2005 Baseline: 449,242 acres of habitat protected or restored; cumulative from 2002.

Gulf of Mexico

In 2008 Improve the overall health of coastal waters of the Gulf of Mexico on the "good/fair/poor" scale of the National Coastal Condition Report.

In 2007 Prevent water pollution and protect aquatic species in order to improve the health of the Gulf of Mexico.

In 2006 Prevent water pollution and protect aquatic species in order to improve the health of the Gulf of Mexico.

In 2005 Prevent water pollution and protect aquatic species in order to improve the health of the Gulf of Mexico.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
<i>Improve overall health of coastal waters of the Gulf of Mexico on the "good/fair/poor" scale of the National Coastal Condition Report.</i>	0.1	2.4	2.4	2.4	2.4	2.5	Scale
<i>Reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico, as measured by the five year running average</i>	12700	12,700	14,128	14,944	14,128	13,500	Square miles
<i>Percentage of water and habitat quality restored to meet water quality standards in impaired segments in 13 priority coastal areas.</i>						64	% Impaired segments
<i>Acres of important coastal and marine habitats restored, enhanced or protected.</i>						18,200	Acres

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

Background: In 2004, the Gulf of Mexico rating of fair/poor was 2.4 where the rating is based on a 5-point system in which 1 is poor and 5 is good and is expressed as an aerially weighted mean of regional scores using the National Coastal Condition Report II indicators: water quality index, sediment quality index, benthic index, coastal habitat index, and fish tissue contaminants.

The hypoxia running average size for 1996-2000 = 14,128 km². The 2002-2006 running average size = 14,944 km².

In 2002, 812 impaired segments identified in Section 303(d) listings. In 2005, 16,000 acres restored, enhanced, or protected; Gulf of Mexico coastal wetlands habitats include 3,769,370 acres.

Great Lakes Implementation Actions

In 2008 Prevent water pollution and protect aquatic systems so that overall ecosystem health of the Great Lakes is improved.

In 2007 Prevent water pollution and protect aquatic systems so that overall ecosystem health of the Great Lakes is improved.

In 2006 Prevent water pollution and protect aquatic systems so that overall ecosystem health of the Great Lakes is improved.

In 2005 Prevent water pollution and protect aquatic systems so that overall ecosystem health of the Great Lakes is improved by at least 1 point

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>Prevent water pollution and protect aquatic systems so that overall ecosystem health of the Great Lakes is improved (cumulative)</i>	21.9	21.9	21	21.1	21	21	Scale
<i>Cubic yards (in millions) of contaminated sediment remediated in the Great Lakes. (cumulative from 1997)</i>	3.7	3.7	3.2	4.1	4.5	5.0	Million cubic yards per meter
<i>Average concentrations of PCBs in whole lake trout and walleye samples will decline.</i>	6.2	6	5	Data Available 2007	5	5	% Annual decrease
<i>Average concentrations of toxic chemicals in the air in the Great Lakes basin will decline</i>	7.1	7	7	8	7	7	% Annual decrease
<i>Restore and delist Areas of Concern (AOCs) within the Great Lakes basin (IC: Fed/State/Tribal Gov. Activities)</i>	0	0	2	1	4	2	Areas of concern

Background: Great Lakes rating of 20.9 reported in 2003, based on most current data available, generally from 2001) on a 40 point scale where the rating uses select Great Lakes State of the Lakes Ecosystem indicators based on a 1 to 5 rating system for each indicator, where 1 is poor and 5 is good. (ii) 2.1 million cubic yards of contaminated sediments were remediated from 1997 through 2001 of the 40 million requiring remediation. (iii) On average, total PCB

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

concentrations in whole Great Lakes top predator fish have recently declined 5 percent annually - average concentrations at Lake sites from 2002 were: L Superior-9ug/g; L Michigan- 1.6ug/g; L Huron- .8ug/g L Erie- 1.8ug/g; and L Ontario- 1.2ug/g. 9iv) Average concentrations of toxic chemicals in the air (PCBs) from 2002 were; L Superior- 60 pg/m2; L Michigan- 87 pg/m2; L Huron-19 pg/m2; L Erie- 183 pg/m2; and L Ontario- 36 pg/m2. (v) In 2002, no Areas of Concern had been delisted.

Wetland and River Corridor Projects

In 2008 Working with partners, achieve a net increase in wetlands acres with additional focus on assessment of wetland condition.

In 2007 Working with partners, achieve no net loss of wetlands.

In 2006 Working with partners, achieve no net loss of wetlands.

In 2005 Working with partners, achieve no net loss of wetlands.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>Annually, in partnership with the Corps of Engineers and States, achieve no net loss of wetlands in the Clean Water Act Section 404 regulatory program</i>	No Net Loss	Data Available 2011	No Net Loss	Data Available 2011	No Net Loss	No Net Loss	Acres
<i>Working with partners, achieve a net increase in wetlands</i>	100,000	Data Available 2011	200,000	Data Available 2011	100,000	100,000	Acres per year
Background:	Annual net wetland loss of an estimated 58,500 acres as measured by the U.S. Fish and Wildlife Service and reported in Status and Trends of Wetlands in the Conterminous United States, 1986-1997. The United States achieved a net cumulative increase of 32,000 acres per year of wetlands over a 6-year period, from 1998 through 2004, as measured by the U.S. Fish and Wildlife Service and reported in Status and Trends of Wetlands in the Conterminous United States, 1998 to 2004. (Dahl, T.E. 2006. Status and Trends of Wetlands in the Conterminous United States, 1998 to 2004. U.S. Department of the Interior; Fish and Wildlife Service, Washington, D.C. 112 pp.)						

Chesapeake Bay Habitat

In 2008 Prevent water pollution and protect aquatic systems so that the overall aquatic system health of the Chesapeake Bay is improved.

In 2007 Prevent water pollution and protect aquatic systems so that overall aquatic system health of the Chesapeake Bay is improved enough so that there are 100,000 acres of submerged aquatic vegetation. (cumulative)

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

In 2007	Reduce nitrogen loads by 80 million pounds per year; phosphorus loads by 9.0 million pounds per year, and sediment loads by 1.16 million tons per year from entering the Chesapeake Bay, from 1985 levels.
In 2006	Prevent water pollution and protect aquatic systems so that overall aquatic system health of the Chesapeake Bay is improved enough so that there are 100,000 acres of submerged aquatic vegetation. (cumulative)
In 2006	Reduce nitrogen loads by 80 million pounds per year; phosphorus loads by 9.0 million pounds per year, and sediment loads by 1.16 million tons per year from entering the Chesapeake Bay, from 1985 levels
In 2005	Prevent water pollution and protect aquatic systems so that overall aquatic system health of the Chesapeake Bay is improved enough so that there are 90,000 acres of submerged aquatic vegetation. (cumulative)
In 2005	Reduce nitrogen loads by 74 million pounds per year; phosphorus loads by 8.7 million pounds per year, and sediment loads by 1.06 million tons per year from entering the Chesapeake Bay, from 1985 levels

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
<i>Reduction, from 1985 levels, of nitrogen (M/lbs), phosphorus (M/lbs), and sediment loads (tons) entering Chesapeake Bay. (cumulative)</i>	74/8.7/1.06	67/8.4/0.9	74/8.7/1.1	72.3/8.7/1	80/9.0/1.16		% Reductions
Percent of point source nitrogen reduction goal of 49.9 million pounds achieved.	Greater Reduction	61	65	65	70	74	% Goal
Percent of point source phosphorus reduction goal of 6.16 million pounds achieved.	Greater Reduction	80	82	82	84	85	% Goal
Percent of forest buffer planting goal of 10,000 miles achieved.	40	38	46	46	53	60	% Goal
<i>Acres of submerged aquatic vegetation (SAV) present in the Chesapeake Bay. (cumulative)</i>	89,659	72,942	90,000	78,259	90,000		Acres
Percent of goal achieved for implementation of nitrogen reduction practices (expressed as progress meeting the nitrogen reduction goal of 162.5 million pounds).	46	41	44	44	47	50	% Reduction
Percent of goal achieved for implementation of phosphorus reduction practices (expressed as progress meeting the phosphorus reduction goal of 14.36 million pounds).	60.6	58	61	61	64	66	% Reduction

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Percent of goal achieved for implementation of sediment reduction practices (expressed as progress meeting the sediment reduction goal of 1.69 million pounds).	63	54	57	57	61	64	% Reduction

Background: In 1984, there were 38,230 acres of submerged aquatic vegetation in the Chesapeake Bay. In 2002, baseline for nitrogen load reductions was 53 million pounds per year; phosphorus load reductions was 8.0 million pounds per year; and sediment load reductions was 0.8 million tons per year. *Fiscal year data in this table reflects prior calendar year performance data.

In 2006, there were 32.68 million lbs of point source nitrogen reduced, 65% towards the goal. There were 5.07 million lbs of point source phosphorus reduced, 82% towards the goal. Four thousand six hundred six miles of forest buffer were planted, 46% towards the goal.

Long Island Sound

In 2008 Prevent water pollution, improve water quality, protect aquatic systems, and restore the habitat of Long Island Sound by working through the Long Island Sound Management Study Conference partnership.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
<i>Reduce point source nitrogen discharges to LIS.</i>						8,303	lbs/day
<i>Acres of coastal habitat, including tidal wetlands, dunes, riparian buffers, and freshwater wetlands restored or protected.</i>						50	Acres
<i>Additional miles of river and stream corridor reopened to anadromous fish passage through removal of dams and barriers or installation of by-pass structures such as fishways.</i>						8.3	Miles

Background: In 2000, TMDL baseline is 213,151 pounds/day. In 2005, 562 acres restored (cumulative) and 150 acres protected (cumulative). Eighty-one miles of river and stream corridor re-opened.

South Florida Ecosystem

In 2008 Protect and maintain the South Florida Ecosystem, including the Everglades and coral reef ecosystems.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
<i>Mean percent stony coral cover in the Florida Keys National Marine Sanctuary (FKNMS) and in the coastal waters of Dade, Broward, and Palm Beach Counties, Florida, working with all stakeholders.</i>						6.7/5.9	Mean % area
<i>Maintain the overall water quality of the near shore and coastal waters of the FKNMS.</i>						Maintain	Water quality
<i>Total phosphorous in Everglades surface waters.</i>						Maintain	Parts per billion

Background: In 2005, the mean percent of stony coral cover is 6.7% in FKNMS and 5.9% in Southeast Florida. The average annual geometric mean phosphorus concentrations were 5 ppb in the Everglades National Park, 10 ppb in Water Conservation 3A, 13 ppb in the Loxahatchee National Wildlife Refuge, and 18 ppb in Water Conservation Area 2A; annual average flow-weighted from total phosphorus discharges from storm water treatment areas ranged from 13 ppb for area 3/4 and 98 ppb for area 1W.

Columbia River Basin

In 2008 Prevent water pollution, and improve and protect water quality and ecosystems in the Columbia River Basin to reduce risks to human health and the environment.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
<i>Acres of wetland habitat and acres of upland habitat protected, enhanced, or restored in the Columbia River Basin.</i>						3,000	Acres

Background: In 2005, 96,770 acres of wetland and upland habitat available for protection, enhancement or restoration.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2011, identify and synthesize the best available scientific information, models, methods, and analyses to support Agency guidance and policy decisions related to the health of people, communities, and ecosystems. Focus research on pesticides and chemical toxicology; global change; and comprehensive, cross-cutting studies of human, community, and ecosystem health.

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

Research

Research on Endocrine Disrupting Chemicals

In 2008 Increased use of endocrine disruptors research program products

In 2007 By 2007, develop improved protocols for screening and testing for the Agency's Endocrine Disruptors Screening Program and reduce scientific uncertainty on effects, exposure, and risk management issues

In 2006 By 2006, develop and transfer standardized protocols for screening chemicals for their potential effects on the endocrine system, so that EPA's Office of Prevention, Pesticides, and Toxic Substances has the necessary protocols to validate for use in the Agency's Endocrine Disruptors Screening Program, mandated by the Food Quality Protection Act, as determined by independent expert review.

In 2005 Increased use of endocrine disruptors research program products

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Improved protocols for screening and testing (Research)	2	2	1	1	6	1	Reports
Effects and exposure milestones met (Research)	5	5	9	9	4	3	Reports
Assessment milestones met (Research)	0	0	1	0	0	0	Reports
Risk management milestones met (Research)	5	5	3	3	3	2	Reports
Background:	In 2008, the program plans to accomplish its goals of completing 1) one report relating to improved protocols for screening and testing; 2) three reports related to effects and exposure; and 3) two reports related to risk management. In achieving these targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to the health of people, communities, and ecosystems, with regard to chemical toxicology.						

Homeland Security Research

In 2008 Enhance public health and safety and mitigate adverse effects of the purposeful introduction of hazardous chemical, biological, or radiological materials into the environment.

In 2007 Enhance public health and safety and mitigate adverse effects of the purposeful introduction of hazardous chemical, biological, or radiological materials into the environment.

In 2006 Provide methods, guidance documents, technologies and tools to first responders and decision-makers to enhance safety and to mitigate adverse effects of the purposeful introduction of hazardous chemical or biological materials into the environment.

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

In 2005 By FY 2005, provide tools, case studies, and technical guidance so that, by FY 2006, first responders and decision-makers will have the methods, guidance documents, and technologies to enhance safety and to mitigate adverse effects of the purposeful introduction of hazardous chemical or biological materials into the environment.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>Percentage of planned outputs delivered to support efficient and effective clean-ups and safe disposal of decontamination wastes. (Research)</i>					100	100	Percent
<i>Percentage of planned outputs delivered to support water security initiatives. (Research)</i>					100	100	Percent
<i>Percentage of planned outputs delivered to support risk assessors and decision-makers in the rapid assessment of risk and the determination of cleanup goals and procedures following contamination. (Research)</i>					100	100	Percent
<i>Percentage of planned outputs delivered in support of establishment of the environmental National Laboratory Response Network (Research)</i>					100	100	Percent

Background: EPA's homeland security research provides appropriate, effective, and rapid risk assessment guidelines and technologies to help decision-makers prepare for, detect, contain, and decontaminate building and water treatment systems against which chemical and/or biological attacks have been directed. The Agency intends to expand the state of the knowledge of potential threats, as well as its response capabilities, by assembling and evaluating private sector tools and capabilities so that preferred response approaches can be identified, promoted, and evaluated for future use by first responders, decision-makers, and the public. This APG will provide guidance documents for the restoration of buildings and water systems and the establishment of remediation goals. These products will enable first responders to better deal with threats to the public and the environment posed by the intentional release of toxic or infectious materials.

Human Health Research

In 2008 Increased use of human health research products

In 2007 Increased use of human health research products

In 2006 Increased use of human health research products

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

In 2005 By FY 2005, provide risk assessors and managers with methods and tools for measuring exposure and effects in children, and characterizing and reducing risks to children from environmental agents in schools so that, by 2014, EPA will be able to demonstrate why some groups of people, defined by life stage, genetic factors, and health status, are more vulnerable than others to adverse effects from exposure to environmental agents.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Percentage of planned outputs delivered in support of public health outcomes long-term goal. (Research)	100	100	100	100	100	100	Percent
Percentage of planned outputs delivered in support of mechanistic data long-term goal. (Research)	100	100	100	92	100	100	Percent
Percentage of planned outputs delivered in support of aggregate and cumulative risk long-term goal. (Research)	100	86	100	100	100	100	Percent
Percentage of planned outputs delivered in support of the susceptible subpopulations long-term goal. (Research)	100	100	100	100	100	100	Percent

Background: In FY 2008, the program plans to accomplish its goals of completing 100% of its planned outputs toward its four long-term goals. In achieving these targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to human health.

Global Change Research

In 2008 Increased use of global change research products

In 2007 Increased use of global change research products

In 2006 Increased use of global change research products

In 2005 Increased use of global change research products

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Percentage of planned outputs delivered. (Research)					Baseline	100	Percent
Percent progress toward completion of framework linking global change to air quality. (Research)	45	47.5	60	65	75	85	Percent

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

Background: In FY 2008, the program plans to accomplish its goal of completing and delivering 100% of its planned outputs. In achieving these targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to the health of people, communities, and ecosystems, with regard to global change.

Human Health Risk Assessment

In 2008 Increased use of human health risk assessment program products

In 2007 Increased use of human health risk assessment program products

In 2006 By 2006, deliver at least 20 dose-response assessments, provisional values, or pathogen risk assessments so that by 2010, at least 100 assessments have been made available through the Integrated Risk Information System (IRIS) database and other communications to EPA program offices, regions, states and Tribes providing the necessary information to predict risk and make risk management decisions that protect public health.

In 2005 Through FY2005, initiate or submit to external review 28 human health assessments and complete 12 human health assessments through the Integrated Risk Information System (IRIS). This information will improve EPA's and other decisionmakers' ability to protect the public from harmful chemical exposure

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Percentage of planned outputs delivered in support of Air Quality Criteria/Science Assessment documents. (Research)	N/A	100	N/A	100	90	90	Percent
Percentage of planned outputs delivered in support of HHRA health assessments. (Research)	N/A	80	N/A	100	90	90	Percent
Percentage of planned outputs delivered in support of HHRA Technical Support Documents. (Research)	N/A	44	N/A	81	90	90	Percent

Background: In FY 2008 the program plans to complete 90% of its planned outputs in support of HHRA health assessments, 90% of its planned outputs in support of Air Quality Criteria/Science Assessment documents, and 90% of its planned outputs in support of HHRA Technical Support Documents. In achieving these targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to the health of people, communities, and ecosystems.

Ecosystems Research

In 2008 Increased use of ecosystems research products

In 2007 Increased use of ecosystems research products

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

In 2006 Increased use of ecosystems research products

In 2005 By FY 2005, provide technical guidance for implementing and evaluating projects to restore riparian zones, which are critical landscape components for the restoration of aquatic ecosystems and water quality, so that, by 2010, watershed managers have state-of-the-science field-evaluated tools, technical guidance, and decision-support systems for selecting, implementing, and evaluating cost-effective and environmentally-sound approaches to restore ecosystem services as part of watershed management

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
Number of states using a common monitoring design and appropriate indicators to determine the status and trends of ecological resources and the effectiveness of national programs and policies. (Research)	20	22	25	25	30	35	States

Background: By FY 2008, the program expects that 35 states will use a common monitoring design and appropriate indicators to determine the status and trends of ecological resources and the effectiveness of national programs and policies. This will represent an increase of 13 states since FY 2005. In achieving its FY 2008 targets, the program will contribute to EPA's goal of providing scientifically sound guidance and policy decisions related to the health of ecosystems.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

GOAL 5: COMPLIANCE AND ENVIRONMENTAL STEWARDSHIP

Improve environmental performance through ensuring compliance with environmental requirements by enforcing environmental statutes, preventing pollution, and promoting environmental stewardship. Protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public that promote environmental stewardship and long-term sustainable outcomes.

OBJECTIVE: ACHIEVE ENVIRONMENTAL PROTECTION THROUGH IMPROVED COMPLIANCE

By 2011, maximize compliance to protect human health and the environment through enforcement and other compliance assurance activities by achieving a 5 percent increase in the pounds of pollution reduced, treated, or eliminated by regulated entities, including those in Indian country.

Monitoring and Enforcement

In 2008	Through monitoring and enforcement actions, EPA will increase complying actions, pollutant reduction or treatment, and improve environmental management practices.
In 2007	Through monitoring and enforcement actions, EPA will increase complying actions, pollutant reduction or treatment, and improve environmental management practices.
In 2006	Through monitoring and enforcement actions, EPA will increase complying actions, pollutant reduction or treatment, and improve environmental management practices.
In 2005	Through monitoring and enforcement actions, EPA will increase complying actions, pollutant reduction or treatment, and improve environmental management practices.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions. (civil enf)	300	1,100	450	890	500	550	Million Pounds
Percentage of concluded enforcement cases requiring that pollution be reduced, treated or eliminated (civil enf.)	30	28.8	30	Data Available 2008	30	30	Percentage
Percentage of concluded enforcement cases requiring	60	72.5	65	82	70	70	Percentage

GOAL 5: COMPLIANCE AND ENVIRONMENTAL STEWARDSHIP

PPA-79

Measures that are not currently used for the Office of Management and Budget's Program Assessment Rating Tool (PART) assessments appear in italics.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	Unit
	Target	Actual	Target	Actual	Pres Bud Target	Pres Bud Target	
implementation of improved environmental management practices.							
<i>Percentage of regulated entities taking complying actions as a result of on-site compliance inspections and evaluations.</i>	10	19	25	16	30	30	Percentage
<i>Dollars invested in improved environmental performance or improved environmental management practices as a result of concluded enforcement actions (i.e., injunctive relief and SEPs)</i>	4.0	10.0	4.1	5.0	4.2	4.3	Billion Dollars

Background: The FY 2004-2006 rolling average baseline for pounds of pollution reduced, treated, or eliminated is 997,000,000 pounds of pollutants. The FY 2006 baseline for the percentage of concluded enforcement cases requiring that pollutants be reduced, treated, or eliminated is the FY2005 result which is 28.8%. The reason for using the FY2005 result as the FY2006 baseline is due to the data lag in the FY2006 result. The FY2006 baseline for the percentage of concluded enforcement cases requiring implementation of improved environmental management practices is 82%. The FY 2006 baseline for the percentage of regulated entities taking complying actions as a result of on-site compliance inspections and evaluations is 16%. The FY 2004-2006 rolling average baseline for dollars invested in improved environmental performance or improved environmental management practices is \$6,600,000,000.

With the adoption of the Clean Air Interstate Rule, pollution reductions will move from an enforcement category to a regulatory category; therefore, the enforcement targets should not be expected to increase, although overall pollution reduction is certain to increase.

Compliance Incentives

In 2008	Identify and correct noncompliance and reduce environmental risks through an increase in the percent of facilities that use EPA incentive policies to conduct environmental audits or other actions that reduce, treat, or eliminate pollution or improve environmental management practices.
In 2007	Identify and correct noncompliance and reduce environmental risks through an increase in the percent of facilities that use EPA incentive policies to conduct environmental audits or other actions that reduce, treat, or eliminate pollution or improve environmental management practices.
In 2006	Through self-disclosure policies, EPA will increase the percentage of audits or other actions reducing pollutants or improving environmental management practices.
In 2005	Through self-disclosure policies, EPA will increase the percentage of audits or other actions reducing pollutants or improving EMP.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Pounds of pollutants reduced, treated, or eliminated, as a result of audit agreements.	0.25	1.9	0.4	0.05	0.4	0.4	Million Pounds

Background: The FY 2006 baseline for pounds of pollutants reduced, treated, or eliminated as a result of audit agreements is 0.05 million pounds of pollutants.

Compliance Assistance

In 2008	Prevent noncompliance or reduce environmental risks through EPA compliance assistance by achieving: an increase in the percent of regulated entities that improve their understanding of environmental requirements; an increase in the number of regulated entities that improve environmental management practices; and an increase in the percentage of regulated entities that reduce, treat, or eliminate pollution.
In 2007	Prevent noncompliance or reduce environmental risks through EPA compliance assistance by achieving: an increase in the percent of regulated entities that improve their understanding of environmental requirements; an increase in the number of regulated entities that improve environmental management practices; and an increase in the percentage of regulated entities that reduce, treat, or eliminate pollution.
In 2006	Through compliance assistance, EPA will increase the understanding of regulated entities, improve environmental management practices, and reduce pollutants.
In 2005	Through compliance assistance, EPA will increase the understanding of regulated entities, improve environmental management practices, and reduce pollutants.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
<i>Percentage of regulated entities receiving direct compliance assistance from EPA reporting that they improved EMP as a result of EPA assistance.</i>	50	51	50	74	50	50	Percentage
<i>Percentage of regulated entities receiving direct assistance from EPA reporting that they reduced, treated, or eliminated pollution, as a result of EPA assistance.</i>	25	13	15	28	15	15	Percentage

Background: The FY 2006 baseline for the percentage of regulated entities receiving direct compliance assistance from EPA reporting that they improved EMP as a result of EPA assistance is 74%. The FY 2006 baseline for the percentage of regulated entities receiving direct compliance assistance from EPA reporting that they reduced, treated, or eliminated pollution as a result of EPA compliance assistance is 28%.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

OBJECTIVE: IMPROVE ENVIRONMENTAL PERFORMANCE THROUGH POLLUTION PREVENTION AND INNOVATION

Improve Environmental Performance through Pollution Prevention and the Adoption of other Stewardship Practices that Lead to Sustainable Outcomes. By 2011, enhance public health and environmental protection and increase conservation of natural resources by promoting pollution prevention and the adoption of other stewardship practices by companies, communities, governmental organizations, and individuals.

Reducing PBTs in Hazardous Waste Streams

In 2008 Reduce pollution in business operations.

In 2007 Reduce pollution in business operations.

In 2006 Reduce pollution in business operations.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
Number of pounds (in millions) of priority chemicals reduced, as measured by National Partnership for Environmental Priorities members.					0.5	1.0	Pounds
Background:	The new performance measure reflects the fact that the National Partnership for Environmental Priorities (NPEP) has quadrupled its members and now has over 100 partners, who have removed more than one million pounds of priority chemicals from the environment. As of August 2006, the NPEP program had also obtained industry commitments for 2.1 million pounds of priority chemical reductions through the year 2011. Reductions will be achieved primarily through source reduction made possible by safer chemical substitutes.						

Innovation Activities

In 2008 75% of innovation projects completed under the State Innovation Grant (SIG) Program and through other piloting mechanisms will achieve, on average, an 8% or greater improvement in environmental results from a project initiation baseline measure for the sectors and facilities involved (e.g., reductions in air or water discharges, improvements in ambient water or air quality, or improvements in compliance rates), or a 5% or greater improvement in cost-effectiveness and efficiency.

In 2008 Performance Track facilities collectively will meet 3 of the 5 annual performance improvement targets for reducing, on a normalized basis, water use, hazardous materials use, production of greenhouse gases, toxic discharges to water and combined NOx, SOx, VOC and PM emissions.

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

In 2007 Performance Track facilities collectively will meet 4 of the 6 annual performance improvement targets for 3.7 billion gallons of water use, 16.3 million MMBTUs of energy use, 1,050 tons materials use, 460,000 tons of non-hazardous solid waste, 66,000 tons of air releases, and 12,400 tons of discharges to water.

In 2006 Performance Track members collectively will achieve an annual reduction of: 600 million gallons in water use; 2.5 million MMBTUs in energy use; 15,000 tons of solid waste; 20,000 tons materials reduced; 6,000 tons of air releases; and 10,000 tons in water discharges, compared with 2001 results.

In 2005 In 2005 Performance Track members collectively will achieve an annual reduction of 600 million gallons in water use; 2.5 million MMBTUs in energy use; 15,000 tons of solid waste; 6,000 tons of air releases; 10,000 tons in water discharges; and 15,000 tons of materials compared with 2001 results.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud Target	FY 2008 Pres Bud Target	Unit
	Target	Actual	Target	Actual			
<i>Reduce 3.7 billion gallons of water use; 16.3 million MMBTUs of energy use; 1,050 tons of materials use; 460,000 tons of solid waste; 66,000 tons of air releases; & 12,400 tons of water discharges.</i>					4		Media Reduction
<i>Reduce water use at Performance Track facilities.</i>						3,900,000,000	Gallons
<i>Reduce hazardous materials use at Performance Track facilities.</i>						10,000	Tons
<i>Reduce production of greenhouse gases at Performance Track facilities.</i>						175,000	MTCO2E
<i>Reduce toxic releases to water at Performance Track facilities.</i>						220	Tons
<i>Reduce combined NOx, SOx, VOC and PM emissions at Performance Track facilities.</i>						4,000	Tons
<i>75% of innovation projects completed under the State Innovation Grants program will achieve, on average, 8% or greater improvement in envtl results for sectors and facilities involved, or 5% or greater improvement in cost-effectiveness & efficiency.</i>						75	Percentage

Background: For Performance Track, the baseline year is 2001 for FY 2005, 2006, and 2007. Performance will be measured against the 2001 baseline annual reduction of 475 M gallons of water conserved, 0.24 million MMBTUs of energy conserved, 150,000 tons of solid waste reduced, 1,113 tons of air emissions reduced, 6,870 tons of water discharged, and -2,154 tons of materials reduced. For FY 2008, the baseline year is 2005. The 2005 baseline

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

annual normalized reductions are: 3,387,333,545 gallons of water reduced, 8,794 tons of hazardous materials reduced, 151,129 MTCO₂Es of greenhouse gas emissions reduced, 186 tons of toxic discharges to water reduced, and 3,533 tons of NO_x, SO_x, VOCs and PM emissions reduced.

EPA's State Innovation Grant program promotes the testing of innovative approaches in State environmental permitting programs. Individual projects are designed to test innovation that improves compliance rates, often within an entire business sector or across an entire permitting program, or improves the efficiency of permitting programs for either the regulated sector or the state environmental agency. Because each grant-supported project is unique, results can only be reported on a project-by project basis. EPA does not report program-wide results (e.g., total tons of air or water pollutants removed or prevented in a year) because not every project selected in a competition year focuses on a single environmental medium or pollutant. Rather, the EPA-funded projects help states test approaches that improve results, often in ways that address multi-media concerns. Similarly, these projects are demonstrations, or pilot tests of new approaches and the projects take 2-4 years to complete. Therefore, results for individual projects are reported at the end of each project. Results are usually described in terms such as an improvement in overall compliance rates at the end of a project above a baseline condition measured at the beginning of the project.

Reduction of Industrial / Commercial Chemicals

- In 2008 Prevent, reduce and recycle hazardous industrial/commercial chemicals and improve environmental stewardship practices.
- In 2007 Prevent, reduce and recycle hazardous industrial/commercial chemicals and municipal solid wastes.
- In 2005 Prevent, reduce and recycle hazardous industrial/commercial chemicals and improve environmental stewardship practices.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
<i>BTUs of energy reduced, conserved or offset by Pollution Prevention (P2) program participants.</i>					1,106,800	1,217,462	BTUs
<i>Gallons of water reduced by P2 program participants.</i>					1,790.1	1,640.4	Million Gallons
Business, institutional and government costs reduced by P2 program participants.					44.3	45.9	Million Dollars
Pounds of hazardous materials reduced by P2 program participants.					414	429.4	Million Pounds

Background: The baseline for the TRI non-recycled wastes measure is the amount of non-recycled wastes in 2001 reported FY2003. The baseline for eco-friendly detergents is 0 formulations in 1997. The baseline for the alternative feed stocks / processes measure is zero in 2000. The baseline for the quantity of hazardous chemicals / solvents measures is zero pounds in the year 2000. The baseline for the hospitals measure is zero in FY2001. The baseline reference point for reductions of pollution and conservation of BTUs and water is zero for 2003. The baseline for money saved will be 2003. The baseline for reduction in CO₂ will be zero for 1996. The baseline for the Clean and Green Index is 2001 levels. The baseline for chemical releases is

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

2001 level. The baseline for chemical production related wastes is 2001 level. Note: Several output measures were changed to internal-only reporting status in 2005. Annual Performance measures are under development for EPA's Environmentally Preferable Purchasing program for the FY2006 Annual Performance Plan.

OBJECTIVE: IMPROVE HUMAN HEALTH AND THE ENVIRONMENT IN INDIAN COUNTRY

Protect human health and the environment on tribal lands by assisting federally-recognized tribes to: build environmental management capacity; assess environmental conditions and measure results; and implement environmental programs in Indian country.

Tribal Environmental Baseline/Environmental Priority

In 2008	Protect human health and the environment on tribal lands by assisting federally recognized tribes to: build environmental capacity; assess environmental conditions and measure results; and implement environmental programs in Indian country.
In 2007	Assist federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.
In 2006	Assist federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.
In 2005	Assist federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	Unit
	Target	Actual	Target	Actual	Target	Target	
Percent of tribes with EPA-approved multimedia workplans.	39	33	18	33	42	45	% Tribes
Percent of tribes with delegated and non-delegated programs (cumulative).	44	47	5	42	49	50	% Tribes
Percent of Tribes with EPA-reviewed monitoring and assessment occurring.	25.0	29.0	20.0	30.8	31.0	31.0	% Tribes
Background:	There are 572 tribal entities that are eligible for GAP program funding. These entities are the ones for which environmental assessments of their lands will be conducted.						

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

ANNUAL PERFORMANCE GOALS AND MEASURES

Enabling Support Programs

NPM: OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT

Energy Consumption Reduction

- In 2008 As required by the Executive Order: Strengthening Federal Environment, Energy, and Transportation Management, EPA will achieve a 8% reduction in energy consumption from the Agency's 2003 baseline.
- In 2007 As required by the Executive Order: Strengthening Federal Environment, Energy, and Transportation Management, EPA will achieve a 5% reduction in energy consumption from the Agency's 2003 baseline.
- In 2006 As required by the Energy Policy Act of 2005, EPA will achieve a 2% reduction in energy consumption from the Agency's 2003 baseline.

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	
	Target	Actual	Target	Actual			
<i>Cumulative percentage reduction in energy consumption.</i>			2	2	5	8	Percent
Background:	On January 24, 2007, the President signed Executive Order: Strengthening Federal Environment, Energy, and Transportation Management, requiring all Federal Agencies to reduce its Green House Gas intensity and its energy use by 3% annually through FY 2015. For the Agency's 29 reporting facilities, the FY 2003 energy consumption of British Thermal Units (BTUs) per square foot is 346,518 BTUs per square foot.						

Human Capital

- In 2008 EPA will develop workforce planning strategies that link current and future Human Capital needs to mission accomplishments which will result in significant reductions in skill gaps for Mission Critical Occupations. In addition, EPA's recruitment strategy will focus on hiring needs that will encourage the use of hiring flexibilities, build on centralized and local recruitment approaches, and focus on attracting applicants who are talented, diverse, and committed to EPA's mission.
- In 2007 EPA will develop workforce planning strategies that link current and future Human Capital needs to mission accomplishments which will result in significant reductions in skill gaps for Mission Critical Occupations. In addition, EPA's recruitment strategy will focus on hiring needs that will encourage the use of hiring flexibilities, build on centralized and local recruitment approaches, and focus on attracting applicants who are talented, diverse, and committed to EPA's mission.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	
	Target	Actual	Target	Actual	Pres Bud	Pres Bud	
<i>Percent increase in the number of non-SES managers and supervisors at the targeted proficiency level (intermediate) for "Interpersonal Skills and Oral Communication".</i>					25	10	Percent
<i>Percent increase in the number of non-SES managers and supervisors at the targeted proficiency level (advanced) for "Interpersonal Skills and Oral Communication".</i>					15	15	Percent
Average time to hire non-SES positions from date vacancy closes to date offer is extended, expressed in working days.					45	45	Days
For SES positions, the average time from date vacancy closes to date offer is extended, expressed in working days.					90	73	Days

Background: Human capital performance measures and targets were selected from EPA's President's Management Agenda, Proud-To-Be, Human Capital annual goal setting and measurement program and from EPA's human capital accountability system.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

NPM: OFFICE OF ENVIRONMENTAL INFORMATION

Information Exchange Network

In 2008 Improve the quality, comparability, and availability of environmental data for sound environmental decision-making through the Central Data Exchange (CDX).

In 2007 Improve the quality, comparability, and availability of environmental data for sound environmental decision-making through the Central Data Exchange (CDX).

In 2006 Improve the quality, comparability, and availability of environmental data for sound environmental decision-making through the Central Data Exchange (CDX).

In 2005 Improve the quality, comparability, and availability of environmental data for sound environmental decision-making through the Central Data Exchange (CDX).

Performance Measures	FY 2005		FY 2006		FY 2007 Pres Bud	FY 2008 Pres Bud	
	Target	Actual	Target	Actual			
<i>Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data.</i>	12	22	29	32	36	43	Systems
<i>States, tribes and territories will be able to exchange data with CDX through nodes in real time, using standards and automated data-quality checking.</i>	40	40	Target Not Established	Target Not Established	Target Not Established	55	Users
<i>Number of users from states, tribes, laboratories, and others that choose CDX to report environmental data electronically to EPA.</i>	20,000	45,000	47,000	62,000	55,000	70,000	Users

Background: The Central Data Exchange program began in FY 2001.

Information Security

In 2008 OMB reports that all EPA information systems meet/exceed established standards for security.

In 2007 OMB reports that all EPA information systems meet/exceed established standards for security.

In 2006 OMB reports that all EPA information systems meet/exceed established standards for security.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

In 2005 OMB reports that all EPA information systems meet/exceed established standards for security.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	
	Target	Actual	Target	Actual	Pres Bud	Pres Bud	
<i>Percent of Federal Information Security Management Act reportable systems that are certified and accredited.</i>	75	90	100	100	100	100	Percent

Background: In FY 2002, the Agency started planning an effort to expand and strengthen its information security infrastructure.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

NPM: OFFICE OF THE INSPECTOR GENERAL

Fraud Detection and Deterrence

In 2008	In 2008, the OIG will improve public confidence and integrity in EPA program operations by detecting and preventing fraud, abuse and breaches of security.
In 2007	In 2007, OIG will improve public confidence and integrity in EPA program operations by detecting and preventing fraud, abuse and breaches of security.
In 2006	In 2006, the OIG will improve public confidence and integrity in EPA program operations by detecting and preventing fraud, abuse and breaches of security.
In 2005	In 2005, the OIG will improve Agency business and operations by identifying 800 recommendations, potential savings and recoveries equal to 150 percent of the annual investment in the OIG, 220 actions for better business operations, and 80 criminal, civil, or administrative actions reducing risk or loss of integrity.

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	
	Target	Actual	Target	Actual	Pres Bud	Pres Bud	
<i>Criminal, civil, administrative, and fraud prevention actions.</i>	80	125	80	121	80	70	Actions

Background: In FY 2005, the OIG established a baseline of 83 criminal, civil, administrative, and fraud prevention actions. Revised FY 2008 performance targets are reduced proportionally to the OIG FY 2008 Congressional Justification Budget level.

Audit and Advisory Services

In 2008	In 2008, the OIG will contribute to human health and environmental quality through audits, evaluations, advisory services, inspections, and investigations for improved Agency business practices, accountability, and performance.
In 2007	In 2007, the OIG will contribute to human health and environmental quality through audits, evaluations, advisory services, inspections, and investigations for improved Agency business practices, accountability, and performance.
In 2006	In 2006, the OIG will contribute to human health and environmental quality through audits, evaluations, advisory services, inspections, and investigations for improved Agency business practices, accountability, and performance.
In 2005	In 2005, the OIG will contribute to improved environmental quality and human health by identifying 95 environmental recommendations, best practices, risks, or opportunities for improvement; contributing to the reduction or elimination of 23 environmental or infrastructure security risks; and 45 actions influencing environmental improvements or program changes.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Performance Measures	FY 2005		FY 2006		FY 2007	FY 2008	
	Target	Actual	Target	Actual	Pres Bud	Pres Bud	
<i>Environmental and business actions taken for improved performance or risk reduction.</i>	288	794	303	407	318	291	Actions
<i>Environmental and business recommendations or risks identified for corrective action.</i>	895	1,231	925	1,024	955	805	Recommendations
Return on the annual dollar investment, as a percentage of the OIG budget, from audits and investigations.	150	285	150	1,100	150	100	Percentage

Background: In FY 2005, the OIG established a revised baseline of 564 environmental and business actions taken for improved performance or risk reduction; 885 environmental and business risks or recommendations identified for corrective action; and 150% in potential dollar return on investment as a percentage of OIG budget, from savings, questioned costs, fines, recoveries, and settlements. The baselines increased because the OIG began including the non-monetary results of "Single Audits" and audits performed for the OIG in its targets and results by acknowledging the increasing number and significance of actionable recommendations in these audits to improve the management of assistance agreements. Revised FY 2008 performance targets are reduced proportionally to the OIG FY 2008 Congressional Justification Budget level.

Environmental Protection Agency
2008 Annual Performance Plan and Congressional Justification

Table of Contents - Appendix

Coordination with Other Federal Agencies - Environmental Programs	1
Coordination with Other Federal Agencies - Enabling Support Programs	29
Major Management Challenges	34
EPA User Fee Program	50
Working Capital Fund	53
Acronyms for Statutory Authorities	54
STAG Categorical Program Grants – Statutory Authority and Eligible Uses	59
Program Projects by Appropriation	69
Long Term Initiatives	82
Expected Benefits of the President’s E-Government Initiatives	85
Discontinued Programs	94
Research: Environmental Technology Verification (ETV)	95
Research SITE Program.....	97
Categorical Grant: Wastewater Operator Training	98
Categorical Grant: Water Quality Cooperative Agreements	99

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

COORDINATION WITH OTHER FEDERAL AGENCIES

ENVIRONMENTAL PROGRAMS

Goal 1- Clean Air and Global Climate Change

Objective: Healthier Outdoor Air

The Environmental Protection Agency (EPA) cooperates with other Federal, state, Tribal, and local agencies in achieving goals related to ground level ozone and PM. EPA continues to work closely with the Department of Agriculture and the Forest Service in developing its burning policy and reviewing practices that can reduce emissions. EPA, the Department of Transportation (DOT), and the Army Corps of Engineers (COE) work with state and local agencies to integrate transportation and air quality plans, reduce traffic congestion, and promote livable communities. EPA continues to work with the Department of the Interior (DOI), National Park Service (NPS), in developing its regional haze program and deploying the IMPROVE visibility monitoring network. The operation and analysis of data produced by the particulate matter (PM) monitoring system is an example of the close coordination of effort between the EPA and state and Tribal governments.

For pollution assessments and transport, EPA is working with the National Aeronautics and Space Administration (NASA) on technology transfer using satellite imagery. EPA will be working to further distribute NASA satellite products to and NOAA air quality forecast products to Regions, states, local agencies, and Tribes to provide better understanding of air quality on a day-to-day basis and to assist with PM forecasting. EPA will also work with NASA to develop a better understanding of PM formation using satellite data. EPA works with the Department of the Army, Department of Defense (DoD) on advancing emission measurement technology and with the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce for meteorological support for our modeling and monitoring efforts.

To better understand the magnitude, sources, and causes of mobile source pollution, EPA works with the Departments of Energy (DOE) and DOT to fund research projects. A program to characterize the exhaust emissions from light-duty gasoline vehicles is being co-funded by DOE and DOT. Other DOT mobile source projects include TRANSIMS (TRANSPORTATION ANALYSIS and SIMULATION System) and other transportation modeling projects; DOE is funding these projects through the National Renewable Energy Laboratory. EPA also works closely with DOE on refinery cost modeling analyses and the development of clean fuel programs. For mobile sources program outreach, the Agency is participating in a collaborative effort with DOT's Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) designed to educate the public about the impacts of transportation choices on traffic congestion, air quality, and human health. This community-based public education initiative also includes the Centers for Disease Control (CDC). In addition, EPA is working with DOE to identify opportunities in the Clean Cities program. EPA also works with other Federal agencies such as the U.S. Coast Guard (USCG) on air emission issues. Other programs targeted to reduce air toxics from mobile sources are coordinated with DOT. These partnerships can involve policy assessments and toxic emission reduction strategies in different regions of the country.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

To develop new continuous source monitoring technology for toxic metals emitted from smokestacks, EPA has partnered with the DoD. This partnership will provide a new source monitoring tool that will streamline source monitoring requirements that a number of DoD incinerators are required to meet and improve the operation of DoD incinerators with real-time emissions information resulting in reduced releases of air toxics to the environment. In time, this technology is expected to be available for use at non-DoD facilities.

For the clean fuel programs, EPA works closely with the DOE on refinery cost modeling analyses. For mobile sources program outreach, the Agency is participating in a collaborative effort with FHWA and FTA designed to educate the public about the impacts of transportation choices on traffic congestion, air quality, and public health. This community-based public education initiative also includes the CDC. In addition, EPA works with DOE to identify opportunities in the Clean Cities program. EPA also works cooperatively with DOE to better characterize gasoline PM emissions and characterize the contribution of gasoline vehicles and engine emissions to ambient PM levels.

To reduce air toxic emissions that do not inadvertently increase worker exposures, EPA is continuing to work closely with the Department of Labor's Occupational Safety and Health Administration (OSHA) to coordinate the development of EPA and OSHA standards. EPA also works closely with other health agencies such as the CDC, the National Institute of Environmental Health Sciences (NIEHS), and the National Institute for Occupational Safety and Health on health risk characterization. To assess atmospheric deposition and characterize ecological effects, EPA works with NOAA and the Department of the Interior's U.S. Fish and Wildlife Service (USFWS).

The Agency has worked extensively with the Department of Health and Human Services (HHS) on the National Health and Nutritional Evaluation Study to identify mercury accumulations in humans. EPA also has worked with DOE on the 'Fate of Mercury' study to characterize mercury transport and traceability in Lake Superior.

To determine the extent to which agricultural activities contribute to air pollution, EPA will continue to work closely with the USDA through the joint USDA/EPA Agricultural Air Quality Task Force (AAQTF). The AAQTF is a workgroup set up by Congress to oversee agricultural air quality-related issues and to develop cost-effective ways in which the agricultural community can improve air quality. In addition, the AAQTF coordinates research on agricultural air quality issues to avoid duplication and ensure data quality and sound interpretation of data.

In developing regional and international air quality programs and projects and working on regional agreements, EPA works primarily with the Department of State, the Agency for International Development (USAID), and the DOE as well as with regional organizations. EPA's international air quality management program will complement EPA's programs on children's health, Trade and the Environment, and trans-boundary air pollution. In addition, EPA will partner with others worldwide, including international organizations such as the United Nations Environment Programme, the European Union, the Organization for Economic Development and Co-operation (OECD), the North American Commission for Environmental

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Cooperation (CEC), the World Bank, the Asian Development Bank, and our colleagues in Canada, Mexico, Europe, and Japan. EPA is working with DOE and USTR under the CEC to promote renewable energy markets in North America.

Objective: Healthier Indoor Air

EPA works closely through a variety of mechanisms with a broad range of Federal, state, Tribal, and local government agencies, industry, non-profit organizations, and individuals, as well as other nations, to promote more effective approaches to identifying and solving indoor air quality problems. At the Federal level, EPA works closely with several departments or agencies:

- Department of Health and Human Services (HHS) to develop and conduct programs aimed at reducing children's exposure to known indoor triggers of asthma, including secondhand smoke;
- Department of Housing and Urban Development (HUD) on home health and safety issues, especially those affecting children;
- Consumer Product Safety Commission (CPSC) to identify and mitigate the health hazards of consumer products designed for indoor use;
- Department of Education (DoEd) to encourage construction and operation of schools with good indoor air quality; and
- Department of Agriculture (USDA) to encourage USDA Extension Agents to conduct local projects designed to reduce risks from indoor air quality. EPA plays a leadership role on the President's Task Force on Environmental Health Risks and Safety Risks to Children, particularly with respect to asthma and school environmental health issues.

As Co-chair of the interagency Committee on Indoor Air Quality (CIAQ), EPA works with the CPSC, DOE, the National Institute for Occupational Safety and Health, and OSHA to review EPA draft publications, arrange the distribution of EPA publications, and coordinate the efforts of Federal agencies with those of state and local agencies concerned with indoor air issues.

Objective: Protect the Ozone Layer

In an effort to curb the illegal importation of ozone depleting substances (ODSs), an interagency task force was formed consisting of representatives from EPA, the Departments of Justice (DOJ), Department of Homeland Security (DHS), Department of State, Department of Commerce, and the Internal Revenue Service (IRS). Venting of illegally imported chemicals has the potential to prevent the United States from meeting the goals of the Montreal Protocol to restore the ozone layer.

EPA works very closely with the Department of State and other Federal agencies as appropriate in international negotiations among Parties to the Protocol. EPA works with the Office of the United States Trade Representative to analyze potential trade implications in stratospheric protection regulations that affect imports and exports.

EPA is working with USDA and the Department of State to facilitate research and development of alternatives to methyl bromide. EPA collaborates with these agencies to prepare U.S. requests for emergency and critical use exemptions of methyl bromide. EPA is providing input to USDA

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

on rulemakings for methyl bromide-related programs. EPA consults with the Food and Drug Administration (FDA) on the potential for domestic methyl bromide needs.

EPA also coordinates closely with FDA to ensure that sufficient supplies of chlorofluorocarbons (CFCs) are available for the production of life-saving metered-dose inhalers for the treatment of asthma and other lung diseases. This partnership between EPA and FDA combines the critical goals of protecting public health and limiting damage to the stratospheric ozone layer.

EPA works with the CDC and the National Weather Service (NWS) to coordinate the Ultraviolet Radiation (UV) Index and the health messages that accompany index reports. EPA is a member of the Federal Council on Skin Cancer Prevention, which educates and protects all Federal employees from the risks of overexposure to UV radiation.

In addition to collecting its own UV data, EPA coordinates with NASA and NOAA to monitor the state of the stratospheric ozone layer. EPA works with NASA on assessing essential uses and other exemptions for critical shuttle and rocket needs, as well as effects of direct emissions of high-speed aircraft flying in the stratosphere.

EPA coordinates with the Small Business Administration (SBA) to ensure that proposed rules are developed in accordance with the Small Business Regulatory Flexibility Act.

Objective: Radiation

In addition to the specific activities described above, EPA continues to work with Federal agencies including Nuclear Regulatory Commission (NRC), DOE, and DHS to prevent metals and finished products suspected of having radioactive contamination from entering the country. EPA also works with the DOT on initiatives to promote use of non-nuclear density gauges for highway paving, and with the DOE and NRC to develop state-of-the-art tracking systems for radioactive sources in U.S. commerce.

Objective: Reduce Greenhouse Gas Intensity

Voluntary climate protection programs government-wide stimulate the development and use of renewable energy technologies and energy efficient products that will help reduce greenhouse gas emissions. The effort is led by EPA and DOE with significant involvement from USDA, HUD and the National Institute of Standards and Technology (NIST).

Agencies throughout the government make significant contributions to the climate protection programs. For example, DOE will pursue actions such as promoting the research, development, and deployment of advanced technologies (for example, renewable energy sources). The Treasury Department will administer proposed tax incentives for specific investments that will reduce emissions. EPA is working with DOE to demonstrate technologies that oxidize ventilation air methane from coal mines. EPA is broadening its public information transportation choices campaign as a joint effort with DOT. EPA coordinates with each of the above-mentioned agencies to ensure that our programs are complementary and in no way duplicative.

This coordination is evident in work recently completed by an interagency task force, including representatives from the Department of State, EPA, DOE, USDA, DOT, Office of Management and Budget (OMB), Department of Commerce, USGCRP, NOAA, NASA, and the DoD, to

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

prepare the Third National Communication to the Secretariat as required under the Framework Convention on Climate Change (FCCC). The FCCC was ratified by the United States Senate in 1992. A portion of the Third National Communication describes policies and measures (such as ENERGY STAR and EPA's Clean Automotive Technology initiative) undertaken by the U.S. to reduce greenhouse gas emissions, implementation status of the policies and measures, and their actual and projected benefits. One result of this interagency review process has been a refinement of future goals for these policies and measures which were communicated to the Secretariat of the FCCC in 2002. The "U.S. Climate Action Report 2002: Third National Communication of the United States of America under the United Nations Framework Convention on Climate Change" is available at: <http://unfccc.int/resource/docs/natc/usnc3.pdf>.

EPA works primarily with the Department of State, USAID and DOE as well as with regional organizations in implementing climate-related programs and projects. In addition, EPA partners with others worldwide, including international organizations such as the United Nations Environment Programme, the United Nations Development Programme, the International Energy Agency, the OECD, the World Bank, the Asian Development Bank, and our colleagues in Canada, Mexico, Europe and Japan.

Objective: Enhance Science and Research

EPA works with the National Park Service in operating Clean Air Status and Trends Network (CASTNET). In addition, DOE will pursue actions such as promoting the research, development, and deployment of advanced technologies (for example, renewable energy sources). In the case of fuel cell vehicle technology, EPA is working closely with DOE as the Administration's FreedomCAR initiative develops, taking the lead on emissions-related issues.

EPA coordinates its air quality research with other Federal agencies through the Subcommittee on Air Quality Research¹ of the NSTC Committee on Environment and Natural Resources (CENR). The Agency and NIEHS co-chaired the subcommittee's Particulate Matter Research Coordination Working Group, which produced a strategic plan² for Federal research on the health and environmental effects, exposures, atmospheric processes, source characterization and control of fine airborne particulate matter. The Agency is also a charter member of NARSTO,³ an international public-private partnership established in 1995 to improve management of air quality across North America. EPA coordinates specific research projects with other Federal agencies where appropriate and supports air-related research at universities and nonprofit organizations through its Science to Achieve Results (STAR) research grants program.

Goal 2- Clean and Safe Water

Objective: Protect Human Health

The 1996 SDWA amendments include a provision that mandates joint EPA/CDC study of waterborne diseases and occurrence studies in public water supplies. CDC is involved in

¹ For more information, see <<http://www.al.noaa.gov/AQRS/>>.

² For more information, see <<http://www.al.noaa.gov/AQRS/reports/srppm.html>>.

³ For more information, see <<http://www.narsto.org/>>.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

assisting EPA in training health care providers (doctors, nurses, public health officials, etc.) on public health issues related to drinking water contamination and there is close CDC/EPA coordination on research on microbial contaminants in drinking water. EPA has in place a MOU and an Interagency Agreement (IAG) with the CDC to implement this provision.

In implementing its source water assessment and protection efforts, the Agency coordinates many of its activities with other Federal agencies. There are three major areas of relationships with other agencies concerning source water assessments and protection.

Public Water Systems (PWS)

Some Federal agencies, (i.e., USDA (Forest Service), DoD, DOE, DOI/NPS, and USPS), own and operate public water systems. EPA's coordination with these agencies focuses primarily on ensuring that they cooperate with the states in which their systems are located, and that they are accounted for in the states' source water assessment programs as mandated in the 1996 amendments to the SDWA.

Data Availability, Outreach and Technical Assistance

EPA coordinates with USGS, USDA (Forest Service, Natural Resources Conservation Service, Cooperative State Research, Education, and Extension Service (CSREES), Rural Utilities Service); DOT, DoD, DOE, DOI (NPS and Bureau of Indian Affairs (BIA), Land Management, and Reclamation); HHS (Indian Health Service) and the Tennessee Valley Authority (TVA).

Tribal Access Coordination

EPA will continue to work with other Federal agencies to develop a coordinated approach to improving Tribal access to safe drinking water. In response to commitments made during the 2002 World Summit in Johannesburg, the EPA committed to the goal of coordinating with other Federal agencies to reduce by half the number of households on Tribal lands lacking access to safe drinking water by 2015. United Nations. 2002. *Report of the World Summit on Sustainable Development: Johannesburg, South Africa, 26 August – 4 September, 2002*. New York, NY: United Nations.

Collaboration with USGS

EPA and USGS have identified the need to engage in joint, collaborative field activities, research and testing, data exchange, and analyses, in areas such as the occurrence of unregulated contaminants, the environmental relationships affecting contaminant occurrence, evaluation of currently regulated contaminants, improved protection area delineation methods, laboratory methods, and test methods evaluation. EPA has an IAG with USGS to accomplish such activities. This collaborative effort has improved the quality of information to support risk management decision-making at all levels of government, generated valuable new data, and eliminated potential redundancies.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Collaboration with Public and Private Partners on Critical Water Infrastructure Protection

EPA coordinates with other Federal agencies, primarily DHS, CDC, FDA and DoD on biological, chemical, and radiological contaminants, and how to respond to their presence in drinking water and wastewater systems. A close linkage with the FBI, particularly with respect to ensuring the effectiveness of the ISAC, will be continued. The Agency is strengthening its working relationships with the American Water Works Association Research Foundation, the Water Environment Research Federation and other research institutions to increase our knowledge on technologies to detect contaminants, monitoring protocols and techniques, and treatment effectiveness.

Collaboration with FDA

EPA and FDA have issued joint national fish consumption advisories to protect the public from exposure to mercury in commercially and recreationally caught fish, as well as fish caught for subsistence. EPA's advisory covers the recreational and subsistence fisheries in fresh waters where states and Tribes have not assessed the waters for the need for an advisory. *ibid.* <http://map1.epa.gov/html/federaladv> FDA's advisory covers commercially caught fish, and fish caught in marine waters. *Ibid.* <http://map1.epa.gov/html/federaladv> EPA works closely with FDA to distribute the advisory to the public. In addition, EPA works with FDA to investigate the need for advisories for other contaminants and to ensure that these federal advisories support and augment advisories issued by states and Tribes.

Beach Monitoring and Public Notification

The BEACH Act requires that all Federal agencies with jurisdiction over coastal and Great Lakes recreation waters adjacent to beaches used by the public implement beach monitoring and public notification programs. These programs must be consistent with guidance published by EPA. *ibid.* "National Beach Guidance and Required Performance Criteria for Grants." EPA will continue to work with the USGS and other Federal agencies to ensure that their beach water quality monitoring and notification programs are technically sound and consistent with program performance criteria published by EPA.

Objective: Protect Water Quality

Watersheds

Protecting and restoring watersheds will depend largely on the direct involvement of many Federal agencies and state, Tribal and local governments who manage the multitude of programs necessary to address water quality on a watershed basis. Federal agency involvement will include USDA (Natural Resources Conservation Service, Forest Service, Agriculture Research Service), DOI (Bureau of Land Management, Office of Surface Mining, USGS, USFWS, and the Bureau of Indian Affairs), NOAA, DOT, and DoD (Navy and COE). At the state level, agencies involved in watershed management typically include departments of natural resources or the environment, public health agencies, and forestry and recreation agencies. Locally, numerous agencies are involved, including Regional planning entities such as councils of governments, as

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

well as local departments of environment, health and recreation who frequently have strong interests in watershed projects.

National Pollutant Discharge Elimination System Program (NPDES)

Since inception of the NPDES program under Section 402 of the CWA, EPA and the authorized states have developed expanded relationships with various Federal agencies to implement pollution controls for point sources. EPA works closely with USFWS and the National Marine Fisheries Service on consultation for protection of endangered species through a Memorandum of Agreement. EPA works with the Advisory Council on Historic Preservation on National Historic Preservation Act implementation. EPA and the states rely on monitoring data from USGS to help confirm pollution control decisions. The Agency also works closely with SBA and the Office of Management and Budget (OMB) to ensure that regulatory programs are fair and reasonable. The Agency coordinates with the NOAA on efforts to ensure that NPDES programs support coastal and national estuary efforts; and with the DOI on mining issues.

Joint Strategy for Animal Feeding Operations

The Agency is working closely with the USDA to implement the Unified National Strategy for Animal Feeding Operations finalized on March 9, 1999. The Strategy sets forth a framework of actions that USDA and EPA will take to minimize water quality and public health impacts from improperly managed animal wastes in a manner designed to preserve and enhance the long-term sustainability of livestock production. EPA's recent revisions to the CAFO Regulations (effluent guidelines and NPDES permit regulations) will be a key element of EPA and USDA's plan to address water pollution from CAFOs. EPA and USDA senior management meet routinely to ensure effective coordination across the two agencies.

Clean Water State Revolving Fund (CWSRF)

Representatives from EPA's SRF program, HUD's Community Development Block Grant program, and USDA's Rural Utility Service have signed a MOU committing to assisting state or Federal implementers in: (1) coordination of the funding cycles of the three Federal agencies; (2) consolidation of plans of action (operating plans, intended use plans, strategic plans, etc.); and (3) preparation of one environmental review document, when possible, to satisfy the requirements of all participating Federal agencies. A coordination group at the Federal level has been formed to further these efforts and maintain lines of communication. In many states, coordination committees have been established with representatives from the three programs. In implementation of the Indian set-aside grant program under Title VI of the CWA, EPA works closely with the Indian Health Service to administer grant funds to the various Indian Tribes, including determination of the priority ranking system for the various wastewater needs in Indian Country. In 1998, EPA and the Rural Utilities Service of the USDA formalized a partnership between the two agencies to provide coordinated financial and technical assistance to Tribes.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Nonpoint Sources

EPA will continue to work closely with its Federal partners to achieve our goals for reducing pollutant discharges from nonpoint sources, including reduction targets for sediments, nitrogen and phosphorous. Most significantly, EPA will continue to work with the USDA, which has a key role in reducing sediment loadings through its continued implementation of the Environmental Quality Incentives Program, Conservation Reserve Program, and other conservation programs. USDA also plays a major role in reducing nutrient discharges through these same programs and through activities related to the AFO Strategy. EPA will also continue to work closely with the Forest Service and Bureau of Land Management especially on the vast public lands that comprise 29 percent of all land in the United States. EPA will work with these agencies, USGS, and the states to document improvements in land management and water quality.

EPA will also work with other Federal agencies to advance a watershed approach to Federal land and resource management to help ensure that Federal land management agencies serve as a model for water quality stewardship in the prevention of water pollution and the restoration of degraded water resources. Implementation of a watershed approach will require coordination among Federal agencies at a watershed scale and collaboration with states, Tribes and other interested stakeholders.

Vessel Discharges

Regarding vessel discharges, EPA will continue working closely with the USCG on addressing ballast water discharges domestically, and with the interagency work group and U.S. delegation to Marine Environmental Protection Committee (MEPC) on international controls. EPA will continue to work closely with the USCG, Alaska and other states, and the International Council of Cruise Lines regarding regulatory and non-regulatory approaches to managing wastewater discharges from cruise ships. EPA will also continue to work with the Coast Guard regarding the vessel sewage discharge standards and with the Navy on developing Uniform National Discharge Standards for Armed Forces vessels. Regarding dredged material management, EPA will continue to work closely with the COE on standards for permit review, as well as site selection/designation and monitoring.

OIA also serves as the primary point-of-contact and liaison with USAID. Specially drawing on expertise from throughout EPA, OIA administers a number of interagency agreements for environmental assistance.

EPA works closely with a number of other Federal agencies with environmental, health, or safety mandates. These include (among others) the DOL, DOT, USDA, DOI, HHS and FDA.

EPA works with the Department of State, NOAA, USCG, Navy, and other Federal agencies in developing the technical basis and policy decisions necessary for negotiating global treaties concerning marine antifouling systems, invasive species, and air pollution from ships. EPA also works with the same Agencies in addressing land-based sources of marine pollution in the Gulf of Mexico and Wider Caribbean Basin.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Objective: Enhance Science and Research

While EPA is the Federal agency mandated to ensure safe drinking water, other Federal and non-Federal entities are conducting research that complements EPA's research program on priority contaminants in drinking water. For example, the CDC and NIEHS conduct health effects and exposure research. FDA also performs research on children's risks. Many of these research activities are being conducted in collaboration with EPA scientists. The private sector, particularly the water treatment industry, is conducting research in such areas as analytical methods, treatment technologies, and the development and maintenance of water resources. Cooperative research efforts have been ongoing with the American Water Works Association Research Foundation and other stakeholders to coordinate drinking water research. EPA is also working with USGS to evaluate performance of newly developed methods for measuring microbes in potential drinking water sources.

EPA has developed joint research initiatives with NOAA and USGS for linking monitoring data and field study information with available toxicity data and assessment models for developing sediment criteria.

EPA is also working with other agencies (FDA, USGS, USDA, NOAA, CDC) on new contaminants of concern in the environment. EPA and others are gathering information on the occurrence, health and ecological effects, and is developing techniques to measure these emerging contaminants in water, fish tissue and biosolids. These emerging contaminants include pharmaceuticals and personal care products (PPCPs), endocrine disrupting compounds (EDCs), polybrominated diphenyl ether flame retardants (PBDEs), perfluorooctanoate (PFOA), nanomaterials, and prions. Data gaps are being identified for further research into whether there is a link between specific contaminants and adverse impacts to humans or aquatic organisms.

The issue of eutrophication, hypoxia, and harmful algal blooms (HABs) is a priority with the Committee on Environment and Natural Resources (CENR). EPA is working closely with NOAA on the issue of nutrients and risks posed by HABs. The CENR is also coordinating the research efforts among Federal agencies to assess the impacts of nutrients and hypoxia in the Gulf of Mexico.

Urban wet weather flow research is being coordinated with other organizations such as the Water Environment Research Foundation's Wet Weather Advisory Panel, the ASCE Urban Water Resources Research Council, the COE, and USGS. Research on the characterization and management of pollutants from agricultural operations (*e.g.*, CAFOs) is being coordinated with USDA through workshops and other discussions.

EPA is pursuing collaborative research projects with the USGS to utilize water quality data from urban areas obtained through the USGS National Ambient Water Quality Assessment (NAWQA) program, showing levels of pesticides that are even higher than in many agricultural area streams. These data have potential uses for identifying sources of urban pesticides, and EPA will evaluate how the USGS data could be integrated into the Geographic Information System (GIS) database system.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Goal 3-Land Preservation and Restoration

Objective: Preserve Land

Pollution prevention activities entail coordination with other Federal departments and agencies. EPA coordinates with the General Services Administration (GSA) on the use of safer products for indoor painting and cleaning, with the Department of Defense (DoD) on the use of safer paving materials for parking lots, and with the Defense Logistics Agency on safer solvents. The program also works with the National Institute of Standards and Technology and other groups to develop standards for Environmental Management Systems.

In addition to business, industry, and other non-governmental organizations, EPA works with Federal, state, Tribal, and local governments to encourage reduced generation and safe recycling of wastes. Partners in this effort include the Environmental Council of States and the Association of State and Territorial Solid Waste Management Officials.

The Federal government is the single largest potential source for “green” procurement in the country, for office products as well as products for industrial use. EPA works with the Office of Federal Environmental Executive and other Federal agencies and departments in advancing the purchase and use of recycled-content and other “green” products. In particular, the Agency is currently engaged with other organizations within the Executive Branch to foster compliance with Executive Order 13101 and in tracking and reporting purchases of products made with recycled contents.

In addition, the Agency is currently engaged with the DoD, the Department of Education, the Department of Energy (DOE), the U.S. Postal Service, and other agencies to foster proper management of surplus electronics equipment, with a preference for reuse and recycling. With these agencies, and in cooperation with the electronics industry, EPA and the Office of the Federal Environmental Executive launched the Federal Electronics Challenge which will lead to increased reuse and recycling of an array of computers and other electronics hardware used by civilian and military agencies.

Objective: Restore Land

Superfund Remedial Program

The Superfund Remedial program coordinates with several other Federal and state agencies in providing numerous Superfund related services in order to accomplish the program’s mission. In FY 2008, EPA will have active interagency agreements with the National Oceanic and Atmospheric Administration and the Department of the Interior (DOI).

The Corps of Engineers and the Bureau of Reclamation also contribute to the cleanup of Superfund sites by providing technical support for the design and construction of many remediation projects through site-specific interagency agreements. These Federal partners have the technical design and construction expertise and contracting capability needed to assist EPA regions in implementing most of Superfund’s high-cost fund-financed remedial action projects.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

The two agencies also provide technical on-site support to Regions in the enforcement oversight of numerous construction projects performed by Potentially Responsible Parties (PRPs).

Superfund Federal Facilities Program

The Superfund Federal Facilities Program coordinates with Federal agencies, states, Tribes and state associations and others to implement its statutory responsibilities to ensure cleanup and property reuse. The Program provides technical and regulatory oversight at Federal facilities to ensure human health and the environment are protected.

In expediting the DOE's cleanup program, DOE has signed IAGs with EPA for technical input regarding innovative and flexible regulatory approaches, streamlining of documentation, integration of projects, deletion of sites from the National Priorities List (NPL), field assessments, and development of management documents and processes. The IAGs have received recognition by DOE as a model for potential use at other DOE field offices.

Resource Conservation and Recovery Act

The Agency coordinates efforts with the DOE to study the energy and environmental benefits of re-refining used oil, including such actions as providing tax incentives for re-refiners, banning used oil in space heaters, and directing the federal government to send its used oil to re-refiners.

The RCRA Permitting and Corrective Action Programs also coordinate closely with other Federal agencies, primarily the DoD and DOE, which have many sites in the corrective action universe. Encouraging Federal facilities to meet the RCRA Corrective Action program's goals remains a top priority.

Leaking Underground Storage Tanks

EPA, with very few exceptions, does not perform the cleanup of leaking underground storage tanks (LUST). States and territories use the LUST Trust Fund to administer their corrective action programs, oversee cleanups by responsible parties, undertake necessary enforcement actions, and pay for cleanups in cases where a responsible party cannot be found or is unwilling or unable to pay for a cleanup.

States are key to achieving the objectives and long-term strategic goals. Except in Indian Country, EPA relies on state agencies to implement the LUST Program, including overseeing cleanups by responsible parties and responding to emergency LUST releases. LUST cooperative agreements awarded by EPA are directly given to the states to assist them in implementing their oversight and programmatic role.

Emergency Preparedness and Response

EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil pose to human health and the environment. This requires continuous coordination with many Federal, state and local agencies. As the Federal On-Scene Coordinator

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

in the inland zone, EPA evaluates and responds to thousands of releases annually as part of the National Response System (NRS). The organizations in the NRS work with state and local officials to develop and maintain contingency plans to enable the Nation to respond effectively to hazardous substance and oil emergencies.

The National Response Plan (NRP), under the direction of the Department of Homeland Security (DHS), provides for the delivery of Federal assistance to states to help them deal with the consequences of terrorist events as well as natural and other significant disasters. EPA maintains the lead responsibility for the NRP's Emergency Support Function covering inland hazardous materials and petroleum releases and participates in the Federal Emergency Support Function Leaders Group which addresses NRP planning and implementation at the operational level.

EPA coordinates its preparedness activities with DHS, FEMA, the Federal Bureau of Investigation, and other Federal agencies, states and local governments. EPA will continue to clarify its roles and responsibilities to ensure that Agency security programs are consistent with the national homeland security strategy.

Oil Spills

Under the Oil Spill Program, EPA works with other Federal agencies such as U.S. Fish and Wildlife Service, the U.S. Coast Guard (USCG), NOAA, FEMA, DOI, DOT, DOE, and other Federal agencies and states, as well as with local government authorities to develop Area Contingency Plans. The Department of Justice also provides assistance to agencies with judicial referrals when enforcement of violations becomes necessary. In FY 2008, EPA will have an active interagency agreement with the USCG. EPA and the USCG work in coordination with other Federal authorities to implement the National Preparedness for Response Program.

Objective: Enhance Science and Research

EPA expends substantial effort coordinating its research with other Federal agencies, including work with DoD in its Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program, DOE and its Office of Health and Environmental Research. EPA also conducts collaborative laboratory research with DoD, DOE, DOI (particularly the USGS), and NASA to improve characterization and risk management options for dealing with subsurface contamination.

The Agency is also working with NIEHS, which manages a large basic research program focusing on Superfund issues, to advance fundamental Superfund research. The Agency for Toxic Substances and Disease Registry (ATSDR) also provides critical health-based information to assist EPA in making effective cleanup decisions. EPA works with these agencies on collaborative projects, information exchange, and identification of research issues and has a MOU with each agency. EPA, Army Corps of Engineers, and Navy recently signed a MOU to increase collaboration and coordination in contaminated sediments research. Additionally, the Interstate Technology Regulatory Council (ITRC) has proved an effective forum for coordinating Federal and state activities and for defining continuing research needs through its teams on topics including permeable reactive barriers, radionuclides, and Brownfields EPA has

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

developed an MOU⁴ with several other agencies [DOE, DoD, NRC, USGS, NOAA, and USDA] for multimedia modeling research and development.

Other research efforts involving coordination include the unique controlled-spill field research facility designed in cooperation with the Bureau of Reclamation. Geophysical research experiments and development of software for subsurface characterization and detection of contaminants are being conducted with the USGS and DOE's Lawrence Berkeley National Laboratory.

Goal 4-Healthy Communities and Ecosystems

Objective: Chemical, Organism and Pesticide Risks

Coordination with state lead agencies and with the USDA provides added impetus to the implementation of the Certification and Training program. States also provide essential activities in developing and implementing the Endangered Species and Worker Protection programs and are involved in numerous special projects and investigations, including emergency response efforts. The Regions provide technical guidance and assistance to the states and Tribes in the implementation of all pesticide program activities.

EPA uses a range of outreach and coordination approaches for pesticide users, agencies implementing various pesticide programs and projects, and the general public. Outreach and coordination activities are essential to effective implementation of regulatory decisions. In addition coordination activities protect workers and endangered species, provide training for pesticide applicators, promote integrated pest management and environmental stewardship, and support for compliance through EPA's Regional programs and those of the states and Tribes.

In addition to the training that EPA provides to farm workers and restricted use pesticide applicators, EPA works with the State Cooperative Extension Services designing and providing specialized training for various groups. Such training includes instructing private applicators on the proper use of personal protective equipment and application equipment calibration, handling spill and injury situations, farm family safety, preventing pesticide spray drift, and pesticide and container disposal. Other specialized training is provided to public works employees on grounds maintenance, to pesticide control operators on proper insect identification, and on weed control for agribusiness.

EPA coordinates with and uses information from a variety of Federal, state and international organizations and agencies in our efforts to protect the safety of America's health and environment from hazardous or higher risk pesticides. In May 1991, the USDA implemented the Pesticide Data Program (PDP) to collect objective and statistically reliable data on pesticide residues on food commodities. This action was in response to public concern about the effects of pesticides on human health and environmental quality. EPA uses PDP data to improve dietary risk assessment to support the registration of pesticides for minor crop uses.

⁴ For more information please go to: Interagency Steering Committee on Multimedia Environmental Models MOU, <http://www.iscmem.org/Memorandum.htm>

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

PDP is critical to implementing the Food Quality Protection Act (FQPA). The system provides improved data collection of pesticide residues, standardized analytical and reporting methods, and sampling of foods most likely consumed by infants and children. PDP sampling, residue, testing and data reporting are coordinated by the Agricultural Marketing Service using cooperative agreements with ten participating states representing all regions of the country. PDP serves as a showcase for Federal-state cooperation on pesticide and food safety issues.

FQPA requires EPA to consult with other government agencies on major decisions. EPA, USDA and FDA work closely together using both a MOU and working committees to deal with a variety of issues that affect the involved agencies' missions. For example, agencies work together on residue testing programs and on enforcement actions that involve pesticide residues on food, and we coordinate our review of antimicrobial pesticides. The Agency coordinates with USDA/ARS in promotion and communication of resistance management strategies. Additionally, we participate actively in the Federal Interagency Committee on Invasive Animals and Pathogens (ITAP) which includes members from USDA, DOL, DoD, DHS and CDC to coordinate planning and technical advice among Federal entities involved in invasive species research, control and management.

While EPA is responsible for making registration and tolerance decisions, the Agency relies on others to carry out some of the enforcement activities. Registration-related requirements under FIFRA are enforced by the states. The HSS/FDA enforces tolerances for most foods and the USDA/Food Safety and Inspection Service enforces tolerances for meat, poultry and some egg products.

Internationally, the Agency collaborates with the Intergovernmental Forum on Chemical Safety (IFCS), the CODEX Alimentarius Commission, the North American Commission on Environmental Cooperation (CEC), the Organization for Economic Cooperation and Development (OECD) and NAFTA Commission. These activities serve to coordinate policies, harmonize guidelines, share information, correct deficiencies, build other nations' capacity to reduce risk, develop strategies to deal with potentially harmful pesticides and develop greater confidence in the safety of the food supply.

One of the Agency's most valuable partners on pesticide issues is the Pesticide Program Dialogue Committee (PPDC), which brings together a broad cross-section of knowledgeable individuals from organizations representing divergent views to discuss pesticide regulatory, policy and implementation issues. The PPDC consists of members from industry/trade associations, pesticide user and commodity groups, consumer and environmental/public interest groups and others.

The PPDC provides a structured environment for meaningful information exchanges and consensus building discussions, keeping the public involved in decisions that affect them. Dialogue with outside groups is essential if the Agency is to remain responsive to the needs of the affected public, growers and industry organizations.

EPA works closely with Federal agencies to improve the health of children and older adults. Working with the CDC, the Environmental Council of the States (ECOS), and the Association of

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

State and Territorial Health Officials (ASTHO), a national action agenda to reduce environmental triggers of childhood asthma was developed and implemented.

The Agency continues to work with other Federal agencies in the development of children's environmental health indicators used to monitor the outcomes of children's health efforts. The Agency collaborates with the CDC, National Center for Health Statistics and obtains approval from the Federal Interagency Forum on Child and Family Statistics (www.childstats.gov) on the reporting of appropriate children's health indicators and data. EPA also participates in the development of the annual report entitled "America's Children: Key National Indicators of Well-Being."

As a member of the Interagency Forum on Aging Related Statistics, EPA helps to assure that key indicators associated with important aspects of older Americans' lives are considered in reports such as "Older Americans 2004: Key Indicators of Well-Being."

EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) support the Pediatric Environmental Health Specialty Units (PEHSUs) which provide education and consultation services on children's environmental health issues to health professionals, public health officials, and the public.

EPA works closely with other Federal agencies to improve children's health in schools. For example, EPA has incorporated into the new Healthy School Environments Assessment Tool (HealthySEAT), a number of recommendations and requirements from the Department of Education, the CDC, DOT, DOE, CPSC and OSHA.

EPA relies on data from HHS to help assess the risk of pesticides to children. Other collaborative efforts that go beyond our reliance on the data they collect include developing and validating methods to analyze domestic and imported food samples for organophosphates, carcinogens, neurotoxins and other chemicals of concern. These joint efforts protect Americans from unhealthful pesticide residue levels.

EPA's chemical testing data provides information for the OSHA worker protection programs, NIOSH for research, and the Consumer Product Safety Commission (CPSC) for informing consumers about products through labeling. EPA frequently consults with these Agencies on project design, progress and the results of chemical testing projects.

The Agency works with a full range of stakeholders on homeland security issues: USDA, CDC, other Federal agencies, industry and the scientific community. Review of the agents that may be effective against anthrax has involved GSA, State Department, Research Institute for Infectious Disease, FDA, EOSA, USPS, and others, and this effort will build on this network.

The Acute Exposure Guidelines (AEGL) program is a collaborative effort that includes ten Federal agencies (EPA, DHS, DOE, DoD, DOT, NIOSH, OSHA, CDC, ATSDR, and FDA), numerous state agencies, private industry, academia, emergency medical associations, unions, and other organizations in the private sector. The program also has been supported internationally by the OECD and includes active participation by the Netherlands, Germany and France.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

The success of EPA's lead program is due in part to effective coordination with other Federal agencies, states and Indian Tribes through the President's Task Force on Environmental Health Risks and Safety Risks to Children. EPA will continue to coordinate with HUD to clarify how new rules may affect existing EPA and HUD regulatory programs, and with the FHWA and OSHA on worker protection issues. EPA will continue to work closely with state and Federally recognized Tribes to ensure that authorized state and Tribal programs continue to comply with requirements established under TSCA, that the ongoing Federal accreditation certification and training program for lead professionals is administered effectively, and states and Tribes adopt the Renovation and Remodeling and the Buildings and Structures Rules when these rules become effective.

EPA has a MOU with HUD on coordination of efforts on lead-based paint issues. As a result of the MOU, EPA and HUD have co-chaired the President's Task Force since 1997. There are fourteen other Federal agencies including CDC and DoD on the Task Force. HUD and EPA also maintain the National Lead Information Center and share enforcement of the Disclosure Rule.

Mitigation of existing risk is a common interest for other Federal agencies addressing issues of asbestos and PCBs. EPA will continue to coordinate interagency strategies for assessing and managing potential risks from asbestos and other fibers. Coordination on safe PCB disposal is an area of ongoing emphasis with the DoD, and particularly with the U.S. Navy, which has special concerns regarding PCBs encountered during ship scrapping. PCBs and mercury storage and safe disposal are also important issues requiring coordination with the Department of Energy and DoD as they develop alternatives and explore better technologies for storing and disposing high risk chemicals.

To effectively participate in the international agreements on POPs, heavy metals and PIC substances, EPA must continue to coordinate with other Federal agencies and external stakeholders, such as Congressional staff, industry, and environmental groups. For example, EPA has an interest in ensuring that the listing of chemicals, including the application of criteria and processes for evaluating future chemicals for possible international controls, is based on sound science. Similarly, the Agency typically coordinates with FDA's National Toxicology Program, the CDC/ATSDR, NIEHS and/or the Consumer Product Safety Commission (CPSC) on matters relating to OECD test guideline harmonization.

EPA's objective is to promote improved health and environmental protection, both domestically and worldwide. The success of this objective is dependent on successful coordination not only with other countries, but also with various international organizations such as the Intergovernmental Forum on Chemical Safety (IFCS), the North American Commission on Environmental Cooperation (CEC), OECD, the United Nations Environment Program (UNEP) and the CODEX Alimentarius Commission. NAFTA and cooperation with Canada and Mexico play an integral part in the harmonization of data requirements.

EPA is a leader in global discussions on mercury and was instrumental in the launch of UNEP's Global Mercury Program, and we will continue to work with developing countries and with other developed countries in the context of that program. In addition, we have developed a strong

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

network of domestic partners interested in working on this issue, including the DOE and the USGS.

EPA has developed cooperative efforts on persistent organic pollutants (POPs) with key international organizations and bodies, such as the United Nations Food and Agricultural Organization, the United Nations Environment Program, the Arctic Council, and the World Bank. EPA is partnering with domestic and international industry groups and foreign governments to develop successful programs.

Objective: Communities

The Governments of Mexico and the United States agreed, in November 1993, to assist communities on both sides of the border in coordinating and carrying out environmental infrastructure projects. The agreement between Mexico and the United States furthers the goals of the North American Free Trade Agreement and the North American Agreement on Environmental Cooperation. To this purpose, the governments established two international institutions, the Border Environmental Cooperation Commission (BECC) and the North American Development Bank (NADBank), which manages the Border Environmental Infrastructure Fund (BEIF), to support the financing and construction of much needed environmental infrastructure.

The BECC, with headquarters in Ciudad Juarez, Chihuahua, Mexico, assists local communities and other sponsors in developing and implementing environmental infrastructure projects. The BECC also certifies projects as eligible for NADBank financing. The NADBank, with headquarters in San Antonio, Texas, is capitalized in equal shares by the United States and Mexico. NADBank provides new financing to supplement existing sources of funds and foster the expanded participation of private capital.

A significant number of residents along the U.S.-Mexico border area are without basic services such as potable water and wastewater treatment and the problem has become progressively worse in the last few decades. Over the last several years, EPA has continued to work with the U.S. and Mexican Sections of the International Boundary and Water Commission to further efforts to improve water and wastewater services to communities within 100 km on the U.S and 300 km on the Mexico side of the U.S.-Mexico border.

EPA's environmental mandate and expertise make it uniquely qualified to represent the nation's environmental interests abroad. While the Department of State is responsible for the conduct of overall U.S. foreign policy, implementation of particular programs, projects, and agreements is often the responsibility of other agencies with specific technical expertise and resources. Relations between EPA and DOS cut across several offices and/or bureaus in both organizations.

EPA works extensively with the Office of the U.S. Trade Representative (USTR), as well as the USTR-chaired interagency Trade Policy Staff Committee (TPSC) system, to ensure that U.S. trade and environmental policies are mutually supportive. (The TPSC system consists of various interagency workgroups that develop trade policy for political level review and decision.) For example, through the Agency's participation in the negotiation of both regional and bilateral

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

trade agreements and the World Trade Organization Agreements, EPA works with USTR to ensure that U.S. obligations under international trade agreements do not hamper the ability of Federal and state governments to maintain high levels of domestic environmental protection.

The two agencies also work together to ensure that new obligations are consistent with U.S. law and EPA's rules, regulations, and programs. In addition to the work with USTR, EPA also cooperates with many other Federal agencies in the development and execution of U.S. trade policy, and in performing environmental reviews of trade agreements, developing and implementing environmental cooperation agreements associated with each new FTA, and developing and implementing the associated environmental capacity building projects. EPA works most closely with the Department of State, USAID and USTR in the capacity building area. Finally, the Agency also serves as the co-lead (with USTR) of the Trade and Environment Policy Advisory Committee (TEPAC), a formally-constituted advisory body made up of respected experts from industry, NGOs and academia.

Brownfields

Under the Brownfields Federal Partnership Action Agenda, EPA and its partnering agencies work together to prevent, assess, safely clean up, and reuse brownfields. More than 20 federal agencies dedicated to brownfields cleanup and redevelopment have committed their resources to help revitalize communities throughout the nation. Building on these partnerships, EPA is initiating a collaborative effort with other agencies involved in brownfields revitalization to develop a shared performance standard that focuses on property reuse. Through this effort, EPA and its partners will analyze methods to demonstrate and measure the transition of brownfields into productive reuse.

Objective: Ecosystems

National Estuary Program

Effectively implementing successful comprehensive management plans for the estuaries in the NEP depends on the cooperation, involvement, and commitment of Federal and state agency partners that have some role in protecting and/or managing those estuaries. Common Federal partners include NOAA, USFWS, COE, and USDA. Other partners include state and local government agencies, universities, industry, non-governmental organizations (NGO), and members of the public.

Wetlands

Federal agencies share the goal of increasing wetlands functions and values, and implementing a fair and flexible approach to wetlands regulations. In addition, EPA has committed to working with ACOE to ensure that the Clean Water Act Section 404 program is more open, consistent, predictable, and based on sound science.

Coastal America

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

In efforts to better leverage our collaborative authorities to address coastal communities' environmental issues (e.g., coastal habitat losses, nonpoint source pollution, endangered species, invasive species, etc.), EPA, by memorandum of agreement in 2002 entered into an agreement with Multi-agency signatories. November 2002. *Coastal America 2002 Memorandum of Understanding*. Available online at <http://www.coastalamerica.gov/text/mou02.htm>

Great Lakes

Pursuant to the mandate in Section 118 of the Clean Water Act to “coordinate action of the Agency with the actions of other Federal agencies and state and local authorities...” the Great Lakes National Program Office (GLNPO) is engaged in extensive coordination efforts with state, Tribal, and other Federal agencies, as well as with our counterparts in Canada pursuant to the Great Lakes Water Quality Agreement (GLWQA). EPA leads a Federal Interagency Task Force charged with increasing and improving collaboration and integration among Federal programs involved in Great Lakes environmental activities. Responding to Executive Order 13340, the President established two major Great Lakes efforts: a "Great Lakes Interagency Task Force" and a Great Lakes “Regional Collaboration of National Significance” (GLRC). The Great Lakes task force brings together ten Cabinet department and Federal agency heads to coordinate restoration of the Great Lakes, focusing on outcomes, such as cleaner water and sustainable fisheries, and targeting measurable results. In December 2005, the GLRC (including representatives from Federal agencies, led by EPA; Great Lakes Governors, Mayors, and Tribes; and the Great Lakes States Congressional Delegation) developed a Great Lakes Regional Collaboration Strategy. This Strategy is being used to guide the Great Lakes environmental efforts. Coordination by GLNPO supports both the GLWQA and GLRC: GLNPO monitoring involves extensive coordination among state, federal, and provincial partners, both in terms of implementing the monitoring program, and in utilizing results from the monitoring to manage environmental programs: GLNPO’s sediments program works closely with the states and the Corps regarding dredging issues; implementation of the Binational Toxics Strategy involves extensive coordination with Great Lakes States; GLNPO works closely with states, Tribes, FWS, and NRCS in addressing habitat issues; and EPA also coordinates with these partners regarding development and implementation of Lakewide Management Plans for each of the Great Lakes and for Remedial Action Plans for the 30 remaining U.S./binational Areas of Concern.

Chesapeake Bay

The Chesapeake Bay Program has a Federal Agencies Committee, chaired by EPA, which was formed in 1984 and has met regularly ever since. There are currently over 20 different Federal agencies actively involved with the Bay Program through the Federal Agencies Committee. The Federal agencies have worked together over the past decade to implement the commitments laid out in the 1994 *Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay* and the 1998 *Federal Agencies Chesapeake Ecosystem Unified Plan (FACEUP)*. The Federal Agencies Committee has been focusing on how its members can help to achieve the 104 commitments contained in the *Chesapeake 2000* agreement adopted by the Chesapeake Bay Program in June 2000. Through this interagency partnership Federal agencies have contributed to some major successes, such as the U.S. Forest Service helping to meet the year 2010 goal to restore 2,010 miles of riparian forest buffers eight years early; the NPS the effort to establish

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

over 500 miles of water trails three years early; and the USFWS in reaching the Program's fish passage goal of reopening 1,357 miles of formerly blocked river habitat in 2004. Also in 2004, through the Federal Agencies Committee, the members sought better coordination of agency budgets and other programs to try to leverage maximum benefit to the state, private, and Federal efforts protect and restore the Bay.

Gulf of Mexico

Key to the continued progress of the Gulf of Mexico Program is a broad multi-organizational Gulf states-led partnership comprised of regional; business and industry; agriculture; state and local government; citizens; environmental and fishery interests; and, numerous Federal departments and agencies. This Gulf partnership is comprised of members of the Gulf Program's Policy Review Board, subcommittees, and workgroups. Established in 1988, the Gulf of Mexico Program is designed to assist the Gulf States and stakeholders in developing a regional, ecosystem-based framework for restoring and protecting the Gulf of Mexico through coordinated Gulf-wide as well as priority area-specific efforts. The Gulf States strategically identify the key environmental issues and work at the regional, state, and local level to define, recommend, and voluntarily implement the supporting solutions. To achieve the Program's environmental objectives, the partnership must target specific Federal, state, local, and private programs, processes, and financial authorities in order to leverage the resources needed to support state and community actions.

Objective: Enhance Science and Research

Several Federal agencies sponsor research on variability and susceptibility in risks from exposure to environmental contaminants. EPA collaborates with a number of the Institutes within the NIH and CDC. For example, NIEHS conducts multi-disciplinary biomedical research programs, prevention and intervention efforts, and communication strategies. The NIEHS program includes an effort to study the effects of chemicals, including pesticides and other toxics, on children. EPA collaborates with NIEHS in supporting the Centers for Children's Environmental Health and Disease Prevention, which study whether and how environmental factors play a role in children's health. The Agency collaborates with the National Academy of Sciences (NAS) on very difficult and complex human health risk assessments through consultation or review.

Research in ecosystems protection is coordinated government-wide through the Committee on Environment and Natural Resources (CENR). EPA is an active participant in the CENR, and all work is fully consistent and complementary with other Committee member activities. EPA researchers work within the CENR on the Environmental Monitoring and Assessment Program (EMAP) and other ecosystems protection research.

The Mid-Atlantic Landscape Atlas represents one of the EMAP's first regional-scale ecological assessments, and was developed in cooperation with NOAA, USFWS, the University of Tennessee, and DOE's Oak Ridge National Laboratory. Development of the Networking and Information Technology Research & Development (NITR) Modeling System is coordinated with the COE, USDA and DOE. Through interagency agreements with USGS, EPA has worked to investigate and develop tools for assessing the impact of hydrogeology on riparian restoration

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

efforts. The collaborative work with the USGS continues to play a vital role in investigating the impact and fate of atmospheric loadings of nitrogen and nitrogen applications as part of restoration technologies on terrestrial and aquatic ecosystems. All of these efforts have significant implications for risk management in watersheds, total maximum daily load (TMDL) implementation, and management of non-point source pollutants.

Homeland Security research is conducted in collaboration with numerous agencies, leveraging funding across multiple programs and producing synergistic results. EPA's National Homeland Security Research Center (NHSRC) works closely with the DHS to assure that EPA's efforts are directly supportive of DHS priorities. EPA is also working with DHS to provide support and guidance to DHS in the startup of their University Centers of Excellence program. Recognizing that the DoD has significant expertise and facilities related to biological and chemical warfare agents, the NHSRC works closely with the Edgewood Chemical and Biological Center (ECBC), the Technical Support Working Group, the Army Corps of Engineers, and other Department of Defense organizations to address areas of mutual interest and concern. In conducting biological agent research, the NHSRC is also collaborating with CDC. The NHSRC works with DOE to access and support research conducted by DOE's National Laboratories, as well as to obtain data related to radioactive materials.

In addition to these major collaborations, the NHSRC has relationships with numerous other Federal agencies, including the U.S. Air Force, U.S. Navy, FDA, USGS and NIST. Also, the NHSRC is working with state and local emergency response personnel to understand better their needs and build relationships, which will enable the quick deployment of NHSRC products. In the water infrastructure arena, the NHSRC is providing information to the Water Information Sharing and Analysis Center (WaterISAC) operated by the Association of Metropolitan Water Agencies (AMWA). The NAS has also been engaged to provide advice on the long-term direction of the water research and technical support program.

EPA coordinates its nanotechnology research with other Federal agencies through the National Nanotechnology Initiative (NNI),⁵ which is managed under the Subcommittee on Nanoscale Science, Engineering and Technology (NSET) of the NSTC Committee on Technology (CoT). The Agency's Science to Achieve Results (STAR) program, which awards research grants to universities and non-profit organizations, has issued its recent nanotechnology grants⁶ jointly with NIOSH, NIEHS, and NSF.

The Agency coordinates its global change research with other Federal agencies through the Climate Change Science Program (CCSP),⁷ which is managed under the Subcommittee on Global Change Research of the NSTC Committee on Environment and Natural Resources (CENR). EPA's global change research also contributes to Department of State-coordinated climate change dialogues with other countries.

⁵ For more information, see <<http://www.nano.gov>>.

⁶ For an example, see <http://es.epa.gov/ncer/rfa/2005/2005_star_nano.html>.

⁷ For more information, see <<http://www.climatechange.gov/>>.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

EPA collaborates with DOE, USGS, and the Electric Power Research Institute (EPRI),⁸ to conduct research on mercury. EPA also works with other Federal agencies to coordinate U.S. participation in the Arctic Mercury Project, a partnership established in 2001 by the eight member states of the Arctic Council—Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the U.S.

The Agency's coordinates its research fellowship programs with other Federal agencies and the nonprofit sector through the National Academies' Fellowships Roundtable, which meets biannually.⁹

Goal 5-Compliance and Environmental Stewardship

Objective: Improve Compliance

The Enforcement and Compliance Assurance Program coordinates closely with DOJ on all enforcement matters. In addition, the program coordinates with other agencies on specific environmental issues as described herein.

The Office of Enforcement and Compliance Assurance (OECA) coordinates with the Chemical Safety and Accident Investigation Board, OSHA, and Agency for Toxic Substances and Disease Registry in preventing and responding to accidental releases and endangerment situations, with the BIA on Tribal issues relative to compliance with environmental laws on Tribal Lands, and with the SBA on the implementation of the Small Business Regulatory Enforcement Fairness Act (SBREFA). OECA also shares information with the IRS on cases which require defendants to pay civil penalties, thereby assisting the IRS in assuring compliance with tax laws. In addition, it coordinates with the SBA and a number of other Federal agencies in implementing the Business Compliance One-Stop Project, an "E-Government" project that is part of the President's Regulatory Management Agenda. OECA also works with a variety of Federal agencies including the DOL and the IRS to organize a Federal Compliance Assistance Roundtable to address cross cutting compliance assistance issues. Coordination also occurs with the COE on wetlands.

Due to changes in the Food Security Act, the USDA/NRCS has a major role in determining whether areas on agricultural lands meet the definition of wetlands and are therefore regulated under the CWA. Civil Enforcement coordinates with USDA/NRCS on these issues also. The program coordinates closely with the USDA on the implementation of the Unified National Strategy for Animal Feedlot Operations. EPA's Enforcement and Compliance Assurance Program also coordinates with USDA on food safety issues arising from the misuse of pesticides, and shares joint jurisdiction with Federal Trade Commission (FTC) on pesticide labeling and advertising. Coordination also occurs with Customs on pesticide imports. EPA and the FDA share jurisdiction over general-purpose disinfectants used on non-critical surfaces and some dental and medical equipment surfaces (e.g., wheelchairs). The Agency has entered into a MOU with HUD concerning lead poisoning.

⁸ For more information, see <<http://www.epri.com/>>.

⁹ For more information, see <<http://www7.nationalacademies.org/fellowships/roundtable.html>>.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

The Criminal Enforcement program coordinates with other Federal law enforcement agencies (i.e., FBI, Customs, DOL, U.S. Treasury, USCG and DOJ) and with state and local law enforcement organizations in the investigation and prosecution of environmental crimes. EPA also actively works with DOJ to establish task forces that bring together Federal, state and local law enforcement organizations to address environmental crimes. In addition, the program has an Interagency Agreement with the DHS to provide specialized criminal environmental training to Federal, state, local, and Tribal law enforcement personnel at the Federal Law Enforcement Training Center (FLETC) in Glynco, GA.

Under Executive Order 12088, EPA is directed to provide technical assistance to other Federal agencies to help ensure their compliance with all environmental laws. The Federal Facility Enforcement Program coordinates with other Federal agencies, states, local, and Tribal governments to ensure compliance by Federal agencies with all environmental laws.

OECA collaborates with the states and Tribes. States perform the vast majority of inspections, direct compliance assistance, and enforcement actions. Most EPA statutes envision a partnership between EPA and the states under which EPA develops national standards and policies and the states implement the program under authority delegated by EPA. If a state does not seek approval of a program, EPA must implement that program in the state. Historically, the level of state approvals has increased as programs mature and state capacity expands, with many of the key environmental programs approaching approval in nearly all states. EPA will increase its effort to coordinate with states on training, compliance assistance, capacity building and enforcement. EPA will continue to enhance the network of state and Tribal compliance assistance providers.

The Office of Enforcement and Compliance Assurance chairs the Interagency Environmental Leadership Workgroup established by Executive Order 13148. The Workgroup consists of over 100 representatives from most Federal departments and agencies. Its mission is to assist all Federal agencies with meeting the mandates of the Executive Order, including implementation of environmental management systems and environmental compliance auditing programs, reducing both releases and uses of toxic chemicals, and compliance with pollution prevention and pollution reporting requirements. In FY 2008, the OECA will work directly with a number of other Federal agencies to improve CWA compliance at Federal facilities. OECA and other agencies will jointly investigate the underlying causes of persistent CWA violations and design and implement fixes to the problems to keep facilities in compliance over the long term. OECA anticipates that FY 2008 will see the completion of a multiple-year partnership with the Veterans Health Administration (VHA), a part of the Department of Veterans Affairs (VA). OECA and the VHA formed the partnership in 2002 to improve compliance at VHA medical centers across the nation. Since then, EPA and VHA have jointly designed and begun implementing environmental management systems at all VHA medical centers, completed multi-day onsite reviews at more than 20 medical centers to assess the strengths and weaknesses of their environmental programs and to guide the VHA in making program improvements at all its medical centers, and delivered multiple environmental compliance courses for VHA staff and managers.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

EPA works directly with Canada and Mexico bilaterally and in the trilateral Commission for Environmental Cooperation (CEC). EPA's border activities require close coordination with the Bureau of Customs and Border Protection, the Fish and Wildlife Service, the Department of Justice, and the States of Arizona, California, New Mexico, and Texas. EPA is the lead agency and coordinates U.S. participation in the CEC. EPA works with NOAA, the Fish and Wildlife Service and the U.S. Geological Survey on CEC projects to promote biodiversity cooperation, and with the Office of the U.S. Trade Representative to reduce potential trade and environmental impacts such as invasive species.

Objective: Improve Environmental Performance through Pollution Prevention and Innovation

EPA is involved in a broad range of pollution prevention (P2) activities which can yield reductions in waste generation and energy consumption in both the public and private sectors. For example, the EPP initiative, which implements Executive Orders 12873 and 13101, promotes the use of cleaner products by Federal agencies. This is aimed at stimulating demand for the development of such products by industry.

This effort includes a number of demonstration projects with other federal Departments and agencies, such as the NPS (to use Green Purchasing as a tool to achieve the sustainability goals of the parks), DoD (use of environmentally preferable construction materials), and Defense Logistics Agency (identification of environmental attributes for products in its purchasing system). The program is also working within EPA to "green" its own operations. The program also works with NIST to develop a life-cycle based decision support tool for purchasers.

Under the Suppliers' Partnership for the Environment program and its umbrella program, the GSN, EPA's P2 Program is working closely with NIST and its Manufacturing Extension Partnership Program to provide technical assistance to the process of "greening" industry supply chains. The EPA is also working with the DOE's Industrial Technologies Program to provide energy audits and technical assistance to these supply chains.

EPA is working with DOE and USDA to develop a "Biofuels Posture Plan," the first step in implementing a Biofuels Initiative to support the goals of the President's Advanced Energy Initiative. The Biofuels Posture Plan will be designed to promote the development of a biofuels industry in the U.S. to help shift the country towards clean, domestic energy production and away from dependence on foreign sources of energy (mostly petroleum). EPA is investigating the use of municipal and industrial solid and hazardous wastes as sources of biomass that can be used to produce clean biofuels. EPA is promoting specific waste-to-energy technologies through policy development, research, and, where feasible, regulatory change.

The Agency is required to review environmental impact statements and other major actions impacting the environment and public health proposed by all Federal agencies, and make recommendations to the proposing Federal agency on how to remedy/mitigate those impacts. Although EPA is required under § 309 of the Clean Air Act (CAA) to review and comment on proposed Federal actions, neither the National Environmental Policy Act nor § 309 CAA require a Federal agency to modify its proposal to accommodate EPA's concerns. EPA does have

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

authority under these statutes to refer major disagreements with other Federal agencies to the Council on Environmental Quality. Accordingly, many of the beneficial environmental changes or mitigation that EPA recommends must be negotiated with the other Federal agency. The majority of the actions EPA reviews are proposed by the Forest Service, Department of Transportation (including FHWA and FAA), COE, DOI (including Bureau of Land Management, Minerals Management Service and NPS), DOE (including Federal Regulatory Commission), and DoD.

EPA and DOI are coordinating an Interagency Tribal Information Steering Committee that includes the Bureau of Reclamation, DOE, HUD, USGS, Federal Geographic Data Committee, BIA, Indian Health Service, Department of the Treasury, and DOJ. This Interagency effort is aimed to coordinate the exchange of selected sets of environmental, resource, and programmatic information pertaining to Indian Country among Federal agencies in a “dynamic” information management system that is continuously and automatically updated and refreshed, to be shared equally among partners and other constituents.

Under a two-party interagency agreement, EPA works extensively with the Indian Health Service to cooperatively address the drinking water and wastewater infrastructure needs of Indian Tribes. EPA is developing protocols with the Indian Health Service Sanitation Facilities Construction Program for integration of databases of the two agencies, within the framework of the Tribal Enterprise Architecture.

EPA has organized a Tribal Data Working Group under the Federal Geographic Data Committee, and, along with BIA, is the co-chair of this group. EPA will play a lead role in establishing common geographic data and metadata standards for Tribal data, and in establishing protocols for exchange of information among Federal, non-Federal and Tribal cooperating partners.

EPA is developing protocols with the Bureau of Reclamation, Native American Program, for integration of databases of the two agencies, within the framework of the Tribal Enterprise Architecture. EPA is also developing agreements to share information with the Alaska District, COE.

To promote mutual goals as leadership programs with industry, the Office of Policy, Economics, and Innovation (OPEI) through its National Environmental Performance Track, works with the Voluntary Protection Programs (VPP) in the Occupational Safety and Health Administration (OSHA). EPA and OSHA collaborate in developing incentives for members, identifying potential members, providing joint recognition, and sharing best practices from their experience in managing leadership programs.

Under a MOU, EPA and NPS established a partnership to share resources for promoting environmental management system approaches that are good for both the environment and business. The MOU promotes the implementation of cost-effective environmental management practices for businesses in the tourism industry, including the approximately 600 NPS concessionaires that provide various visitor services in more than 130 national parks.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Information on regulations and other issues that may have an adverse impact on small businesses is shared regularly with the Small Business Administration's Office of Advocacy. An ongoing activity includes the coordination of interactions among the Office of Air and Radiation, the State Small Business Assistance Program's National Steering Committee, and the Office of Advocacy in the development of the proposed 55 area source Maximum Achievable Control Technology (MACT) rules that will impact small businesses and state programs.

The Sector Strategies program addresses issues that directly affect the environmental performance of selected industries and other sectors of the economy. At times, actions taken to enhance sector-wide performance involve other Federal agencies. This work tends to be informal and issue-specific, as opposed to formal inter-agency partnerships. For example, previous work on Agribusiness sector issues involved the Natural Resource Conservation Service of the USDA. Energy conservation work with the Metal Foundry sector involved the DOE's innovative technologies program. In 2005, Port sector stakeholders include the U.S. Maritime Administration (DOT), COE and NOAA. Data work with the Cement sector involves USGS contacts. And future "green highway" work of the Construction Sector may involve the FHWA.

Activities associated with the Environmental Education Program are coordinated with other Federal agencies in a variety of ways:

EPA currently funds approximately \$1.5M for eight interagency agreements with four Federal agencies. Current projects are focused on helping these agencies to better coordinate their environmental education efforts (see www.handsontheland.org) and improving capacity to measure environmental education program outcomes. All of the activities are funded jointly by the cooperating Federal agency and a third non-profit partner. Detailed information about the interagency agreements is available at <http://www.epa.gov/enviroed/iag.html>.

EPA chairs the Task Force on Environmental Education which meets periodically to share information. The current focus involves sharing information on linking environmental education programs to the strategic planning initiatives of Federal agencies and developing program impact measures.

EPA, in partnership with Department of Education, the Agency for Toxic Substances and Disease Registry, the Department of Interior, the Bureau of Indian Affairs, the Consumer Product Safety Commission, and the Centers for Disease Control, is implementing a national Schools Chemical Cleanout Campaign (SC3). SC3 is building a national public/private network that will facilitate the removal of dangerous and inappropriate chemicals from K - 12 schools; encourage responsible chemical management practices to prevent future chemical accidents and accumulations; and raise issue awareness.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

As a participant on the following interagency workgroups, EPA remains informed of related efforts across the government and provides coordination assistance as necessary: The Interagency Committee on Education (Chair: Department of Education); Partners in Resource Education (Chair: National Environmental Education and Training Foundation); the Federal Interagency Committee on Interpretation (Chair: National Park Service); Ocean Education Task Force (workgroup of the U.S. Ocean Commission); and the Afterschool.gov (Chair: General Services Administration).

EPA coordinates U.S. participation in the activities of the North American Commission on Environmental Cooperation (CEC) on green purchasing, supply chains, and buildings.

EPA's web portal of all Federal environmental education program web sites is: <http://www.epa.gov/enviroed/FTFmemws.html>.

Objective: Enhance Science and Research

EPA is coordinating with DoD's Strategic Environmental Research and Development Program (SERDP) in an ongoing partnership, especially in the areas of sustainability research and of incorporating materials lifecycle analysis into the manufacturing process for weapons and military equipment. EPA's People, Prosperity, and Planet (P3) student design competition for sustainability will partner with NASA, NSF, OFEE, USAID, USDA, CEQ, and OSTP. EPA is continuing its partnerships with NSF, NIEHS, AND NIOSH on jointly issued grant solicitations for nanotechnology, and its coordination through the NSET with all agencies that are part of the NNI.

EPA will continue work under the MOA with the USCG and the State of Massachusetts on ballast water treatment technologies and mercury continuous emission monitors. The agency also coordinates technology verifications with NOAA (multiparameter water quality probes); DOE (mercury continuous emission monitors); DoD (explosives monitors, PCB detectors, dust suppressants); USDA (ambient ammonia monitors); Alaska and Pennsylvania (arsenic removal); Georgia, Kentucky, and Michigan (storm water treatment); and Colorado and New York (waste-to-energy technologies).

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

COORDINATION WITH OTHER FEDERAL AGENCIES

ENABLING SUPPORT PROGRAMS

Office of the Administrator (OA)

EPA collaborates with other Federal agencies in the collection of economic data used in the conduct of economic benefit-cost analyses of environmental regulations and policies. The Agency collaborates with the Department of Commerce, Bureau of the Census on the Pollution Abatement Costs and Expenditure (PACE) survey in order to obtain information on pollution abatement expenditures by industry. In our effort to measure the beneficial outcomes of Agency programs, we co-sponsor with several other agencies the U.S. Forest Service's National Survey on Recreation and the Environment (NSRE), which measures national recreation participation and recreation trends. EPA also collaborates with other natural resource agencies (e.g., United States Department of Agriculture (USDA), Department of Interior, Forest Service, National Oceanic Atmospheric Administration (NOAA)) to foster improved interdisciplinary research and reporting of economic information by collaboratively supporting workshops and symposiums on environmental economics topics (ecosystem valuation resource evaluation); economics of invasive species; and measuring health benefits.

The Agency also continues to work with other Federal agencies in the development of children's environmental health indicators used to monitor the outcomes of children's health efforts. The Agency collaborates with the Centers for Disease Control and Prevention and the National Center for Health Statistics to obtain approval of the Federal Interagency Forum on Child and Family Statistics (www.childstats.gov) on the reporting of appropriate children's health indicators and data. Furthermore, the Agency is an active member of the Interagency Forum on Aging-Related Statistics (www.agingstats.gov). The Forum was created to foster collaboration among Federal agencies that produce or use statistical data on the older population. The biannual chartbook contains an indicator on air quality and the counties where older adults reside that have experienced poor air quality.

EPA's Office of Homeland Security (OHS) continues to focus on broad, Agency and government-wide homeland security policy issues that cannot be adequately addressed by a single program office, as well as ensuring implementation of EPA's Homeland Security Strategy. A significant amount of the responsibilities require close coordination with Federal partners, through Policy Coordinating Committees (PCCs), briefings and discussions with individual senior Federal officials. The Associate Administrator for Homeland Security and OHS represent the Administrator, Deputy Administrator, and other senior Agency officials at meetings with personnel from the White House and Department of Homeland Security (DHS), and other high-level stakeholders. OHS coordinates the development of responses to inquiries from the White House, DHS, the Congress, and others with oversight responsibilities for homeland security efforts. EPA's ability to effectively implement its broad range of homeland security responsibilities is significantly enhanced through these efforts. OHS ensures consistent development and implementation of the Agency's homeland security policies and procedures, while building an external network of partners so that EPA's efforts can be integrated into, and build upon, the efforts of other Federal agencies.

Environmental Protection Agency FY 2008 Annual Performance Plan and Congressional Justification

The Science Advisory Board (SAB) primarily provides the Administrator with independent peer reviews and advice on the scientific and technical aspects of environmental issues to inform the Agency's environmental decision-making. Often, the Agency program office seeking the SAB's review and advice has identified the Federal agencies interested in the scientific topic at issue. The SAB coordinates with those Federal agencies by providing notice of its activities through the Federal Register, and as appropriate, inviting Federal agency experts to participate in the peer review or advisory activity. The SAB, from time to time, also convenes science workshops on emerging issues, and invites Federal agency participation through the greater Federal scientific and research community.

EPA's Office of Small and Disadvantaged Business Utilization (OSDBU) works with the Small Business Administration (SBA) and other Federal agencies to increase the participation of small and disadvantaged businesses in EPA's procurement of goods, services, equipment, and construction. OSDBU works with the SBA to develop EPA's goals for contracting with small and disadvantaged businesses; address bonding issues that pose a roadblock for small businesses in specific industries, such as environmental clean-up and construction; and address data-collection issues that are of concern to OSDBUs throughout the Federal government. EPA's OSDBU works closely with the Center for Veterans Enterprise and EPA's Regional and program offices to increase the amount of EPA procurement dollars awarded to Service-Disabled Veteran-Owned Small Businesses (SDVOSB). It also works with the Department of Education and the White House Historically Black College and University (HBCU) Workgroup to increase opportunities for HBCUs to partner with small businesses and Federal agencies, especially in the area of scientific research and development. Work is also coordinated with the Minority Business Development Agency to fund opportunities for small disadvantaged businesses, and to collaborate to provide outreach to small disadvantage businesses and Minority-Serving Institutions throughout the United States and the trust territories. EPA's OSDBU Director is an active participant in the Federal OSDBU Council (www.osdbu.gov), and served as the Council's Chairperson in FYs 2004 and 2006. The OSDBU Directors collaborate to the extent possible to support major outreach efforts to small and disadvantaged businesses, SDVOSB, and minority-serving educational institutions via conferences, business fairs, and speaking engagements.

Office of the Chief Financial Officer (OCFO)

EPA makes active contributions to standing interagency management committees, including the Chief Financial Officers Council and the Federal Financial Managers' Council. These groups are focused on improving resources management and accountability throughout the Federal government. EPA also coordinates appropriately with Congress and other Federal agencies, such as Department of Treasury, Office of Management of Budget (OMB), and the Government Accountability Office (GAO).

Office of Administration and Resources Management (OARM)

EPA is committed to working with Federal partners that focus on improving management and accountability throughout the Federal government. The Agency provides leadership and expertise to Government-wide activities in various areas of human resources, grants

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

administration, contracts management and Homeland Security. These activities include specific collaboration efforts with Federal agencies and departments through:

- Chief Human Capital Officers, a group of senior leaders that discuss human capital initiatives across the Federal government; and
- Legislative & Policy Committee, a committee comprised of other Federal agency representatives who assist Office of Personnel and Management in developing plans and policies for training and development across the government.

The Agency is participating in the government's implementation of Public Law 106-107 to improve the effectiveness and performance of Federal financial assistance programs, simplify application and reporting requirements, and improve the delivery of services to the public. This includes membership on the Grants Policy Committee, the Grants Executive Board, and the Grants.gov Users Group. EPA also participates in the Federal Demonstration Partnership to reduce the administrative burdens associated with research grants.

The Chief Acquisition Officers Council, the principal interagency forum for monitoring and improving the Federal acquisition system. The Council also is focused on promoting the President's Management Agenda in all aspects of the acquisition system, as well as the President's specific acquisition-related initiatives and policies.

EPA is working with the OMB, General Services Administrations, and Department of Commerce's National Institute of Standards and Technology to implement Homeland Security Presidential Directive No. 12 - Policy for a Common Identification Standard for Federal Employees and Contractors.

Office of Environmental Information (OEI)

To support EPA's overall mission, OEI collaborates with a number of other Federal agencies and state and Tribal governments on a variety of initiatives, including initiatives to make government more efficient and transparent, protect human health and the environment, and assist in homeland security. OEI is more specifically involved in the areas of information technology (IT), information management (IM), or information security aspects of the projects it collaborates on.

To help make government more efficient and transparent, OEI leads the electronic docket system (E-Dockets) and electronically supported rulemaking (E-Rulemaking) projects, and participates in the electronic records systems (E-Records) project. E-Docket is a modern and well-supported electronic docket system. It reduces the cost of maintaining EPA's dockets while improving their accessibility and security. EPA coordinates with other Federal agencies by making E-Docket available to host their docket needs. E-Rulemaking is one of the President's E-Government (E-Gov) initiatives and is being led by EPA, in coordination with the OMB, the Department of Transportation, and 10 other Federal agencies. The purpose of this initiative is to apply modern information technology to the rulemaking process to make it more efficient and to allow broader and easier participation by the public. Building on e-Docket, e-Rulemaking adds

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

features that make it easier for interested parties, including the public, to review proposed rules and to submit comments for the record. EPA is also coordinating with the National Archives and Records Administration on a broader e-Records initiative aimed at establishing uniform procedures, requirements, and standards for creating and managing Federal e-Gov records.

As part of its effort to help protect human health and the environment, EPA is coordinating with the states and Tribes to improve the collection, management, and sharing of environmental information. A key component of these efforts is EPA's participation in the State/EPA Information Management Workgroup and Network Steering Board. As a member of the Board, EPA participates in action teams comprised of EPA, state, and Tribal members, designed to identify information projects that can resolve information issues and to arrive at consensus solutions. Two of the areas that this forum has worked on extensively are developing environmental data standards and implementing new technologies for collecting and reporting information.

In addition to protecting human health and the environment, EPA also supports homeland security by coordinating extensively with a number of other Federal agencies to develop and expand the use of geographically based information. These efforts include coordination with the U. S. Geological Survey (USGS), Federal Geographic Data Committee, Chief Information Officer (CIO) Council (<http://www.cio.gov>), DHS, Council for Environmental Quality, ECOS, other national security agencies, and state agencies. Much of this work is done by multi-agency workgroups designed to ensure consistent implementation of standards and technologies across the Federal government to support efficient sharing of data, especially the sharing of geographically based data and Geographic Information Systems. A key aspect of this work is developing and implementing the infrastructure to support an assortment of national spatial data – data that can be attached to and portrayed on maps. This work has several key applications, including ensuring that human health and environmental conditions are represented in the appropriate contexts, supporting the assessment of environmental conditions and changes, and supporting first responders and other homeland security situations. Additionally, EPA coordinates with the CIO Council and other Federal agencies on projects related to information security, capital planning, workforce development, interoperability, and infrastructure related to homeland security.

Another area where EPA actively coordinates with other Governmental entities is public access to information. In addition to the E-Gov initiatives described above, EPA also coordinates with the USGS, Bureau of Indian Affairs, Fish and Wildlife Service, and state and local government partners to expand and improve public access to information affecting their lives. EPA also works with states, Tribes, local agencies, and non-governmental organizations to design and implement specific community-based information projects.

Office of the Inspector General (OIG)

The EPA Inspector General is a member of the President's Council on Integrity and Efficiency (PCIE), an organization comprised of Federal Inspectors General (IG). The PCIE coordinates and improves the way IGs conduct audits and investigations, and completes projects of government-wide interest. The EPA IG chairs the PCIE's Environmental Consortium and the

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Government Performance and Results Act (GPRA) Roundtable to promote greater coordination and collaboration among the 54 Federal agency IGs and GAO in addressing cross-cutting management and environmental issues. The OIG Special Operations Division coordinates activities with other law enforcement organizations that have computer crimes units such as the Federal Bureau of Investigation, the Secret Service, and the Department of Justice. In addition, the OIG participates with various inter-governmental audit forums, professional associations, training activities and other cross-governmental forums to exchange information, share best practices, and direct collaborative efforts. The OIG also promotes collaboration by EPA with its Federal, state and local partners for greater economy, efficiency and effectiveness in the application of technology, information and resources.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

MAJOR MANAGEMENT CHALLENGES

As required by the Reports Consolidation Act of 2000, EPA's Office of Inspector General (OIG) identifies, briefly assesses, and reports annually the most serious management and performance challenges facing the Agency. In April 2006, OIG and the Government Accountability Office (GAO) identified areas they consider to be EPA's most pressing management challenges. While OIG identified the majority of the areas, GAO raised a number of the same concerns, such as human capital and assistance agreements. Notably, neither OIG nor GAO suggested elevating any of the issues to the level of a material weakness—a control deficiency that could adversely impact the integrity of Agency programs and activities. EPA has made great progress in addressing the issues raised by OIG and GAO, and will continue to work diligently to ensure that these, as well as other issues do not affect EPA's mission to protect human health and the environment.

EPA senior managers are committed to resolving current issues and identifying and addressing vulnerabilities or emerging issues before they become serious problems. EPA continues to strengthen its management practices by maintaining a system of internal controls that helps identify and resolve potential management vulnerabilities. In FY 2006, for the fifth consecutive year, EPA reported no material weaknesses under the Federal Managers Financial Integrity Act (FMFIA). The Agency resolved two of its internal Agency-level weaknesses, which are reportable conditions less severe than material weaknesses, but that merit the attention of the Administrator. Currently, EPA has elevated three management challenges (human capital, assistance agreement, and homeland security) to the level of Agency-level weaknesses under FMFIA. EPA leaders meet periodically to review and discuss the progress the Agency is making to address the issues, and each year the Agency reports on the status of its efforts in its Performance and Accountability Report and Budget Submissions.

OMB continues to recognize EPA's efforts to maintain effective and efficient management controls. Since June 2003, the Agency has maintained its "green" status score for Improved Financial Performance under the President's Management Agenda (PMA). Following are discussions of the Agency's management challenges and the progress made in addressing them.

1. Emission Factors for Sources of Air Pollution

Scope of Challenge: *The Agency faces significant challenges in improving emissions factors. A recent OIG evaluation found conflicting guidance on appropriately using emissions factors; a rating system that did not quantify the uncertainty associated with emissions factors; inadequate funding of the program; and the lack of a comprehensive plan to improve data collection and set priorities. EPA needs to limit the decisions being made with poor quality emissions factors and to provide significant non-regulatory incentives to industry and state or local agencies to obtain the data it needs to improve emissions factors. (OIG)*

EPA and its stakeholders use emissions factors to make about 80 percent of emissions determinations for sources of air pollution and rely on them for other environmental decisions as

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

well. The Agency is making it easier for industries to transform their emissions data into emissions factors and to transmit them to state and federal reviewers quickly. EPA is re-engineering its emissions factors program, investing over \$500,000 to develop more and better emissions factors and account for uncertainty. In FY 2006, EPA developed and launched the Electronic Reporting Tool (ERT), which provides an electronic version of emission test plans and reports. ERT allows source owners or operators to transmit standardized emission test data to state, local, or tribal reviewers, and enables reviewers to evaluate and report on the quality of the emissions testing and assess the uncertainty of future, as well as existing, emission factors. These reviewers will then be able to assess the quality of the testing online before submitting the results to the newly developed WebFIRE, an internet version of the emissions Factor Information Retrieval System (FIRE) that integrates AP-42 emissions factor data with FIRE data in a user-friendly on-line search program.

Highlights of progress include:

- Launched WebFIRE, an interactive web version of the emissions Factor Information Retrieval (FIRE) system, that combines AP-42 and FIRE data so that users are no longer required to conduct independent checks while searching for emission factors (more information is available at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main>).
- Conducted an extensive statistical analysis on determining the uncertainty of highly-rated emissions factors.
- Completed and published updates to emission factors for floating roof tanks and low pressure petroleum storage tanks.

Plans for further improvements include:

- Enhance WebFIRE to allow users to independently check and verify background information for emissions factors.
- Provide the results of the uncertainty analysis to external partners for review and comment.
- Develop emissions factors for coke ovens, landfills, municipal waste combustors, steel mini-mills, landing losses for external floating roofs, and low pressure petroleum storage tanks.
- Initiate development of emissions factors for natural gas engines, rubber manufacturers, and animal feeding operations.

2. Voluntary Climate Change Program

Scope of Challenge: *Two voluntary programs aimed at securing private sector agreements to voluntarily reduce greenhouse gas emissions or emissions intensity need to be especially robust and involve a substantial portion of the economy if they are going to achieve desired results. The Climate Leaders and Climate VISION voluntary programs involve companies and industries that represent less than one-half of total U.S. emissions. While many participants have made progress in completing program steps in a timely manner, some participants appear not to be progressing at the rate expected. GAO recommends that EPA develop written policies establishing the consequences for not completing program steps on schedule. EPA and DOE are working to estimate the emission reductions attributable to*

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

their programs. However, both agencies will need to find ways to determine their programs' contribution to emission reduction. (GAO)

In its April 2006 report on Climate Change, GAO recommended that EPA develop written policy for increasing progress under the EPA Climate Leaders program. EPA believes GAO's recommendation was addressed in the initial design of the program. The Agency has detailed its existing policy in an internal memorandum which documents the steps that EPA will take if it believes a participant is not progressing in completing the program requirements in a timely manner.

On average, it takes about a year from the date a participant joins the program to develop a high-quality inventory and management plan and complete the base year reporting requirements. However, EPA recognizes that some participants may take longer to complete these requirements due to factors such as mergers and acquisitions, complexity of calculating emissions from some sources and sectors, data availability, or other issues. Given the differences in the size and complexity of participants' corporate inventories, EPA believes that written public policy establishing consequences for not meeting program steps on a specified schedule would be detrimental to recruiting companies to undertake the significant voluntary effort needed to meet the program requirements.

When EPA believes a participant is not making a good faith effort to complete program requirements, the Agency will telephone the participant to re-invigorate the process; send an official letter urging the participant to act more expeditiously; and, if necessary, remove the participant from the program for noncompliance. EPA will continue to monitor participants' progress through its program tracking system, which includes a goal tracking spreadsheet and inventory of calls conducted to discuss progress.

Highlights of progress include:

- Provided official letters to two program participants EPA believes were not making good faith efforts to complete program requirements in a timely manner.

Plans for further improvements include:

- Continue to monitor progress of the two partners who received letters.
- Continue to monitor other participants' progress through the program tracking system to identify issues that may delay completing program requirements.

3. Efficiently Managing Water and Wastewater Resources and Infrastructure

Scope of Challenge: *The Agency faces challenges in finding innovative ways to reach and influence the management behavior, skills, and abilities of thousands of small utilities. EPA needs to define its role as part of a long-term national strategy on sustainable water infrastructure that addresses financial and management issues so that the Nation's water quality is protected now and in the future. (OIG)*

EPA believes it has taken, and will continue to take, effective steps to define its role in closing the gap in funding for water infrastructure and assisting states and communities in overcoming

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

infrastructure issues. The Agency is incorporating the four pillars of its Sustainable Water Infrastructure Initiative—better management, full cost pricing, water efficiency, and the watershed approach—into existing programs and redirecting funds toward this initiative.

Highlights of progress include:

- Launched WaterSense, a market enhancement program that is increasing national awareness of water-efficient choices and the value of clean and safe water.
- Co-sponsored the Water Quality Trading Conference with USDA that brought together utility companies and the agricultural community to build further momentum for trading programs that maximize impact from infrastructure investments.
- Continued to produce assistance documents and tools targeting the needs and special circumstances of small utilities (e.g., Simple Tools for Effective Performance [STEP] and Total Electronic Asset Management Software [TEAMS]).

Plans for further improvements include:

- Develop an internal strategy that focuses on better management of wastewater for small communities and disadvantaged and underserved populations.
- Prepare a Drinking Water Capacity Development Strategic Plan to ensure that the Agency's outreach efforts to small utilities are well coordinated and effective.

4. Chemical Regulation

Scope of Challenge: *In a June 2005 review, GAO found that EPA does not routinely assess the risks of all existing chemicals and faces challenges in obtaining the information necessary to do so. Although EPA initiated the High Production Volume (HPV) Challenge Program, it is not yet clear whether the program will produce sufficient information for EPA to determine chemicals' risks to human health and the environment. GAO recommends EPA develop and implement a methodology for using information collected through the HPV Challenge Program to prioritize chemicals for further review and identify information needed to assess their risks; promulgate a rule requiring chemical companies to submit to EPA copies of health and safety studies they submit to foreign governments; develop a strategy for validating risk assessment models; and revise regulations to require companies to reassert claims of confidentiality within a certain time period. (GAO)*

The High Production Volume Challenge Program has already resulted in a substantial amount of basic screening level data. The approximately 2,800 HPV chemicals included in both the U. S. Challenge Program and the International Council of Chemical Associations (ICCA) Program represent over 93 percent of the production volume of chemicals tracked on the Toxic Substances Control Act (TSCA) Inventory. Through the U.S. HPV Challenge Program, the public now has access to test plans and robust summaries for more than 15,000 health and safety studies on over 1,400 chemicals. Many of the test plans and robust summaries are included in the recently launched searchable database known as the High Production Volume Information

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

System (HPVIS). Additionally, the Agency has a complementary international effort underway with the Organization for Economic Cooperation and Development to address HPV chemicals, some of which are not included in the HPV Challenge Program.

While the HPV data continues to be submitted, the Agency is currently implementing an approach for prioritizing and screening HPV chemicals for further review. The approach involves implementing a tiering process to identify chemicals for more in-depth review of data submitted for quality and completeness, development of screening-level hazard characterizations for the chemicals, and preparation of data needs documentation in order to proceed with risk assessment and potential risk management for chemicals of concern.

EPA believes focusing first on HPV chemicals is the best strategy for understanding chemical risks to human health and the environment. GAO's recommendation to require chemical companies to submit to EPA copies of health and safety studies they submit to foreign governments suggests a potentially broad-ranging information collection rule. While such a reporting rule may bring useful information, other more targeted approaches, such as the efforts directed towards HPV chemicals, which are directed at EPA's domestic priorities rather than foreign government mandates, may be a more prudent and efficient use of government and affected party resources. Further, it is expected that much information submitted to foreign governments will be made available to the public and accessible to EPA. EPA has been a leader in international information sharing and is actively engaged in a variety of activities (e.g., developing a Global Data Portal, working with the Canadian government to implement the Canadian Environmental Protection Act, and participating in development of guidance on grouping chemicals for assessment within the OECD chemicals program).

Highlights of progress include:

- Launched the HPV Information System (HPVIS) to make information submitted under the HPV Challenge Program accessible to the public in a searchable format.
- Submitted 404 test plans and robust summaries covering 1404 total chemicals.
- Established and implemented the scheme for establishing priority reviews of chemical data submitted under the auspices of the HPV Challenge Program.
- Promulgated the first HPV Test Rule under Section 4 of TSCA for 17 chemicals.
- Initiated analysis of Confidential Business Information (CBI) trends.

Plans for further improvements include:

- Continue work on a second HPV rule to backstop the voluntary HPV program and ensure that test data is available on all HPV chemicals.
- Complete hazard screening level characterizations and identification of further data needs for Tier 1 HPV chemicals.
- Develop a Global Data Portal, which will allow searching, viewing and exchanging of test data between the United States, European Union, and other governments (2008).
- Conclude CBI analysis and implement changes, if appropriate.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

5. Enforcement and Compliance Activities

Scope of Challenge: *With budget constraints and limited resources and the Nation's high expectation for environmental protections, it is important that EPA develop more flexible and cost-effective management approaches to its environmental enforcement and compliance programs. The Agency needs to intensify its efforts to move from a performance management system toward a system focused on achieving measurable improvements; ensure that funds are used to achieve consistent and equitable enforcement; and develop an effective workforce strategy and assessment system to ensure resources are appropriately allocated. Additionally, recurring findings show inconsistencies in program delivery among EPA's regional offices have often exceeded the expected level. EPA also needs to make a long-term commitment to filling critical enforcement data gaps.*

EPA believes that a high degree of management attention and considerable financial and staff resources are being dedicated to the issues raised by GAO. The Agency has increased its focus on measurable environmental results by expanding its use of outcome measures in the last several years. Under EPA's current *Strategic Plan*, the compliance objective and sub-objectives set quantitative targets for contributing to various environmental protection outcomes.

The Agency employs a host of national policies and guidance that ensure consistency across regions. Statute-specific policies include those addressing compliance monitoring, enforcement response to violations, penalties and responsibility for cleanup of hazardous waste sites – all of which were created to provide consistency across headquarters and regions. With respect to specific enforcement cases, consistency is achieved through routine collaboration between the regions and headquarters on policy applicability and interpretation issues. This collaboration is required on issues of national significance. Although the regions have the authority to conduct most cases independent of headquarters, approval by headquarters is required when the terms of the settlement deviate from policy or when the case includes issues that meet the criteria for national significance.

In an effort to ensure that resources are appropriately allocated, EPA has dedicated a significant percentage of its activities and resources to specific national priorities – risks and noncompliance patterns that deserve federal attention. These priorities are selected through a collaborative process that: (1) identifies risks and patterns that may be potential national priorities; (2) evaluates each on three criteria (benefit gained from reducing or solving the problem, scope of the noncompliance pattern, and appropriateness of federal intervention); and (3) develops national strategies with goals and measures for each of the priorities ultimately selected.

Highlights of progress include:

- Developed, in collaboration with the Environmental Council of the States, a mechanism for enhancing state program performance and rewarding achievement of environmental results.
- Continued to allocate funds to help address resource gaps for implementing the Compliance Assurance Program's national priorities.
- Worked with states to improve the quality of data they provide to us and the sharing of compliance rate data with external stakeholders

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Plans for further improvements include:

- Develop more statistically-valid outcome measures and incorporate risk characterization into our outcome reporting.
- Continue reviewing all state enforcement and compliance programs to determine their adequacy on twelve performance elements.

6. Managing for Results

Scope of Challenge: *EPA has made considerable progress in linking resource investments to results and improving its PART scores. However, the Agency needs to focus on the logic of program design, measures of success, measures of efficiency, and ensuring programs and process are set up so that EPA can evaluate the results and make changes. EPA must also continue improvements to track the cost of achieving environmental results, and EPA managers should consider cost when making operational and strategic decisions. (OIG)*

While EPA acknowledges the importance of the opportunities OIG identified for improvement, the Agency believes that it is making and will continue to make significant progress in these areas. Over the past years, EPA has worked with stakeholders to strengthen results-based management at EPA. In FY 2006, the Agency completed its *2006-2011 Strategic Plan*, which reflects a sharpened focus on achieving measurable results and will help advance protection of human health and the environment. The Agency continues to improve the quality of its performance measures and ability to track costs, and it is making cost and performance information available to managers for operational and strategic decision making.

OMB has acknowledged EPA's significant accomplishments in these areas by awarding the Agency progress scores of "green" for Budget and Performance Integration under the President's Management Agenda for all but one consecutive quarter since June 2002. EPA continues to receive "green" status scores for Improved Financial Performance, in recognition of the Agency's use of financial and performance information in day-to-day program management and decision making.

Highlights of progress include:

- Improved the outcome orientation of the objectives, sub-objectives, and strategic targets presented in EPA's *2006-2011 Strategic Plan*.
- Worked with the Environmental Council of the States to implement OMB's directive that requires EPA to develop standard templates for states to use to submit state grant agreements.
- Improved the Agency's annual planning and budgeting process by analyzing performance trends and cost information to establish priorities for EPA's 2008 budget. Conducted performance and budget hearings with program offices, regions, states, and tribes to review performance and identify potential efficiencies.
- Enhanced the Annual Commitment System (ACS) to track three new classes of measures (Senior Executive Service organizational assessment, state grant template, and regional priorities). The system also flags measures which contribute to OMB's Program Assessment and Rating Tool (PART) evaluations.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

- Launched a new intranet website (<http://intranet.epa.gov/ocfo/acs>) to provide information on ACS developments and the annual performance commitment process.
- Developed a new detailed performance report and financial management reports through the Office of the Chief Financial Officer's Reporting and Business Intelligence Tool (ORBIT). Replicating key financial reports will enable EPA to realize significant cost savings by retiring the Management and Accounting Reporting Systems (MARS).

Plans for further improvements include:

- Continue to enhance the reporting capabilities of the Agency's ACS.
- Strengthen performance measurement to better manage programs for improved accountability.

7. Human Capital Management

Scope of Challenge: *EPA faces challenges in maintaining a highly skilled, diverse, results-oriented workforce. The Agency must complete four activities listed in its Strategic Workforce Plan: identifying competencies, taking inventory of current workforce, identifying gaps, and developing strategies and solutions to close gaps. While EPA continues to make progress in developing performance appraisals and workforce planning, the Agency must now evaluate the results of its human capital initiatives and adjust its strategy to ensure it meets its human capital goals. GAO finds that despite EPA's progress in improving the management of its human capital, effectively implementing a human capital strategic plan remains a major challenge. The Agency needs to comprehensively assess its workforce—number of employees needed, technical skills required, best allocation among goals and geographic locations—and continue monitoring its progress to ensure it has a well-trained and motivated workforce with the right mix of skills and experience. (OIG and GAO)*

OIG and GAO continue to cite managing human capital as a management challenge as well as an Agency-level weakness. EPA is working closely with OMB and the Office of Personnel Management (OPM) to align the Agency's Human Capital Strategy to meet the objectives outlined in the PMA as it relates to the Strategic Management of Human Capital. Developing and implementing a comprehensive strategic workforce planning model and development strategy will address concerns identified by OIG and GAO. EPA currently acknowledges human capital as an Agency-level weakness (immaterial) under FMFIA and has made great strides in meeting its human capital challenges.

Highlights of progress include:

- Aligned its FY 2007 Human Capital Action Plan with the Strategy for Human Capital and Strategic Workforce Plan.
- Addressed human capital in the Agency's 2006-2011 *Strategic Plan* and identified the priority mission critical occupations and core competencies needed to support the Plan
- Issued an Agency-wide Strategic Workforce Plan.
- Continued to implement a competency-based approach to workforce planning.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

- Implemented a SES Mobility Program to enhance skills and ensure the continuity of leadership.
- Completed the first full rating cycle under the new 5-tier performance appraisal system.

Plans for further improvements include:

- Implement competency assessments for Agency-specific priority mission critical occupations.
- Refine targets for workforce planning and procedures for closing gaps.
- Improve the Agency's employee performance evaluation system.
- Continue to implement the Agency's rigorous accountability and human capital assessment program.

8. Improved Management of Assistance Agreements/Grants Management

Scope of Challenge: EPA has taken actions to improve its grant management and address the issues identified. The Agency needs to continue defining environmental measures for its activities so that measures can be incorporated into grant documentation. Also, EPA needs to continue to emphasize supervisor and project officer accountability for managing grants in accordance with policies and procedures. GAO reports that EPA has faced persistent grants management challenges for many years. While EPA has issued a 5-year grants management plan and made progress in addressing the issue, weaknesses in implementation and accountability continue to hamper effective grants management. In particular, problems remain in documenting ongoing monitoring and in closing out grants. (OIG and GAO)

EPA believes it has made significant progress in addressing the issues raised by OIG and GAO. The Agency has adjusted its corrective action and internal controls as necessary to further the principles of accountability, transparency, and results. In FY 2003, EPA issued its first long-term Grants Management Plan, with associated performance measures, to map the Agency's approach for improving grants management. The Agency is continuing to implement this plan. EPA currently acknowledges assistance agreements as an Agency-level weakness (immaterial) under FMFIA.

Highlights of progress include:

- Subjected 92 percent of new grants to the revised competition policy, exceeding the performance goal set in the Grants Management Plan.
- Developed and implemented an on-line Basic Project Officer training class that contains advanced stand-alone modules on managing performance partnership grants and environmental grants.
- Implemented the Agency's "Green Plan" to integrate grants with financial data and eliminate duplicate data entry.
- Revised the Agency's new Post Award Monitoring Order. The new Order will require that all baseline monitoring be documented in the Grantee Compliance Database.
- Deployed the Integrated Grants Management System to headquarters users (January 2007).

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

- Met 90 percent of the 99 percent closeout goal in the Grants Management Plan.

Plans for further improvements include:

- Implement GAO's recommendation to develop new environmental results performance measures under the Grants Management Plan.
- Distribute guidance for assessing project officer and supervisor performance in grants management.

9. Data Gaps/Environmental Information

Scope of Challenge: *EPA reports demonstrate the usefulness of environmental indicators in tracking environmental progress. However, while some important data exist, EPA and its partners are not yet engaged in efforts to fill high priority data gaps and ensure that data deemed important will be collected in the future. To address data gaps, EPA and its partners will need to collaborate during budget preparation and strategic prioritization. Additionally, GAO believes that EPA data problems limit national indicators of environmental conditions and trends from being fully developed. EPA needs clear lines of responsibility and accountability among its various organizational components and specific requirements for developing and using environmental indicators. (OIG and GAO)*

As part of its strategic planning, EPA continues to implement and refine processes to identify and prioritize data gaps, including coordinating the draft Report of the Environment (ROE) with the Agency's strategic planning and budgeting process. As part of developing EPA's 2006-2011 *Strategic Plan*, national program managers (NPMs) considered the suite of ROE questions and indicators as a means of helping the Agency develop better environmental performance goals and measures and to identify and set priorities for filling gaps in the information needed to manage programs. NPMs were also required to develop a preliminary strategy for improving performance measures to make them more environmental outcome oriented. Each strategy identified priorities for filling key data gaps to meet the most critical needs and provided a brief recommendation on how to address critical gaps in program data.

Highlights of progress include:

- Completed gaps analysis and documentation.
- Developed a process for identifying and ranking key data gaps.
- Prepared an options paper addressing ROE indicators and data gaps for the Indicators Steering Committee (ICS).
- Developed a pilot (endorsed by ICS) that assesses how the ROE and strategic planning efforts can best inform and support one another.

Plans for further improvements include:

- Analyze and discuss ROE indicator gaps and limitations
- Further refine the process to identify and prioritize data gaps identified in the ROE as part of the Agency's strategic and budget planning process.
- Continue to use existing interagency forums, such as the Global Earth System of Systems and the Collaboration on Indicators in the Nation's Environment, to identify how and where existing efforts can be leveraged among partners.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

10. Information Technology Systems Development and Implementation

Scope of Challenge: *EPA has taken steps to strengthen its Capital Planning and Investment Control (CPIC) and system development process by updating its CPIC policy and publishing an Interim Agency System Life Cycle Management Policy. The Agency needs to further enhance its IT investment control structure and hold system managers accountable. (OIG)*

In its September 2005 report, “EPA Needs to Improve Oversight of Its Information Technology Projects,” OIG noted that EPA has experienced system development and implementation problems and did not sufficiently oversee information technology (IT) projects to ensure they met planned budgets and schedules.

In January 2006, EPA responded to OIG’s audit findings and recommendations. While EPA’s Chief Information Officer (CIO) has the lead for ensuring effective IT project management, primary authority and responsibility lies with the senior manager in the office that owns the IT project, with appropriate oversight by the CIO. EPA’s response to OIG, therefore, included an action plan calling for formal delegation of independent oversight responsibility and an additional question in the CPIC process focusing on System Life Cycle documentation and approvals. The plan also calls for increased emphasis on reviewing solutions architecture documents and an outreach and education program for senior management and Senior Information Officials. OIG has agreed to the action plan and believes it will address the report findings and recommendations. Based on the action plan in place and progress made to date, the audit was closed in January 2006.

Highlights of progress include:

- Issued a revised System Life Cycle Management Policy.
- Developed Enterprise Architecture Governance Procedures that require review, approval, and certification that solutions architectures are aligned with both federal and EPA enterprise architectures.
- Briefed Agency Senior Information Officials.

Plans for further improvements include:

- Continue to conduct outreach briefings with senior management.
- Review information submitted in response to the CPIC question on System Life Cycle documentation and approval.

11. Data Standards and Data Quality

Scope of Challenge: *EPA has a substantive effort in place to develop data standards and guide their implementation. However, the Agency needs to continue to focus on ensuring that data are of sufficient quality for decision-making (e.g., assess drinking water laboratory integrity and incorporate techniques to identify improper practices and fraud into the laboratory oversight process). EPA should also take further steps to ensure consistent approval of electronic reporting systems under the Cross-Media Electronic Reporting Rule (CROMERR) and continue to address the “Record Keeping” portion of the rule. (OIG)*

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

EPA currently acknowledges implementation of data standards as an Agency-level weakness (immaterial) under FMFIA. In FY 2006, the Agency completed five of the eight major milestones to address this weakness. The remaining corrective actions are on track for completion in FY 2010. Also, EPA has an effort in place to ensure that Agency laboratories are operating under approved Quality Management Plans (including government-owned, contractor-operated labs). In FY 2004, EPA worked with the Forum on Environmental Measurements to develop a policy directive to document the competency of Agency laboratories. Agency laboratories must demonstrate on-going performance through independent external assessments and participation in inter-laboratory comparison studies, which will be reported and reviewed on an annual basis via Quality Assurance Annual Reports and Work Plans.

With regard to commercial laboratories, the Agency will continue to manage its Drinking Water Laboratory Certification program (comprising training, guidance materials, proficiency testing, laboratory audits, and program reviews) by working with states and EPA regional partners to implement the program. The Agency will look for opportunities to strengthen the program based upon recommendations identified by the OIG in FY 2006. OIG recommendations include integrating fraud awareness/detection into the program to a greater degree to complement the traditional focus on laboratory capability and improper practices.

In response to electronic record keeping issues, CROMERR sets standards for electronic reporting systems used by EPA and its authorized partners (state, tribal, and local governments) to receive electronic reports submitted by regulated entities in lieu of paper. The rule requires that states, tribes, and local governments seek EPA approval for these systems as complying with the CROMERR standards. The Agency currently has an organizational structure for the review and approval of electronic reporting systems operated by EPA and authorized state, tribal, and local government programs. The CROMERR approval process has been in place for about 3 months, and there is no evidence that approvals might be inconsistent in the future. EPA does not believe there is a demonstrable need to regulate electronic record keeping. Currently, records addressed by CROMERR are maintained electronically by the regulated companies. While this practice has been widespread for at least a decade, EPA has seen no evidence that this practice has resulted in any harm to environmental programs or their enforceability. Also, a requirement of this magnitude would impose unacceptable cost on regulated companies and would likely be more effective if proposed as a government-wide initiative.

Highlights of progress include:

- Develop draft standard operating procedures for the Technical Review Committee.
- Developed CROMERR guidance, which includes a system checklist and a set of examples on approaches to CROMERR-compliant e-reporting
- Developed a tracking system for CROMERR approvals.

Plans for further improvements include:

- Provide a fact sheet for existing EPA systems that are working on CROMERR compliance.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

- Develop a step by step guide for program system managers to determine if they are compliant with the electronic reporting rule.

12. Voluntary Alternative, and Innovative Practices and Programs

Scope of Challenge: *EPA supports and advocates a range of voluntary programs and innovative or alternative practices. However, their growth has not been matched by efforts or processes to define the programs, determine which programs work and how efficiently, or determine the respective goals and expectations of voluntary programs or alternative approaches compared to regulatory programs and approaches. EPA must improve its ability to articulate or measure the results of voluntary programs or innovative and alternative approaches. (OIG)*

The terms “voluntary, alternative, and innovative” encompass a tremendously diverse array of activities. These programs range from high-profile programs such as Energy Star and Performance Track to the more than 100 “voluntary” partnership programs that exist Agency-wide. Many different program offices and regions are responsible for ensuring that these programs are well-designed and well-managed. EPA’s Innovation Action Council (IAC), composed of the Agency’s senior managers, directs and oversees the Agency’s innovation agenda. IAC has a number of efforts underway to clarify the goals and measures and evaluate the results of innovative and “voluntary” partnership programs and has established workgroups on Performance Measurement, Voluntary Partnership Programs, and Environmental Stewardship.

A priority of the IAC over the past year has been to identify organizational strategies to help strengthen the performance-orientation of EPA’s innovative programs. This includes articulating goals clearly, measuring outputs and outcomes, and evaluating of the relationship between the two.

Highlights of progress include:

- Conducted a needs assessment to identify what additional information, tools, or services would be helpful in improving the design, measurement, and evaluation of innovative and other programs.
- Developed guidance that promotes a strategic approach to program evaluation and encourages innovative programs to participate in EPA’s annual Program Evaluation Competition.
- Developed a notification system for new or expanding partnership programs to assure sound design and to eliminate program overlap or conflicts.
- Established a partnership program coordination function within the Administrator’s office to encourage sound program design and management, with particular emphasis on performance measurement.
- Developed guidelines on designing, marketing, and measuring the performance of partnership programs to assure they are designed to demonstrate environmental results.
- Conducted a national practitioners’ workshop for training on good program design and performance measurement.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

- Provided training on performance measurement to approximately 2300 EPA employees.

Plans for further improvements include:

- Continue implementing the three areas of the needs assessment (design, measurement, and evaluation).
- Implement a new information collection request that will enable a number of voluntary programs to collect data critical to evaluating their impacts and effectiveness.
- Publish an Agency-wide partnership program accomplishments report to summarize and aggregate the overall environmental results achieved by these programs.
- Conduct strategic assessment of all partnership programs to evaluate program performance and identify opportunities for greater coordination or consolidation.
- Work with partnership programs to implement measurement guidelines.
- Maintain an internal EPA network of performance management training and technical assistance providers in the Agency's program and regional offices who can assist "voluntary, alternative, and innovative" programs in measurement and evaluation.

13. Agency Efforts in Support of Homeland Security

Scope of Challenge: *Challenges remain as EPA finalizes its Emergency Response Business Plan for selecting incidents of national significance scenarios; dealing with conflicts in preparing for incidents; specifying its role in the National Approach to Response work plans; and monitoring progress. Because EPA made limited progress in accomplishing the initiatives in its 2004 Critical Infrastructure and Key Resources Protection Plan (CIPP), EPA's ability to protect public health and the environment from future terrorist attacks or other nationally significant incidents is not at the level the Agency determined necessary. (OIG)*

EPA's Emergency Response Plan provides a framework for the Agency to address simultaneous incidents of national significance while maintaining an effective day-to-day emergency response and removal operations. In preparing the plan, headquarters and regions use five simultaneous incidents in a "worst case" planning scenario around which to develop detailed assessments, gap analyses, and program activities. The Plan incorporates chemical, biological and radiological scenarios. It also briefly describes the necessary changes in the management of personnel, financial, and other resources required to address incidents of national significance readiness. These changes are identified as EPA's National Approach to Response (NAR) priorities and work is underway.

EPA submitted its Critical Infrastructure and Key Resources Protection Plan Project (CIPP) Matrix to OMB for review and approval. While OMB continues its review, EPA has begun implementing CIPP initiatives. To date, six of the ten initiatives have been completed, and two of the remaining initiatives will be completed by July 2008. One initiative, upgrade of the Environmental Radiation Ambient Monitoring System Process, calls for the staggered

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

acquisition of 180 monitors. The current schedule for this ambitious upgrade is completion by 2012. The final initiative to be completed is acquisition of a Trace Atmospheric Gas Analyzer bus. EPA currently acknowledges homeland security as an Agency-level weakness (immaterial) under FMFIA.

Highlights of progress include:

- Developed and implemented an information technology strategy to move seamlessly from field tools to enterprise architecture. The strategy will link prevention and preparedness data to response.
- Developed a draft *Incident Management Handbook* that provides guidance on organizational structure and outlines the communications flow during an incident of national significance.
- Formed an Administrative and Finance Workgroup to address procurement, property tracking, and pay issues.
- Deployed the National Decontamination Team during the Hurricane Katrina response.
- Established a steering committee to provide oversight and leadership to the numerous workgroups that support the Agency's National Approach to Response.
- Developed a training course for senior managers on emergency response and the use of the Incident Command System (ICS) to assure that roles and responsibilities are well understood.

Plans for further improvements include:

- Finalize the Agency's National Approach to Response (NAR) Communication Plan, which will address roles and responsibilities for incidents of national significance and a "How to Manual" with pre-approved messaging templates.
- Complete the Emergency Response Equipment Data Tracking System
- Continue to coordinate the implementation of the 2004 CIPP (OSWER).

14. Restoration Strategies for the Great Lake Basin

Scope of Challenge: *EPA has made progress in guiding the development of an overall strategy for restoration of the environmental conditions in the Great Lakes Basin. However, it is unclear whether the strategy will be the guiding document for Great Lakes restoration. The Agency needs a clearly defined organizational structure with measurable basin-wide goals and a monitoring system as called for in the Great Lakes Water Quality Agreement and the Clean Water Act. The Agency also needs to follow through to ensure that progress is made on achieving the goals of the strategy. (GAO)*

In May 2004, President Bush signed Executive Order 13340, creating a cabinet-level interagency task force to bring an unprecedented level of collaboration and coordination to restore and protect the Great Lakes. EPA's Great Lakes National Program Office (GLNPO) was cited in the Order and given the responsibility for providing assistance in carrying out the goals of the Order. In addition, the Order directed that a "Regional Collaboration of National Significance" be convened to bring the many governmental and non-governmental partners together to protect and

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

restore the Great Lakes. In December 2005, the Great Lakes Regional Collaboration developed a strategy to guide federal, state, tribal and other partners' action to restore the Great Lakes. Federal commitments from the strategy have been identified in the Federal Near-Term Action Plan and are being implemented. GLNPO is tracking progress towards commitments in the Federal Near-Term Action Plan.

Highlights of progress include:

- Supported the Great Lakes Interagency Task Force in meeting its requirement to submit a report that summarizes task force activities and recommendations that advance the policy of Executive Order 13340.
- Developed an Implementation Framework document which outlines how implementation and reporting of the Great Lakes Regional Collaboration Strategy will be accomplished.

Plans for further improvements include:

- Continue to work with partners to develop basin-wide goals and indicators for the Great Lakes.
- Continue to work with Environment Canada to develop indicators for measuring the health of the Great Lakes.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

EPA USER FEE PROGRAM

In FY 2008, EPA will have several user fee programs in operation. These user fee programs and proposals are as follows:

Current Fees: Pesticides

The FY 2008 President's Budget reflects the continued collection of Maintenance fees for review of existing pesticide registrations, and Enhanced Registration Service Fees for the accelerated review of new pesticide registration applications.

- **Pesticides Maintenance Fee Extension**

The Maintenance fee provides funding for the Reregistration program and a certain percentage supports the processing of applications involving "me-too" or inert ingredients. The Agency is scheduled to complete issuance of Reregistration Eligibility Decisions for the Reregistration program in 2008. In FY 2008, the Agency expects to collect \$15 million in Maintenance fees.

- **Enhanced Registration Services**

Entities seeking to register pesticides for use in the United States pay a fee at the time the registration action request is submitted to EPA specifically for accelerated pesticide registration decision service. This process has introduced new pesticides to the market more quickly. In FY 2008, the Agency expects to collect \$10 million in Enhanced Registration Service fees under current law.

Current Fees: Other

- **Pre-Manufacturing Notification Fee**

Since 1989, the Pre-Manufacturing Notifications (PMN) fee has been collected for the review and processing of new chemical pre-manufacturing notifications submitted to EPA by the chemical industry. These fees are paid at the time of submission of the PMN for review by EPA's Toxic Substances program. PMN fees are authorized by the Toxic Substances Control Act and contain a cap on the amount the Agency may charge for a PMN review. EPA is authorized to collect up to \$1.8 million in PMN fees in FY 2008 under current law.

- **Lead Accreditation and Certification Fee**

The Toxic Substances Control Act, Title IV, Section 402(a)(3), mandates the development of a schedule of fees for persons operating lead training programs accredited under the 402/404 rule and for lead-based paint contractors certified under this rule. The training programs ensure that lead paint abatement is done safely. Fees

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

collected for this activity are deposited in the U.S. Treasury. EPA estimates that \$1 million will be deposited in FY 2008.

- **Motor Vehicle and Engine Compliance Program Fee**

This fee is authorized by the Clean Air Act of 1990 and is managed by the Air and Radiation program. Fee collections began in August 1992. This fee is imposed on manufacturers of light-duty vehicles, light and heavy trucks and motorcycles. The fees cover EPA's cost of certifying new engines and vehicles and monitoring compliance of in-use engines and vehicles. In 2004, EPA promulgated a rule that updated existing fees and established fees for newly-regulated vehicles and engines. The fees established for new compliance programs are also imposed on heavy-duty, in-use, and nonroad industries, including large diesel and gas equipment (earthmovers, tractors, forklifts, compressors, etc), handheld and non-handheld utility engines (chainsaws, weed-whackers, leaf-blowers, lawnmowers, tillers, etc.), marine (boat motors, tugs, watercraft, jet-skis), locomotive, aircraft and recreational vehicles (off-road motorcycles, snowmobiles). In FY 2008, EPA expects to collect \$19 million from this fee.

Fee Proposals: Pesticides

- **Registration Review Fees**

As the Reregistration program approaches completion, EPA has initiated a Registration Review program. EPA will review existing pesticide registrations on a 15-year cycle to ensure that registered pesticides in the marketplace continue to be safe for use in accordance with the latest scientific information. Legislative language will be submitted proposing to collect \$32 million in FY 2008 to partially offset the costs of operating this program and evaluating potential effects of pesticides on endangered species.

- **Pesticides Tolerance Fee**

A tolerance is the maximum legal limit of a pesticide residue in and on food commodities and animal feed. In 1954, the Federal Food, Drug, and Cosmetic Act (FFDCA) authorized the collection of fees for the establishment of tolerances on raw agricultural commodities and in food commodities. The collection of this fee has been blocked by the Pesticides Registration Improvement Act (PRIA) through 2008. Legislative language will be submitted to allow for the collection of Pesticide Tolerance fees in FY 2008 and the Administration will submit legislative language proposing to collect \$13 million in Pesticide Tolerance fees in FY 2008.

- **Enhanced Registration Services**

Legislative language will be submitted proposing to publish a new fee schedule to collect an additional \$12 million in FY 2008 to better align fee collections with program costs. Currently those who directly benefit from EPA's registration services cover only a

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

fraction of the costs to operate the program, leaving the general taxpayer to shoulder the remaining burden.

- **Pesticides Maintenance Fee Extension**

Under current law, the Agency expects to collect \$15 million in Maintenance fees in FY 2008. Legislative language will be submitted to allow the collection of an additional \$9 million in order to more closely align fee collections with program costs. The President's Budget proposes to relieve the burden on the general taxpayer and finance the costs of operating the Reregistration program from those who directly benefit from EPA's reregistration activities.

Fee Proposals: Other

- **Pre-Manufacturing Notification Fee**

Under the current fee structure, the Agency would collect \$1.8 million in FY 2008. Legislative language will be submitted to remove the statutory cap in the Toxic Substances Control Act on Pre-Manufacturing Notification Fees. In FY 2008, EPA expects to collect an additional \$4 million by removing the statutory cap.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

WORKING CAPITAL FUND

In FY 2008, the Agency begins its twelfth year of operation of the Working Capital Fund (WCF). It is a revolving fund authorized by law to finance a cycle of operations, where the costs of goods and services provided are charged to users on a fee-for-service basis. The funds received are available without fiscal year limitation, to continue operations and to replace capital equipment. EPA's WCF was implemented under the authority of Section 403 of the Government Management Reform Act of 1994 and EPA's FY 1997 Appropriations Act. Permanent WCF authority was contained in the Agency's FY 1998 Appropriations Act.

The Chief Financial Officer initiated the WCF in FY 1997 as part of an effort to: (1) be accountable to Agency offices, the Office of Management and Budget, and the Congress; (2) increase the efficiency of the administrative services provided to program offices; and (3) increase customer service and responsiveness. The Agency has a WCF Board which provides policy and planning oversight and advises the CFO regarding the WCF financial position. The Board, chaired by the Associate Chief Financial Officer, is composed of eighteen permanent members from the program and regional offices.

Three Agency Activities provided in FY 2007 will continue into FY 2008. These are the Agency's information technology and telecommunications operations, managed by the Office of Environmental Information, Agency postage costs, managed by the Office of Administration, and the Agency's core accounting system, managed by the Office of the Chief Financial Officer.

The Agency's FY 2008 budget request includes resources for these three Activities in each National Program Manager's submission, totaling approximately \$170.0 million. These estimated resources may be increased to incorporate program office's additional service needs during the operating year. To the extent that these increases are subject to Congressional reprogramming notifications, the Agency will comply with all applicable requirements. In FY 2008, the Agency will continue to market its information technology services to other Federal agencies in an effort to deliver high quality services external to EPA, which will result in lower costs to EPA customers.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

ACRONYMS FOR STATUTORY AUTHORITIES

AEA: Atomic Energy Act, as amended, and Reorganization Plan #3

ADA: Americans with Disabilities Act

ADEA: Age Discrimination in Employment Act

AHERA: Asbestos Hazard Emergency Response Act

AHPA: Archaeological and Historic Preservation Act

ASHAA: Asbestos in Schools Hazard Abatement Act

APA: Administrative Procedures Act

ASTCA: Antarctic Science, Tourism, and Conservation Act

BEACH Act of 2000: Beaches Environmental Assessment and Coastal Health Act

BRERA: Brownfields Revitalization and Environmental Restoration Act

CAA: Clean Air Act

CAAA: Clean Air Act Amendments

CCA: Clinger Cohen Act

CCAA: Canadian Clean Air Act

CEPA: Canadian Environmental Protection Act

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act (1980)

CFOA: Chief Financial Officers Act

CFR: Code of Federal Regulations

CICA: Competition in Contracting Act

CRA: Civil Rights Act

CSA: Computer Security Act

CWPPR: Coastal Wetlands Planning, Protection, and Restoration Act of 1990

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

CWA: Clean Water Act

CZARA: Coastal Zone Management Act Reauthorization Amendments

CZMA: Coastal Zone Management Act

DPA: Deepwater Ports Act

DREAA: Disaster Relief and Emergency Assistance Act

ECRA: Economic Cleanup Responsibility Act

EFOIA: Electronic Freedom of Information Act

EPAA: Environmental Programs Assistance Act

EPAAR: EPA Acquisition Regulations

EPCA: Energy Policy and Conservation Act

EPACT: Energy Policy Act

EPCRA: Emergency Planning and Community Right to Know Act

ERD&DAA: Environmental Research, Development and Demonstration Authorization Act

ESA: Endangered Species Act

ESECA: Energy Supply and Environmental Coordination Act

FACA: Federal Advisory Committee Act

FAIR: Federal Activities Inventory Reform Act

FCMA: Fishery Conservation and Management Act

FEPCA: Federal Environmental Pesticide Control Act; enacted as amendments to FIFRA.

FFDCA: Federal Food, Drug, and Cosmetic Act

FGCAA: Federal Grant and Cooperative Agreement Act

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act

FLPMA: Federal Land Policy and Management Act

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

FMFIA: Federal Managers' Financial Integrity Act

FOIA: Freedom of Information Act

FPAS: Federal Property and Administration Services Act

FPA: Federal Pesticide Act

FPPA: Federal Pollution Prevention Act

FPR: Federal Procurement Regulation

FQPA: Food Quality Protection Act

FRA: Federal Register Act

FSA: Food Security Act

FUA: Fuel Use Act

FWCA: Fish and Wildlife Coordination Act

FWPCA: Federal Water Pollution and Control Act (aka CWA)

GISRA: Government Information Security Reform Act

GMRA: Government Management Reform Act

GPRA: Government Performance and Results Act

HMTA: Hazardous Materials Transportation Act

HSWA: Hazardous and Solid Waste Amendments

IGA: Inspector General Act

IPA: Intergovernmental Personnel Act

IPIA: Improper Payments Information Act

ISTEA: Intermodal Surface Transportation Efficiency Act

LPA-US/MX-BR: 1983 La Paz Agreement on US/Mexico Border Region

MPPRCA: Marine Plastic Pollution, Research and Control Act of 1987

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

MPRSA: Marine Protection Research and Sanctuaries Act

NAAEC: North American Agreement on Environmental Cooperation

NAAQS: National Ambient Air Quality Standard

NAWCA: North American Wetlands Conservation Act,

NEPA: National Environmental Policy Act

NHPA: National Historic Preservation Act

NIPDWR: National Interim Primary Drinking Water Regulations

NISA: National Invasive Species Act of 1996

ODA: Ocean Dumping Act

OPA: The Oil Pollution Act

OWBPA: Older Workers Benefit Protection Act

PBA: Public Building Act

PFCRA: Program Fraud Civil Remedies Act

PHSA: Public Health Service Act

PLIRRA: Pollution Liability Insurance and Risk Retention Act

PR: Privacy Act

PRA: Paperwork Reduction Act

QCA: Quiet Communities Act

RCRA: Resource Conservation and Recovery Act

RLBPHRA: Residential Lead-Based Paint Hazard Reduction Act

RFA: Regulatory Flexibility Act

RICO: Racketeer Influenced and Corrupt Organizations Act

SARA: Superfund Amendments and Reauthorization Act of 1986

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

SBREFA: Small Business Regulatory Enforcement Fairness Act of 1996

SBLRBRERA: Small Business Liability Relief and Brownfields Revitalization and Environmental Restoration Act

SDWA: Safe Drinking Water Act

SICEA: Steel Industry Compliance Extension Act

SMCRA: Surface Mining Control and Reclamation Act

SPA: Shore Protection Act of 1988

SWDA: Solid Waste Disposal Act

TCA: Tribal Cooperative Agreement

TSCA: Toxic Substances Control Act

UMRA: Unfunded Mandates Reform Act.

UMTRLWA: Uranium Mill Tailings Radiation Land Withdrawal Act

USC: United States Code

USTCA: Underground Storage Tank Compliance Act

WQA: Water Quality Act of 1987

WRDA: Water Resources Development Act

WSRA: Wild and Scenic Rivers Act

WWWQA: Wet Weather Water Quality Act of 2000

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

FY 2008 STAG CATEGORICAL PROGRAM GRANTS

**Statutory Authority and Eligible Uses
(Dollars in Thousands)**

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/ Objective	FY 2008 President's Budget Dollars (X1000)
State and Local Air Quality Management	CAA, Section 103	Multi-jurisdictional organizations (non-profit organizations whose boards of directors or membership is made up of CAA section 302(b) agency officers and Tribal representatives and whose mission is to support the continuing environmental programs of the states)	Coordinating or facilitating a multi-jurisdictional approach to addressing regional haze.	\$2,500.0	Goal 1, Obj. 1	\$1,000.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/Objective	FY 2008 President's Budget Dollars (X1000)
State and Local Air Quality Management	CAA, Sections 103, 105, 106	Air pollution control agencies as defined in section 302(b) of the CAA; Multi-jurisdictional organizations (non-profit organizations whose boards of directors or membership is made up of CAA section 302(b) agency officers and whose mission is to support the continuing environmental programs of the states); Interstate air quality control region designated pursuant to section 107 of the CAA or of implementing section 176A, or section 184 NOTE: only the Ozone Transport Commission is eligible	Carrying out the traditional prevention and control programs required by the CAA and associated program support costs, including monitoring activities (section 105); Coordinating or facilitating a multi-jurisdictional approach to carrying out the traditional prevention and control programs required by the CAA (sections 103 and 106); Supporting training for CAA section 302(b) air pollution control agency staff (sections 103 and 105); Supporting research, investigative and demonstration projects(section 103)	\$182,679.5	Goal 1, Obj. 1	\$184,180.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/ Objective	FY 2008 President's Budget Dollars (X1000)
Tribal Air Quality Management	CAA, Sections 103 and 105; Tribal Cooperative Agreements (TCA) in annual Appropriations Acts.	Tribes; Intertribal Consortia; State/ Tribal College or University	Conducting air quality assessment activities to determine a Tribe's need to develop a CAA program; Carrying out the traditional prevention and control programs required by the CAA and associated program costs; Supporting training for CAA for Federally-recognized Tribes	\$10,939.5	Goal 1, Obj. 1	\$10,940.0
Radon	TSCA, Sections 10 and 306; TCA in annual Appropriations Acts.	State Agencies, Tribes, Intertribal Consortia	Assist in the development and implementation of programs for the assessment and mitigation of radon	\$8,073.5	Goal 1, Obj. 2	\$8,074.0
Water Pollution Control (Section 106)	FWPCA, as amended, Section 106; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia, Interstate Agencies	Develop and carry out surface and ground water pollution control programs, including NPDES permits, TMDL's, WQ standards, monitoring, and NPS control activities.	\$221,661.0	Goal 2, Obj. 2	\$221,664.0
Nonpoint Source (NPS – Section 319)	FWPCA, as amended, Section 319(h); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement EPA-approved state and Tribal nonpoint source management programs and fund priority projects as selected by the state.	\$194,040.0	Goal 2, Obj. 2	\$194,040.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/ Objective	FY 2008 President's Budget Dollars (X1000)
Wetlands Program Development	FWPCA, as amended, Section 104 (b)(3); TCA in annual Appropriations Acts.	States, Local Governments, Tribes, Interstate Organizations, Intertribal Consortia, Non-Profit Organizations	To develop new wetland programs or enhance existing programs for the protection, management and restoration of wetland resources.	\$16,830.0	Goal 4, Obj. 3	\$16,830.0
Targeted Watershed Grants	Department of Interior, Environment and Related Agencies Appropriation Act, 2006 Public Law 109-54.	States, Local Governments, Tribes, Interstate Organizations, Intertribal Consortia, Non-Profit Organizations	Assistance for watersheds to expand and improve existing watershed protection efforts.	\$6,930.0	Goal 4, Obj. 3	\$0.0
Public Water System Supervision (PWSS)	SDWA, Section 1443(a); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Assistance to implement and enforce National Primary Drinking Water Regulations to ensure the safety of the Nation's drinking water resources and to protect public health.	\$99,099.0	Goal 2, Obj. 1	\$99,100.0
Homeland Security Grants	SDWA, Section 1442; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	To assist states and Tribes in coordinating their water security activities with other homeland security efforts.	\$4,950.0	Goal 2, Obj. 1	\$4,950.0
Underground Injection Control [UIC]	SDWA, Section 1443(b); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement and enforce regulations that protect underground sources of drinking water by controlling Class I-V underground injection wells.	\$10,890.0	Goal 2, Obj. 1	\$10,891.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/ Objective	FY 2008 President's Budget Dollars (X1000)
Beaches Protection	BEACH Act of 2000; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia, Local Governments	Develop and implement programs for monitoring and notification of conditions for coastal recreation waters adjacent to beaches or similar points of access that are used by the public.	\$9,900.0	Goal 2, Obj. 1	\$9,900.0
Hazardous Waste Financial Assistance	RCRA, Section 3011; FY 1999 Appropriations Act (PL 105-276); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Development & Implementation of Hazardous Waste Programs	\$103,345.5	Goal 3, Obj. 1 Obj. 2	\$103,346.0
Brownfields	CERCLA, as amended by the Small Business Liability Relief and Brownfields Revitalization Act (P.L. 107-118); GMRA (1990); FGCAA.	States, Tribes, Intertribal Consortia	Build and support Brownfields programs which will assess contaminated properties, oversee private party cleanups, provide cleanup support through low interest loans, and provide certainty for liability related issues.	\$49,494.9	Goal 4, Obj. 2	\$49,495.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/ Objective	FY 2008 President's Budget Dollars (X1000)
Underground Storage Tanks [UST]	SWDA, as amended by the Superfund Reauthorization Amendments of 1986 (Subtitle I), Section 2007(f), 42 U.S.C. 6916(f)(2); Energy Policy Act of 2005, Title XV – Ethanol and Motor Fuels, Subtitle B – Underground Storage Tank Compliance, Sections 1521-1533, P.L. 109-58, 42 U.S.C. 15801; and implemented by regulations at CFR 35.330; Tribal Grants - P.L. 105-276.	States, Federally-Recognized Tribes, Intertribal Consortia	Develop and/or implement state or Indian UST program; provide assistance to states to help them meet their new responsibilities under the Energy Policy Act of 2005; provide funding for SEE enrollees to work on the states' underground storage tanks and to support direct UST implementation programs.	\$37,566.7	Goal 3, Obj. 1	\$22,274.0
Pesticides Program Implementation	FIFRA, Sections 20 and 23; the FY 1999 Appropriations Act (PL 105-276); FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement the following programs through grants to states, Tribes, partners, and supporters: Certification and Training / Worker Protection, Endangered Species Protection Program (ESPP) Field Activities, Tribal Program, and Pesticide Environmental Stewardship Program.	\$12,968.9	Goal 4, Obj. 1	\$12,970.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/ Objective	FY 2008 President's Budget Dollars (X1000)
Lead	TSCA, Sections 10 and 404 (g); FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement the lead-based paint activities in the Training and Certification program through EPA-authorized state, territorial and Tribal programs and, in areas without authorization, through direct implementation by the Agency. Activities conducted as part of this program include issuing grants for the training and certification of individuals and firms engaged in lead-based paint abatement and inspection activities and the accreditation of qualified training providers.	\$13,563.1	Goal 4, Obj. 1	\$13,564.0
Toxic Substances Compliance	TSCA, Sections 28(a) and 404 (g); TCA in annual Appropriations Acts.	States, Territories, Tribes, Intertribal Consortia	Assist in developing and implementing toxic substances enforcement programs for PCBs, asbestos, and lead-based paint	\$5,098.5	Goal 5, Obj. 1	\$5,099.0
Pesticide Enforcement	FIFRA § 23(a)(1); FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	States, Territories, Tribes, Intertribal Consortia	Assist in implementing cooperative pesticide enforcement programs	\$18,711.0	Goal 5, Obj. 1	\$18,711.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/ Objective	FY 2008 President's Budget Dollars (X1000)
National Environmental Information Exchange Network (NEIEN, aka "the Exchange Network")	As appropriate, CAA, Section 103; CWA, Section 104; RCRA, Section 8001; FIFRA, Section 20; TSCA, Sections 10 and 28; MPRSA, Section 203; SDWA, Section 1442; Indian Environmental General Assistance Program Act of 1992, as amended; FY 2000 Appropriations Act (P.L. 106-74); Pollution Prevention Act of 1990, Section 6605; FY 2002 Appropriations Act and FY 2003 Appropriations Acts.	States, Tribes, Interstate Agencies, Tribal Consortium, Other Agencies with Related Environmental Information Activities	Assists states and others to better integrate environmental information systems, better enable data-sharing across programs, and improve access to information.	\$14,850.0	Goal 5, Obj. 2	\$12,850.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/Objective	FY 2008 President's Budget Dollars (X1000)
Pollution Prevention	Pollution Prevention Act of 1990, Section 6605; TSCA Section 10; FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Provides assistance to states and state entities (i.e., colleges and universities) and Federally-recognized Tribes and intertribal consortia in order to deliver pollution prevention technical assistance to small and medium-sized businesses. A goal of the program is to assist businesses and industries with identifying improved environmental strategies and solutions for reducing waste at the source.	\$5,940.0	Goal 5, Obj. 2	\$5,940.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2007 President's Budget Dollars (X1000)	FY 2008 Goal/ Objective	FY 2008 President's Budget Dollars (X1000)
Sector Program (previously Enforcement & Compliance Assurance)	As appropriate, CAA, Section 103; CWA, Section 104; SWDA, Section 8001; FIFRA, Section 20; TSCA, Sections 10 and 28; MPRSA, Section 203; SDWA, Section 1442; Indian Environmental General Assistance Program Act of 1992, as amended; FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	State, Territories, Tribes, Intertribal Consortia, Multi-Jurisdictional Organizations	Assist in developing innovative sector-based, multi-media, or single-media approaches to enforcement and compliance assurance	\$2,227.5	Goal 5, Obj. 1	\$2,228.0
Indian General Assistance Program	Indian Environmental General Assistance Program Act of 1992, as amended; TCA in annual Appropriations Acts.	Tribal Governments, Intertribal Consortia	Plan and develop Tribal environmental protection programs.	\$56,925.0	Goal 5, Obj. 3	\$56,925.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

PROGRAM PROJECTS BY APPROPRIATION
(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Science & Technology				
Air Toxics and Quality				
Clean Air Allowance Trading Programs	\$8,036.1	\$9,259.4	\$8,259.0	(\$1,000.4)
Federal Support for Air Quality Management	\$9,647.9	\$10,272.9	\$10,886.0	\$613.1
Federal Support for Air Toxics Program	\$2,029.6	\$2,264.7	\$2,252.0	(\$12.7)
Federal Vehicle and Fuels Standards and Certification				
<i>Energy Policy Act & Related Authorities Implementation</i>	\$0.0	\$11,400.0	\$8,388.0	(\$3,012.0)
<i>Federal Vehicle and Fuels Standards and Certification (other activities)</i>	\$61,604.3	\$56,924.5	\$57,334.0	\$409.5
Subtotal, Federal Vehicle and Fuels Standards and Certification	\$61,604.3	\$68,324.5	\$65,722.0	(\$2,602.5)
Radiation: Protection	\$2,311.9	\$2,054.3	\$2,120.0	\$65.7
Radiation: Response Preparedness	\$3,263.4	\$3,585.9	\$3,721.0	\$135.1
Subtotal, Air Toxics and Quality	\$86,893.2	\$95,761.7	\$92,960.0	(\$2,801.7)
Climate Protection Program				
Climate Protection Program	\$19,650.5	\$12,549.6	\$13,104.0	\$554.4
Enforcement				
Forensics Support	\$13,044.2	\$13,185.2	\$15,075.0	\$1,889.8
Homeland Security				
Homeland Security: Critical Infrastructure Protection				
<i>Water sentinel and related training</i>	\$707.8	\$41,735.2	\$21,884.0	(\$19,851.2)
<i>Homeland Security: Critical Infrastructure Protection (other activities)</i>	\$12,598.3	\$3,515.8	\$3,702.0	\$186.2
Subtotal, Homeland Security: Critical Infrastructure Protection	\$13,306.1	\$45,251.0	\$25,586.0	(\$19,665.0)
Homeland Security: Preparedness, Response, and Recovery				
<i>Decontamination</i>	\$11,345.1	\$24,666.7	\$20,738.0	(\$3,928.7)
<i>Laboratory Security: Preparedness, Response, and Recovery</i>	\$578.2	\$600.0	\$600.0	\$0.0
<i>Safe Building</i>	\$2,441.4	\$4,000.0	\$4,000.0	\$0.0
<i>Homeland Security: Preparedness, Response, and Recovery (other activities)</i>	\$18,328.1	\$15,231.4	\$15,430.0	\$198.6
Subtotal, Homeland Security: Preparedness, Response, and Recovery	\$32,692.8	\$44,498.1	\$40,768.0	(\$3,730.1)
Homeland Security: Protection of EPA Personnel and Infrastructure	\$3,013.8	\$2,079.0	\$594.0	(\$1,485.0)
Subtotal, Homeland Security	\$49,012.7	\$91,828.1	\$66,948.0	(\$24,880.1)

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Indoor Air				
Indoor Air: Radon Program	\$583.9	\$442.2	\$428.0	(\$14.2)
Reduce Risks from Indoor Air	\$759.9	\$828.7	\$788.0	(\$40.7)
Subtotal, Indoor Air	\$1,343.8	\$1,270.9	\$1,216.0	(\$54.9)
IT / Data Management / Security				
IT / Data Management	\$4,412.9	\$4,268.0	\$3,499.0	(\$769.0)
Operations and Administration				
Facilities Infrastructure and Operations	\$8,841.7	\$70,239.5	\$73,859.0	\$3,619.5
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	\$0.0	\$0.0	\$3,294.0	\$3,294.0
Pesticides: Protect the Environment from Pesticide Risk	\$0.0	\$0.0	\$2,115.0	\$2,115.0
Pesticides: Realize the Value of Pesticide Availability	\$0.0	\$0.0	\$472.0	\$472.0
Pesticides: Registration of New Pesticides	\$2,631.7	\$2,766.1	\$0.0	(\$2,766.1)
Pesticides: Review / Reregistration of Existing Pesticides	\$2,347.0	\$2,820.4	\$0.0	(\$2,820.4)
Subtotal, Pesticides Licensing	\$4,978.7	\$5,586.5	\$5,881.0	\$294.5
Research / Congressional Priorities	\$56,300.5	\$0.0	\$0.0	\$0.0
Research: Clean Air				
Research: Air Toxics	\$18,535.1	\$12,274.2	\$0.0	(\$12,274.2)
Research: Clean Air	\$0.0	\$0.0	\$81,054.0	\$81,054.0
Research: Global Change	\$17,495.2	\$17,456.4	\$16,908.0	(\$548.4)
Research: NAAQS	\$65,242.5	\$65,455.6	\$0.0	(\$65,455.6)
Subtotal, Research: Clean Air	\$101,272.8	\$95,186.2	\$97,962.0	\$2,775.8
Research: Clean Water				
Research: Drinking Water	\$52,015.9	\$49,242.5	\$48,548.0	(\$694.5)
Research: Water Quality	\$48,233.9	\$56,988.2	\$56,454.0	(\$534.2)
Subtotal, Research: Clean Water	\$100,249.8	\$106,230.7	\$105,002.0	(\$1,228.7)
Research: Human Health and Ecosystems				
Human Health Risk Assessment	\$33,663.5	\$34,488.5	\$38,856.0	\$4,367.5
Research: Computational Toxicology	\$13,264.5	\$14,983.1	\$15,103.0	\$119.9
Research: Endocrine Disruptor	\$11,234.3	\$9,081.2	\$10,131.0	\$1,049.8
Research: Fellowships	\$15,609.9	\$8,383.0	\$8,438.0	\$55.0
Research: Human Health and Ecosystems				
<i>Human Health</i>	\$0.0	\$0.0	\$72,285.0	\$72,285.0

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
<i>Ecosystems</i>	\$0.0	\$0.0	\$72,761.0	\$72,761.0
<i>Research: Human Health and Ecosystems (other activities)</i>	\$169,126.0	\$161,312.7	\$0.0	(\$161,312.7)
Subtotal, Research: Human Health and Ecosystems	\$169,126.0	\$161,312.7	\$145,046.0	(\$16,266.7)
Subtotal, Research: Human Health and Ecosystems	\$242,898.2	\$228,248.5	\$217,574.0	(\$10,674.5)
Research: Land Protection				
Research: Land Protection and Restoration	\$12,101.5	\$10,552.8	\$10,737.0	\$184.2
Research: Sustainability				
Research: Economics and Decision Science(EDS)	\$2,487.6	\$2,494.6	\$0.0	(\$2,494.6)
Research: Environmental Technology Verification (ETV)	\$2,761.9	\$0.0	\$0.0	\$0.0
Research: Sustainability	\$27,042.4	\$21,404.9	\$22,478.0	\$1,073.1
Subtotal, Research: Sustainability	\$32,291.9	\$23,899.5	\$22,478.0	(\$1,421.5)
Toxic Research and Prevention				
Research: Pesticides and Toxics	\$28,343.3	\$26,223.7	\$24,795.0	(\$1,428.7)
Water: Human Health Protection				
Drinking Water Programs	\$3,101.9	\$3,243.1	\$3,416.0	\$172.9
Total, Science & Technology	\$764,737.6	\$788,274.0	\$754,506.0	(\$33,768.0)
Environmental Program & Management				
Air Toxics and Quality				
Clean Air Allowance Trading Programs	\$17,710.5	\$19,126.4	\$19,388.0	\$261.6
Federal Stationary Source Regulations	\$23,221.1	\$25,678.3	\$26,504.0	\$825.7
Federal Support for Air Quality Management				
<i>Energy Policy Act Implementation</i>	\$0.0	\$2,800.0	\$2,800.0	\$0.0
<i>Clean Diesel Initiative</i>	\$3,119.4	\$0.0	\$0.0	\$0.0
<i>Federal Support for Air Quality Management (other activities)</i>	\$89,933.6	\$85,265.6	\$87,690.0	\$2,424.4
Subtotal, Federal Support for Air Quality Management	\$93,053.0	\$88,065.6	\$90,490.0	\$2,424.4
Federal Support for Air Toxics Program	\$24,332.1	\$25,513.7	\$24,711.0	(\$802.7)
Radiation: Protection	\$11,301.6	\$10,648.6	\$10,186.0	(\$462.6)
Radiation: Response Preparedness	\$2,374.4	\$2,688.7	\$2,928.0	\$239.3
Stratospheric Ozone: Domestic Programs	\$5,560.8	\$5,221.4	\$4,489.0	(\$732.4)
Stratospheric Ozone: Multilateral Fund	\$8,534.7	\$13,365.0	\$9,865.0	(\$3,500.0)
Subtotal, Air Toxics and Quality	\$186,088.2	\$190,307.7	\$188,561.0	(\$1,746.7)
Brownfields				
Brownfields	\$21,848.2	\$24,637.3	\$23,450.0	(\$1,187.3)

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Climate Protection Program				
Climate Protection Program				
<i>Energy Star</i>	\$33,391.6	\$45,722.8	\$43,926.0	(\$1,796.8)
<i>Methane to Markets</i>	\$2,147.5	\$4,420.5	\$4,436.0	\$15.5
<i>Climate Protection Program (other activities)</i>	\$48,154.8	\$41,700.0	\$39,565.0	(\$2,135.0)
Subtotal, Climate Protection Program	\$83,693.9	\$91,843.3	\$87,927.0	(\$3,916.3)
Subtotal, Climate Protection Program	\$83,693.9	\$91,843.3	\$87,927.0	(\$3,916.3)
Compliance				
Compliance Assistance and Centers				
<i>Energy Policy Act Implementation</i>	\$0.0	\$111.2	\$131.0	\$19.8
<i>Compliance Assistance and Centers (other activities)</i>	\$27,774.3	\$28,779.5	\$29,416.0	\$636.5
Subtotal, Compliance Assistance and Centers	\$27,774.3	\$28,890.7	\$29,547.0	\$656.3
Compliance Incentives	\$8,338.9	\$9,702.2	\$9,786.0	\$83.8
Compliance Monitoring				
<i>Energy Policy Act Implementation</i>	\$172.0	\$986.9	\$1,128.0	\$141.1
<i>Compliance Monitoring (other activities)</i>	\$86,463.1	\$92,031.9	\$92,300.0	\$268.1
Subtotal, Compliance Monitoring	\$86,635.1	\$93,018.8	\$93,428.0	\$409.2
Subtotal, Compliance	\$122,748.3	\$131,611.7	\$132,761.0	\$1,149.3
Enforcement				
Civil Enforcement				
<i>Energy Policy Act Implementation</i>	\$0.0	\$753.2	\$810.0	\$56.8
<i>Civil Enforcement (other activities)</i>	\$118,560.9	\$120,024.5	\$125,835.0	\$5,810.5
Subtotal, Civil Enforcement	\$118,560.9	\$120,777.7	\$126,645.0	\$5,867.3
Criminal Enforcement	\$41,595.6	\$37,793.5	\$39,688.0	\$1,894.5
Enforcement Training	\$2,655.2	\$2,503.7	\$3,145.0	\$641.3
Environmental Justice	\$4,691.5	\$3,859.0	\$3,822.0	(\$37.0)
NEPA Implementation	\$12,890.2	\$13,787.5	\$14,366.0	\$578.5
Subtotal, Enforcement	\$180,393.4	\$178,721.4	\$187,666.0	\$8,944.6
Environmental Protection / Congressional Priorities	\$65,347.2	\$0.0	\$0.0	\$0.0
Geographic Programs				
Geographic Program: Chesapeake Bay	\$22,292.9	\$26,397.7	\$28,768.0	\$2,370.3
Geographic Program: Great Lakes	\$19,251.9	\$20,577.1	\$21,757.0	\$1,179.9
Geographic Program: Gulf of Mexico	\$3,715.9	\$4,310.7	\$4,457.0	\$146.3
Geographic Program: Lake Champlain	\$3,959.0	\$933.8	\$934.0	\$0.2

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Geographic Program: Long Island Sound	\$946.0	\$466.9	\$467.0	\$0.1
Geographic Program: Other				
<i>Geographic Program: Puget Sound</i>	\$2,307.8	\$0.0	\$1,000.0	\$1,000.0
<i>Lake Pontchartrain</i>	\$0.0	\$978.0	\$978.0	\$0.0
<i>Community Action for a Renewed Environment (CARE)</i>	\$1,148.2	\$4,448.4	\$3,448.0	(\$1,000.4)
<i>Geographic Program: Other (other activities)</i>	\$4,725.6	\$3,623.6	\$3,149.0	(\$474.6)
Subtotal, Geographic Program: Other	\$8,181.6	\$9,050.0	\$8,575.0	(\$475.0)
Regional Geographic Initiatives	\$7,717.1	\$9,137.3	\$9,553.0	\$415.7
Subtotal, Geographic Programs	\$66,064.4	\$70,873.5	\$74,511.0	\$3,637.5
Homeland Security				
Homeland Security: Communication and Information				
<i>Laboratory Preparedness and Response</i>	\$318.1	\$1,200.0	\$500.0	(\$700.0)
<i>Homeland Security: Communication and Information (other activities)</i>	\$4,961.9	\$5,599.7	\$6,406.0	\$806.3
Subtotal, Homeland Security: Communication and Information	\$5,280.0	\$6,799.7	\$6,906.0	\$106.3
Homeland Security: Critical Infrastructure Protection				
<i>Decontamination</i>	\$43.6	\$99.0	\$99.0	\$0.0
<i>Homeland Security: Critical Infrastructure Protection (other activities)</i>	\$4,673.8	\$7,143.7	\$7,688.0	\$544.3
Subtotal, Homeland Security: Critical Infrastructure Protection	\$4,717.4	\$7,242.7	\$7,787.0	\$544.3
Homeland Security: Preparedness, Response, and Recovery				
<i>Decontamination</i>	\$5.0	\$3,328.7	\$3,380.0	\$51.3
<i>Homeland Security: Preparedness, Response, and Recovery (other activities)</i>	\$1,654.2	\$0.0	\$1.0	\$1.0
Subtotal, Homeland Security: Preparedness, Response, and Recovery	\$1,659.2	\$3,328.7	\$3,381.0	\$52.3
Homeland Security: Protection of EPA Personnel and Infrastructure	\$8,845.1	\$6,268.9	\$6,345.0	\$76.1
Subtotal, Homeland Security	\$20,501.7	\$23,640.0	\$24,419.0	\$779.0
Indoor Air				
Indoor Air: Radon Program	\$7,418.0	\$5,519.2	\$5,429.0	(\$90.2)
Reduce Risks from Indoor Air	\$19,023.2	\$23,464.3	\$21,440.0	(\$2,024.3)
Subtotal, Indoor Air	\$26,441.2	\$28,983.5	\$26,869.0	(\$2,114.5)
Information Exchange / Outreach				
Children and Other Sensitive Populations: Agency Coordination	\$5,695.1	\$6,063.8	\$6,203.0	\$139.2
Congressional, Intergovernmental, External Relations	\$48,586.7	\$52,142.7	\$49,747.0	(\$2,395.7)

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Environmental Education	\$8,582.4	\$0.0	\$0.0	\$0.0
Exchange Network	\$18,725.7	\$16,048.5	\$15,364.0	(\$684.5)
Small Business Ombudsman	\$2,498.5	\$3,501.7	\$3,261.0	(\$240.7)
Small Minority Business Assistance	\$1,950.4	\$2,646.6	\$2,466.0	(\$180.6)
State and Local Prevention and Preparedness	\$11,576.0	\$12,508.4	\$12,960.0	\$451.6
TRI / Right to Know	\$13,914.4	\$15,243.4	\$15,728.0	\$484.6
Tribal - Capacity Building	\$11,841.6	\$11,435.7	\$11,477.0	\$41.3
Subtotal, Information Exchange / Outreach	\$123,370.8	\$119,590.8	\$117,206.0	(\$2,384.8)
International Programs				
Commission for Environmental Cooperation	\$4,229.9	\$4,137.0	\$4,022.0	(\$115.0)
Environment and Trade	\$1,695.8	\$1,861.2	\$1,945.0	\$83.8
International Capacity Building	\$7,687.0	\$6,390.3	\$5,311.0	(\$1,079.3)
POPs Implementation	\$1,707.9	\$1,808.7	\$1,831.0	\$22.3
US Mexico Border	\$8,145.2	\$6,061.0	\$4,646.0	(\$1,415.0)
Subtotal, International Programs	\$23,465.8	\$20,258.2	\$17,755.0	(\$2,503.2)
IT / Data Management / Security				
Information Security	\$4,198.5	\$5,562.1	\$5,583.0	\$20.9
IT / Data Management	\$98,871.4	\$96,807.2	\$91,019.0	(\$5,788.2)
Subtotal, IT / Data Management / Security	\$103,069.9	\$102,369.3	\$96,602.0	(\$5,767.3)
Legal / Science / Regulatory / Economic Review				
Administrative Law	\$4,289.0	\$4,860.9	\$5,260.0	\$399.1
Alternative Dispute Resolution	\$1,004.4	\$1,229.8	\$1,175.0	(\$54.8)
Civil Rights / Title VI Compliance	\$10,674.8	\$11,053.7	\$11,240.0	\$186.3
Legal Advice: Environmental Program	\$35,237.7	\$37,525.5	\$39,366.0	\$1,840.5
Legal Advice: Support Program	\$13,454.0	\$13,465.9	\$13,986.0	\$520.1
Regional Science and Technology	\$3,772.5	\$3,520.7	\$3,574.0	\$53.3
Regulatory Innovation	\$22,671.1	\$25,853.6	\$23,866.0	(\$1,987.6)
Regulatory/Economic-Management and Analysis	\$16,592.7	\$17,554.8	\$20,104.0	\$2,549.2
Science Advisory Board	\$4,555.8	\$4,615.7	\$4,790.0	\$174.3
Subtotal, Legal / Science / Regulatory / Economic Review	\$112,252.0	\$119,680.6	\$123,361.0	\$3,680.4
Operations and Administration				
Acquisition Management	\$23,040.8	\$25,418.3	\$29,992.0	\$4,573.7
Central Planning, Budgeting, and Finance	\$70,768.6	\$83,548.1	\$74,960.0	(\$8,588.1)
Facilities Infrastructure and Operations	\$336,980.6	\$294,760.1	\$303,728.0	\$8,967.9
Financial Assistance Grants / IAG Management	\$22,280.0	\$21,847.0	\$23,439.0	\$1,592.0
Human Resources Management	\$42,966.8	\$40,202.5	\$40,175.0	(\$27.5)

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Subtotal, Operations and Administration	\$496,036.8	\$465,776.0	\$472,294.0	\$6,518.0
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	\$0.0	\$0.0	\$62,514.0	\$62,514.0
Pesticides: Protect the Environment from Pesticide Risk	\$0.0	\$0.0	\$41,750.0	\$41,750.0
Pesticides: Realize the Value of Pesticide Availability	\$0.0	\$0.0	\$12,114.0	\$12,114.0
Pesticides: Field Programs	\$24,627.9	\$24,926.3	\$0.0	(\$24,926.3)
Pesticides: Registration of New Pesticides	\$39,406.5	\$39,767.6	\$0.0	(\$39,767.6)
Pesticides: Review / Reregistration of Existing Pesticides	\$54,507.5	\$51,814.6	\$0.0	(\$51,814.6)
Science Policy and Biotechnology	\$2,035.3	\$1,754.0	\$1,780.0	\$26.0
Subtotal, Pesticides Licensing	\$120,577.2	\$118,262.5	\$118,158.0	(\$104.5)
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	\$38,425.9	\$40,372.3	\$39,573.0	(\$799.3)
RCRA: Waste Management	\$66,819.2	\$67,887.3	\$69,158.0	\$1,270.7
RCRA: Waste Minimization & Recycling	\$12,067.4	\$12,235.1	\$13,666.0	\$1,430.9
Subtotal, Resource Conservation and Recovery Act (RCRA)	\$117,312.5	\$120,494.7	\$122,397.0	\$1,902.3
Toxics Risk Review and Prevention				
Toxic Substances: Chemical Risk Management	\$9,090.4	\$7,736.5	\$5,654.0	(\$2,082.5)
Toxic Substances: Chemical Risk Review and Reduction	\$41,500.9	\$44,637.0	\$45,046.0	\$409.0
Endocrine Disruptors	\$7,350.1	\$7,985.4	\$5,890.0	(\$2,095.4)
Toxic Substances: Lead Risk Reduction Program	\$12,087.0	\$11,367.6	\$13,546.0	\$2,178.4
Pollution Prevention Program	\$17,744.8	\$21,292.4	\$19,935.0	(\$1,357.4)
Subtotal, Toxics Risk Review and Prevention	\$87,773.2	\$93,018.9	\$90,071.0	(\$2,947.9)
Underground Storage Tanks (LUST / UST)				
LUST / UST				
<i>Energy Policy Act Implementation</i>	\$0.0	\$11,713.7	\$11,707.0	(\$6.7)
<i>LUST / UST (other activities)</i>	\$9,042.3	\$0.0	\$12.0	\$12.0
Subtotal, LUST / UST	\$9,042.3	\$11,713.7	\$11,719.0	\$5.3
Subtotal, Underground Storage Tanks (LUST / UST)	\$9,042.3	\$11,713.7	\$11,719.0	\$5.3
Water: Ecosystems				
Great Lakes Legacy Act	\$26,771.7	\$49,600.0	\$35,000.0	(\$14,600.0)
National Estuary Program / Coastal Waterways	\$26,294.4	\$18,417.2	\$17,203.0	(\$1,214.2)
Wetlands	\$19,842.5	\$20,992.2	\$21,518.0	\$525.8
Subtotal, Water: Ecosystems	\$72,908.6	\$89,009.4	\$73,721.0	(\$15,288.4)

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Water: Human Health Protection				
Beach / Fish Programs	\$3,593.8	\$2,653.9	\$2,830.0	\$176.1
Drinking Water Programs	\$90,252.9	\$99,121.0	\$96,967.0	(\$2,154.0)
Subtotal, Water: Human Health Protection	\$93,846.7	\$101,774.9	\$99,797.0	(\$1,977.9)
 Water Quality Protection				
Marine Pollution	\$10,846.3	\$12,462.4	\$12,851.0	\$388.6
Surface Water Protection				
<i>Water Quality Monitoring</i>	\$5,480.4	\$7,120.7	\$7,121.0	\$0.3
<i>Surface Water Protection (other activities)</i>	\$182,825.7	\$184,466.5	\$188,971.0	\$4,504.5
Subtotal, Surface Water Protection	\$188,306.1	\$191,587.2	\$196,092.0	\$4,504.8
Subtotal, Water Quality Protection	\$199,152.4	\$204,049.6	\$208,943.0	\$4,893.4
 Total, Environmental Program & Management	\$2,331,934.7	\$2,306,617.0	\$2,298,188.0	(\$8,429.0)
 Inspector General				
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$36,501.5	\$35,100.0	\$38,008.0	\$2,908.0
Total, Inspector General	\$36,501.5	\$35,100.0	\$38,008.0	\$2,908.0
 Building and Facilities				
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	\$10,800.9	\$11,385.1	\$7,870.0	(\$3,515.1)
Operations and Administration				
Facilities Infrastructure and Operations	\$30,871.3	\$28,430.9	\$26,931.0	(\$1,499.9)
Total, Building and Facilities	\$41,672.2	\$39,816.0	\$34,801.0	(\$5,015.0)
 Hazardous Substance Superfund				
Air Toxics and Quality				
Radiation: Protection	\$1,938.3	\$2,323.3	\$2,373.0	\$49.7
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$13,243.5	\$13,316.0	\$7,149.0	(\$6,167.0)
Compliance				
Compliance Assistance and Centers	\$11.0	\$22.2	\$22.0	(\$0.2)
Compliance Incentives	\$156.5	\$142.7	\$144.0	\$1.3

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Compliance Monitoring	\$914.4	\$1,144.1	\$1,182.0	\$37.9
Subtotal, Compliance	\$1,081.9	\$1,309.0	\$1,348.0	\$39.0
Enforcement				
Civil Enforcement	\$785.4	\$883.0	\$884.0	\$1.0
Criminal Enforcement	\$8,611.7	\$8,502.2	\$9,167.0	\$664.8
Enforcement Training	\$568.9	\$621.9	\$840.0	\$218.1
Environmental Justice	\$638.6	\$756.7	\$757.0	\$0.3
Forensics Support	\$3,600.9	\$4,184.2	\$2,310.0	(\$1,874.2)
Superfund: Enforcement	\$161,995.4	\$163,650.5	\$161,610.0	(\$2,040.5)
Superfund: Federal Facilities Enforcement	\$9,117.9	\$10,196.9	\$9,843.0	(\$353.9)
Subtotal, Enforcement	\$185,318.8	\$188,795.4	\$185,411.0	(\$3,384.4)
Homeland Security				
Homeland Security: Communication and Information				
<i>Laboratory Preparedness and Response</i>	\$100.4	\$300.0	\$0.0	(\$300.0)
Subtotal, Homeland Security: Communication and Information	\$100.4	\$300.0	\$0.0	(\$300.0)
Homeland Security: Critical Infrastructure Protection				
<i>Decontamination</i>	\$77.7	\$198.0	\$198.0	\$0.0
<i>Homeland Security: Critical Infrastructure Protection (other activities)</i>	\$907.4	\$1,373.6	\$1,659.0	\$285.4
Subtotal, Homeland Security: Critical Infrastructure Protection	\$985.1	\$1,571.6	\$1,857.0	\$285.4
Homeland Security: Preparedness, Response, and Recovery				
<i>Decontamination</i>	\$39.2	\$12,271.3	\$10,527.0	(\$1,744.3)
<i>Laboratory Preparedness and Response</i>	\$0.0	\$9,500.0	\$6,064.0	(\$3,436.0)
<i>Homeland Security: Preparedness, Response, and Recovery (other activities)</i>	\$40,360.8	\$28,003.6	\$28,689.0	\$685.4
Subtotal, Homeland Security: Preparedness, Response, and Recovery	\$40,400.0	\$49,774.9	\$45,280.0	(\$4,494.9)
Homeland Security: Protection of EPA Personnel and Infrastructure	\$534.7	\$594.2	\$594.0	(\$0.2)
Subtotal, Homeland Security	\$42,020.2	\$52,240.7	\$47,731.0	(\$4,509.7)
Information Exchange / Outreach				
Congressional, Intergovernmental, External Relations	\$35.4	\$130.4	\$155.0	\$24.6
Exchange Network	\$1,883.6	\$1,432.4	\$1,433.0	\$0.6
Subtotal, Information Exchange / Outreach	\$1,919.0	\$1,562.8	\$1,588.0	\$25.2
IT / Data Management / Security				
Information Security	\$341.0	\$788.6	\$792.0	\$3.4

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
IT / Data Management	\$16,646.2	\$17,120.4	\$16,338.0	(\$782.4)
Subtotal, IT / Data Management / Security	\$16,987.2	\$17,909.0	\$17,130.0	(\$779.0)
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	\$559.4	\$887.2	\$837.0	(\$50.2)
Legal Advice: Environmental Program	\$624.6	\$690.8	\$606.0	(\$84.8)
Subtotal, Legal / Science / Regulatory / Economic Review	\$1,184.0	\$1,578.0	\$1,443.0	(\$135.0)
Operations and Administration				
Financial Assistance Grants / IAG Management	\$2,752.7	\$2,920.8	\$3,049.0	\$128.2
Facilities Infrastructure and Operations	\$66,365.6	\$73,944.7	\$74,956.0	\$1,011.3
Acquisition Management	\$19,577.1	\$23,514.3	\$24,645.0	\$1,130.7
Human Resources Management	\$5,282.1	\$5,270.2	\$5,036.0	(\$234.2)
Central Planning, Budgeting, and Finance	\$21,783.7	\$25,540.8	\$24,306.0	(\$1,234.8)
Subtotal, Operations and Administration	\$115,761.2	\$131,190.8	\$131,992.0	\$801.2
Research: Human Health and Ecosystems				
Human Health Risk Assessment	\$3,604.4	\$3,847.2	\$3,972.0	\$124.8
Research: Land Protection				
Research: Land Protection and Restoration	\$22,210.2	\$21,963.9	\$20,081.0	(\$1,882.9)
Research: SITE Program	\$4,628.0	\$0.0	\$0.0	\$0.0
Subtotal, Research: Land Protection	\$26,838.2	\$21,963.9	\$20,081.0	(\$1,882.9)
Research: Sustainability				
Research: Sustainability	\$292.0	\$0.0	\$0.0	\$0.0
Superfund Cleanup				
Superfund: Emergency Response and Removal	\$205,038.7	\$192,398.9	\$191,880.0	(\$518.9)
Superfund: EPA Emergency Preparedness	\$11,115.1	\$8,863.1	\$9,318.0	\$454.9
Superfund: Federal Facilities	\$32,461.2	\$31,486.6	\$31,879.0	\$392.4
Superfund: Remedial	\$667,056.2	\$581,594.9	\$584,836.0	\$3,241.1
Superfund: Support to Other Federal Agencies	\$4,989.0	\$8,575.4	\$6,575.0	(\$2,000.4)
Brownfields Projects	\$9,319.5	\$0.0	\$0.0	\$0.0
Subtotal, Superfund Cleanup	\$929,979.7	\$822,918.9	\$824,488.0	\$1,569.1
Total, Hazardous Substance Superfund	\$1,340,168.4	\$1,258,955.0	\$1,244,706.0	(\$14,249.0)
(Transfer to Office of Inspector General)	(\$13,243.5)	(\$13,316.0)	(\$7,149.0)	\$6,167.0
(Transfer to Science and Technology)	(\$32,283.4)	(\$27,811.1)	(\$26,126.0)	\$1,685.1

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Leaking Underground Storage Tanks				
Compliance				
Compliance Assistance and Centers	\$481.3	\$839.1	\$688.0	(\$151.1)
IT / Data Management / Security				
IT / Data Management	\$130.9	\$175.9	\$177.0	\$1.1
Operations and Administration				
Acquisition Management	\$357.3	\$360.8	\$165.0	(\$195.8)
Central Planning, Budgeting, and Finance	\$760.9	\$1,014.8	\$1,102.0	\$87.2
Facilities Infrastructure and Operations	\$769.6	\$916.8	\$901.0	(\$15.8)
Human Resources Management	\$3.0	\$3.0	\$3.0	\$0.0
Subtotal, Operations and Administration	\$1,890.8	\$2,295.4	\$2,171.0	(\$124.4)
Research: Land Protection				
Research: Land Protection and Restoration	\$617.2	\$651.3	\$660.0	\$8.7
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$11,889.1	\$10,590.1	\$10,558.0	(\$32.1)
LUST Cooperative Agreements	\$71,175.1	\$58,207.2	\$58,207.0	(\$0.2)
Subtotal, Underground Storage Tanks (LUST / UST)	\$83,064.2	\$68,797.3	\$68,765.0	(\$32.3)
Total, Leaking Underground Storage Tanks	\$86,184.4	\$72,759.0	\$72,461.0	(\$298.0)
Oil Spill Response				
Compliance				
Compliance Assistance and Centers	\$257.8	\$280.2	\$291.0	\$10.8
Enforcement				
Civil Enforcement	\$1,759.1	\$1,826.3	\$2,065.0	\$238.7
IT / Data Management / Security				
IT / Data Management	\$38.8	\$32.5	\$34.0	\$1.5
Oil				
Oil Spill: Prevention, Preparedness and Response	\$12,645.3	\$12,964.6	\$13,499.0	\$534.4
Operations and Administration				
Facilities Infrastructure and Operations	\$366.1	\$499.3	\$490.0	(\$9.3)
Research: Land Protection				
Research: Land Protection and Restoration	\$828.4	\$903.1	\$901.0	(\$2.1)

Environmental Protection Agency

FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Total, Oil Spill Response	\$15,895.5	\$16,506.0	\$17,280.0	\$774.0
State and Tribal Assistance Grants				
Air Toxics and Quality				
Clean School Bus Initiative	\$9,795.4	\$0.0	\$0.0	\$0.0
Brownfields				
Brownfields Projects	\$93,549.0	\$89,119.4	\$89,258.0	\$138.6
Infrastructure Assistance				
Infrastructure Assistance: Alaska Native Villages	\$33,905.5	\$14,850.0	\$15,500.0	\$650.0
Infrastructure Assistance: Clean Water SRF	\$905,435.8	\$687,555.0	\$687,554.0	(\$1.0)
Diesel Emissions Reduction Grant Program				
<i>Energy Policy Act Implementation</i>	\$0.0	\$49,500.0	\$35,000.0	(\$14,500.0)
Subtotal, Diesel Emissions Reduction Grant Program	\$0.0	\$49,500.0	\$35,000.0	(\$14,500.0)
Infrastructure Assistance: Drinking Water SRF	\$813,735.3	\$841,500.0	\$842,167.0	\$667.0
Infrastructure Assistance: Mexico Border	\$49,013.5	\$24,750.0	\$10,000.0	(\$14,750.0)
Infrastructure Assistance: Puerto Rico	\$0.0	\$990.0	\$0.0	(\$990.0)
Subtotal, Infrastructure Assistance	\$1,802,090.1	\$1,619,145.0	\$1,590,221.0	(\$28,924.0)
STAG Infrastructure Grants / Congressional Priorities	\$360,947.0	\$0.0	\$0.0	\$0.0
Subtotal, State and Tribal Assistance Grants (excluding categorical grants)	\$2,266,381.5	\$1,708,264.4	\$1,679,479.0	(\$28,785.4)
Categorical Grants				
Categorical Grant: Beaches Protection	\$9,707.3	\$9,900.0	\$9,900.0	\$0.0
Categorical Grant: Brownfields	\$51,377.9	\$49,494.9	\$49,495.0	\$0.1
Categorical Grant: Environmental Information	\$19,308.2	\$14,850.0	\$12,850.0	(\$2,000.0)
Categorical Grant: Hazardous Waste Financial Assistance	\$103,364.9	\$103,345.5	\$103,346.0	\$0.5
Categorical Grant: Homeland Security	\$4,283.1	\$4,950.0	\$4,950.0	\$0.0
Categorical Grant: Lead	\$15,115.2	\$13,563.1	\$13,564.0	\$0.9
Categorical Grant: Nonpoint Source (Sec. 319)	\$203,807.2	\$194,040.0	\$194,040.0	\$0.0
Categorical Grant: Pesticides Enforcement	\$19,876.7	\$18,711.0	\$18,711.0	\$0.0
Categorical Grant: Pesticides Program Implementation	\$13,749.8	\$12,968.9	\$12,970.0	\$1.1
Categorical Grant: Pollution Control (Sec. 106)				
<i>Water Quality Monitoring Grants</i>	\$946.1	\$18,500.0	\$18,500.0	\$0.0
<i>Categorical Grant: Pollution Control (Sec. 106) (other activities)</i>	\$219,826.3	\$203,161.0	\$203,164.0	\$3.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	\$220,772.4	\$221,661.0	\$221,664.0	\$3.0
Categorical Grant: Pollution Prevention	\$4,192.6	\$5,940.0	\$5,940.0	\$0.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	Pres Bud vs. Pres Bud
Categorical Grant: Public Water System Supervision (PWSS)	\$98,590.8	\$99,099.0	\$99,100.0	\$1.0
Categorical Grant: Radon	\$8,577.4	\$8,073.5	\$8,074.0	\$0.5
Categorical Grant: Sector Program	\$1,938.9	\$2,227.5	\$2,228.0	\$0.5
Categorical Grant: State and Local Air Quality Management	\$225,269.8	\$185,179.5	\$185,180.0	\$0.5
Categorical Grant: Targeted Watersheds	\$14,301.8	\$6,930.0	\$0.0	(\$6,930.0)
Categorical Grant: Toxics Substances Compliance	\$6,347.5	\$5,098.5	\$5,099.0	\$0.5
Categorical Grant: Tribal Air Quality Management	\$11,723.9	\$10,939.5	\$10,940.0	\$0.5
Categorical Grant: Tribal General Assistance Program	\$60,086.9	\$56,925.0	\$56,925.0	\$0.0
Categorical Grant: Underground Injection Control (UIC)	\$10,591.5	\$10,890.0	\$10,891.0	\$1.0
Categorical Grant: Underground Storage Tanks				
<i>Energy Policy Act Implementation</i>	\$0.0	\$37,566.7	\$22,274.0	(\$15,292.7)
<i>Categorical Grant: Underground Storage Tanks (other activities)</i>	\$14,328.1	\$0.0	\$0.0	\$0.0
Subtotal, Categorical Grant: Underground Storage Tanks	\$14,328.1	\$37,566.7	\$22,274.0	(\$15,292.7)
Categorical Grant: Wastewater Operator Training	\$1,382.1	\$0.0	\$0.0	\$0.0
Categorical Grant: Water Quality Cooperative Agreements	\$11,136.7	\$0.0	\$0.0	\$0.0
Categorical Grant: Wetlands Program Development	\$13,360.5	\$16,830.0	\$16,830.0	\$0.0
Total, State and Tribal Assistance Grants	\$3,409,572.7	\$2,797,448.0	\$2,744,450.0	(\$52,998.0)
Rescission of Prior Year Funds				
Not Specified	\$0.0	\$0.0	(\$5,000.0)	(\$5,000.0)
Subtotal, (no Program Area specified)	\$1,143,191.2	\$1,089,183.6	\$1,059,971.0	(\$29,212.6)
Total, Rescission of Prior Year Funds	\$0.0	\$0.0	(\$5,000.0)	(\$5,000.0)

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

LONG TERM INITIATIVES

EPA will conduct a number of long term initiatives designed to improve efficiency, streamline operations, and enhance customer service. Successful implementation of these initiatives will require thoughtful coordination and take into account the Agency's overall mission and any potentially impacted employees and contractors. The following sections provide a brief description of these initiatives:

Laboratory Infrastructure Requirements Study

The Agency will conduct a comprehensive review of laboratory infrastructure requirements through 2011. This will be a collaborative effort to identify enterprise-wide efficiencies. Achieving these results will require coordination and integration into other ongoing studies.

Reviewing Voluntary Programs

The Agency will conduct a thorough evaluation of all voluntary programs. This Agency-wide study will identify priorities, methods to maximize effectiveness, and opportunities to streamline operations while meeting Agency goals and objectives. Senior leaders are now developing workgroups to evaluate the Agency's voluntary programs and identify opportunities for organizational efficiencies and optimize reasonable results.

Aligning International Activities

The Agency will review and improve coordination on all international environmental activities. This will be a comprehensive review of the Agency-wide international strategic objectives and their relation to domestic and foreign policy objectives. Information from this review will be used to identify and streamline areas of overlap and create efficiencies. The Agency is laying out a process for engaging senior leaders in identifying international activities planned or currently underway.

Reducing Reporting Burden for States

States have expressed concerns about their growing reporting burden. In order to better understand the burden of regulatory report requirements on state environmental protection programs, EPA is currently working with states to review EPA reporting requirements affecting the states.

Reducing Reporting Burden for Tribes

The Agency has initiated a review of all Tribal reporting requirements. In order to successfully reduce reporting requirements, project leads will inventory all current requirements, analyze associated directives and regulations, and identify opportunities for consolidations or eliminations. Project leads are developing a current inventory of all reporting requirements which will be the first step in this effort.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Energy Efficiencies Plan

EPA's Energy Conservation Plan is addressing energy and energy cost reductions for all reporting Agency facilities (i.e. facilities that pay utilities directly rather than indirectly as part of a lease or other agreement) from FY 2006 through FY 2015. The current energy conservation goal for FY 2008 is a 10% reduction from EPA's FY 2003 baseline. The Energy Conservation Plan includes an implementation plan and schedule of projects through FY 2010.

In general, laboratory operations require more energy use per square foot than many other types of facilities. Since EPA can directly control its utility costs at the 29 "reporting" laboratories, the Agency is targeting these facilities for energy savings. For the upcoming FY 2008 budget year, the Agency will develop BTU (energy) usage goals for the 29 reporting labs, based on past energy use, projects under design/under construction, re-commissioning underway etc. Each reporting lab will be given a BTU target and fuel cost predictions, and a total utility cost budget. The Agency cannot however directly impact utility costs at its office locations. Under standard General Services Administration office leases and occupancy agreements, utility costs are an integral part of the rent paid.

EPA Long Term Space Consolidation Plan

The Agency occupies approximately ten (10) million square feet of space in 191 facilities, staffed by about 25,000 personnel in fifty states and four territories. The intent of the Long Term Space Consolidation Plan is to examine closely our space usage at these locations; explore ways to use our space more efficiently; and seek potential short- and long-term savings while keeping our inventory in line with generally accepted space and utilization rates. The Agency will form a space planning workgroup that includes Regional and Headquarters representation, to meet periodically to discuss the development of the comprehensive plan and implementation.

The workgroup will develop implementation budget estimates on a facility by facility case, depending on the location, number of personnel, and the size of the facility being reviewed, among other factors. The plan will provide the workgroup with: 1) the information required for discussions with the affected Program and Regional offices; and 2) the process for meeting inventory space requirements, including conducting/updating space inventories, validating personnel counts and conducting lease and occupancy agreement reviews.

Shared Services Centers Project

EPA will examine methods to develop more efficient and cost-effective human resource, grants and contracts management services throughout the Agency. The Centers plan will allow the Agency to increase efficiency, reduce long-term costs, and maintain a high quality of services, while ensuring that other opportunities exist for potentially impacted work force. These efforts are part of a broader government trend, based on business models, to provide more standardized and efficient services.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Centralized IT Service Review

The Agency is working to develop and implement an Agencywide consolidation and centralization effort for our core information technology services and contracts. In recent years, new tools have become available that allow for consolidation of key aspects of IT services and solutions.

The services targeted in this effort include email services, access to data files, telephone communications, and Enterprise Content Management System (ECMS). The end result will be changes to the Agency's IT environment, including the ability to: 1) manage key IT services as a Managed Service, with strict service level agreements, 2) use the power of competition to control costs in a highly competitive environment, and 3) hold vendors and contractors accountable for providing consistently excellent services.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

EXPECTED BENEFITS OF THE PRESIDENT'S E-GOVERNMENT INITIATIVES

Business Gateway

The Business Gateway initiative benefits EPA by supporting the Agency's emphasis on the Small Business Paperwork Relief Act of 2002. EPA has many initiatives, activities, and services directed at small business needs. Business.gov provides a one-stop compliance tool enabling these small and emerging businesses access to compliance rules, regulations and tools across the Federal government. Business Gateway augments EPA's small business activities function by providing the following benefits:

- Advocating consideration of small business regulatory issues and regulatory relief on a government-wide scale;
- Providing plain-English compliance guidance, fact sheets and links to checklists for small businesses; and
- Maintaining an extensive website with numerous links to other internal and external assistance sources.

EPA anticipates the same benefits from Business Gateway in 2008 as stated for 2007.

Fiscal Year	Account Code	Budget (in thousands)
2007	020-00-01-16-04-0100-24-305-109	\$328.8
2008	020-00-01-16-04-0100-24	\$120.0

eRulemaking

EPA's mission is to protect human health and the environment, implemented according to the following five goals: Clean Air and Global Climate Change, Clean and Safe Water, Land Preservation and Restoration, Healthy Communities and Ecosystems, and Compliance and Environmental Stewardship. EPA promulgates and takes enforcement actions on regulations focusing on various environmental protection standards (e.g., safe drinking water, pesticides, global climate change, air toxics, radionuclides, wastewater treatment, solid and hazardous waste, Superfund sites). EPA also conducts research on the adverse effects of pollution and on methods and equipment to reduce and mitigate pollution; gathers information on environmental quality and compliance with regulations and standards; and assists entities in complying with standards and regulations via grants, technical assistance and other means.

The Federal Docket Management System (FDMS) has simplified the public's participation in the rulemaking process and made EPA's internal rulemaking business processes more transparent. FDMS provides EPA's 1,000 registered users with a secure, centralized electronic repository for managing the Agency's rulemaking development via distributed management of data and robust role-based user access. EPA posts *all* regulatory and non-regulatory documents (e.g., *Federal Register* documents, supporting analyses, and public comments) in Regulations.gov for public viewing, downloading, and commenting. From

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

January 2006 to the current date, Regulations.gov posted 1,817 *Federal Register* documents and received 3,553 comments for EPA. In addition, EPA has posted 16,881 documents supporting rulemaking and non-rulemaking actions and posted an additional 22,879 comments that the public provided to EPA in paper, email, or another format.

EPA expects continued benefits over the next five years through participation and reliance on FDMS and Regulations.gov.

Fiscal Year	Account Code	Budget (in thousands)
2007	020-00-01-16-04-0060-24-306-113	\$615.0
2008	020-00-01016-04-0060-24	\$535.0

Geospatial LoB

The Geospatial Line of Business (GeoLoB) is expected to benefit EPA by providing opportunities to improve operations in several areas. The investments made in FY 2007 and FY 2008 should provide the necessary planning and coordination for continued benefits to EPA in FY 2009 and beyond.

EPA's mission requires the use of a broad range of data on places (e.g. facilities, roads, wastesites, etc.) and geographic features (wetlands, soils, hydrography, etc.) to support Agency decisions. A great deal of this data is contained in 30 critical datasets, as identified in OMB circular A-16. The GeoLoB Program Management Office will help EPA provide the necessary planning and coordination across the A-16 data stewards to complete these critical data sets.

EPA is moving to a Service Oriented Architecture (SOA) that is expected to facilitate flexible access to data to support a variety of business applications. Implementing a SOA requires the establishment of common standards and policies. The GeoLoB will advance the establishment of a Federal Geospatial Segment Architecture as part of the Federal Enterprise Architecture that can expose geospatial data and capabilities across vertical lines of business. In the process of establishing the geospatial segment architecture, the GeoLoB will promote the implementation of standards and policies to support an SOA.

EPA's geospatial program has increased the efficiency of affected activities by consolidating procurements for data and tools into multi-year enterprise licenses. Participation in the GeoLoB is expected to continue providing EPA opportunities to share approaches on procurement consolidation.

EPA benefits from Geospatial LoB in FY 2008 are anticipated to be the same as those described for FY 2007.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Fiscal Year	Account Code	Budget (in thousands)
2007	No UPI code prior to FY08	\$42.0
2008	020-00-01-16-04-3100-24	\$43.2

Grants.gov

The Grants.gov initiative benefits EPA and its grant programs by providing a single location to publish grant opportunities and application packages. Grants.gov serves as a single site for the grants community to apply for grants using common forms, processes, and systems. The grants community benefits from savings in postal costs, paper and envelopes. Grants.gov has already begun to reduce the large number of disparate electronic and paper-based grant applicant/recipient interactions. The deployment of Grants.gov's "Find and Apply" feature has enabled agencies and the grants community to transform an 80% paper-based process into process into a potentially 100% electronic process.

EPA built and maintains a system for collecting electronic grant applications received from Grants.gov and these applications are easily processed through the EPA grant award system. During FY 2006, EPA posted 197 grant opportunities on Grants.gov and linked 100% of those competitive opportunities to electronic application packages. EPA received 2,271 applications via Grants.gov in 2006, a 750% increase over the number of applications received in 2005.

EPA benefits from Grants.gov in FY08 are anticipated to be the same as those described for FY07.

Fiscal Year	Account Code	Budget (in thousands)
2007	020-00-04-00-04-1316-24-402-16	\$520.5
2008	020-00-04-00-04-1316-24	\$536.1

E-Travel

The intent of the E-Travel project is to provide EPA more efficient and effective travel management services. The agency is expected to benefit from this effort by utilizing cross-government purchasing agreements and improved functionality benefits through streamlined travel policies and processes. Other benefits include enhancing security and privacy controls and Agency oversight and audit capabilities. EPA employees would also benefit from integrated travel planning. EPA and GSA are currently discussing a GovTrip implementation date.

EPA benefits from eTravel in FY08 are anticipated to be the same as those described for FY07.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Fiscal Year	Account Code	Estimated Fee Amount (in thousands)
2007	020-00-01-01-03-0220-24-401-122	\$1,455.0
2008	020-00-01-01-03-0221-24	\$1,088.7

Integrated Acquisition Environment (IAE)

The Integrated Acquisition Environment (IAE) is comprised of nine government-wide automated applications and/or databases that have contributed to streamlining the acquisition business process across the government. EPA leverages the usefulness of these systems via electronic linkages between EPA's acquisition systems and the IAE shared systems. Other IAE systems are not linked directly to EPA's acquisition systems, but benefit the Agency's contracting staff and vendor community as stand-alone resources.

EPA's acquisition systems use data provided by the Central Contractor Registry (CCR) to replace internally maintained vendor data. Contracting officers can download vendor-provided representation and certification information electronically, via the Online Representations and Certifications (ORCA) database, allowing vendors to submit this information once rather than separately for every contract proposal. Contracting officers are able to access the Excluded Parties List System (EPLS) via links in the acquisition systems to identify vendors that are debarred from receiving contract awards.

Contracting officers can also link to the Wage Determination Online (WDOL) to obtain information required under the Service Contract Act and the Davis-Bacon Act. EPA's acquisition systems link to the Federal Procurement Data System – Next Generation (FPDS-NG) for submission of contract actions at the time of award. FPDS-NG provides public access to government-wide contract information. The Electronic Subcontracting Reporting System (eSRS) supports vendor submission of subcontracting data for contracts identified as requiring this information. EPA submits synopses of procurement opportunities over \$25,000 to the Federal Business Opportunities (FBO) website, where the information is accessible to the public. Vendors use this website to identify business opportunities in federal contracting.

Fiscal Year	Account Code	Budget (in thousands)
2007	020-00-01-16-04-0230-24-405-146	\$119.7
2008	020-00-01-16-04-0230-24	\$127.2

E-Authentication

Public trust in the security of information exchanged over the Internet plays a vital role in the E-Government (E-Gov) transformation. E-Authentication is setting the standards for the identity proofing of individuals and businesses, based on risk of online services used. The initiative focuses on meeting the authentication business needs of the E-Gov initiatives and building the necessary infrastructure to support common, unified processes and systems for

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

government-wide use. This will build the trust that must be an inherent part of every online exchange between citizens and the government.

The web-based E-Authentication that EPA is currently implementing is for Central Data Exchange Web Portal (CDX-Web) at level 3. CDX-Web provides E-Authentication and other services for back-end EPA systems. The current plan is to offer production level 3 E-Authentication for the end-users of the system capable of implementing PKI-based digital signatures.

The initiative benefits EPA by providing E-Authentication expertise, guidance, and documentation, including project planning and reporting templates, to enable EPA to achieve production implementation of E-Authentication for its Central Data Exchange Node (CDX-Node) of the EPA-State Exchange Network (EN) and its Central Data Exchange Web Portal (CDX-Web) by the end of FY 2007. EPA is taking advantage of the availability of PKI-certificates provided through the Federation to offer production level 3 E-Authentication.

EPA benefits from E-Authentication in FY 2008 are anticipated to be the same as those described for FY 2007.

Fiscal Year	Account Code	Budget (in thousands)
2007	----	\$0.0
2008	020-00-01-16-04-0250-24	\$65.2

Enterprise Human Resource Integration Initiative

The Enterprise Human Resource Integration's (EHRI) Electronic Official Personnel Folder (eOPF) is designed to provide a consolidated repository that digitally documents the employment actions and history of individuals employed by the Federal Government. EPA plans to migrate from a manual Official Personnel File (OPF) process to the Federal eOPF system by October 2007. This initiative is expected to benefit the Agency by reducing contract support cost for file room maintenance and improving customer service for employees and productivity for HR specialists. The 24/7 access to view and print official personnel documents allows employees more independence and frees HR specialists from manually filing, retrieving or mailing personnel actions to employees.

EPA benefits from EHRI in FY 2008 are anticipated to be the same as those described for FY 2007.

Fiscal Year	Account Code	Estimated Fee Amount (in thousands)
2007	No UPI code prior to FY08	\$3,000.0
2008	020-00-01-16-01-1219-21	\$406.0

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Recruitment One-Stop (ROS)

Recruitment One-Stop (ROS) simplifies the process of locating and applying for Federal jobs. USAJOBS is a standard job announcement and resume builder. It is the one-stop for Federal job seekers to search for and apply to positions on-line. This integrated process benefits citizens by providing a more efficient process to locate and apply for jobs, and assists Federal agencies in hiring top talent in a competitive marketplace. The Recruitment One-Stop initiative has increased job seeker satisfaction with the Federal job application process and is helping us to locate highly-qualified candidates and improve response times to applicants.

By integrating with ROS, the Agency has eliminated the need for applicants to maintain multiple user IDs to apply for Federal jobs through various systems. The vacancy announcement format has been improved for easier readability. The system can maintain up to five resumes per applicant, which allows them to create and store resumes tailored to specific skills -- this is an improvement from our previous system that only allowed one resume per applicant. In addition, ROS has a notification feature that keeps applicants updated on the current status of the application, and provides a link to the agency website for detailed information. This self-help ROS feature allows applicants to obtain up-to-date information on the status of their application upon request.

EPA benefits from Recruitment One-Stop in FY 2008 are anticipated to be the same as those described for FY 2007.

Fiscal Year	Account Code	Estimated Fee Amount (in thousands)
2007	No UPI code prior to FY08	\$87.5
2008	020-00-01-16-04-0010-24	\$102.2

eTraining

The President's Management Agenda encourages e-learning to improve training, efficiency and financial performance. EPA recently exercised its option to renew the current Interagency Agreement with OPM-GoLearn that provides licenses to online training for employees. EPA purchased 5,000 licenses to prevent any interruption in service to current users. Through this agreement, EPA gains efficiency through economy of scale, while developing its own learning management and reporting system. EPA expects to have its own learning management system in place by the end of 2008, developed through the E-Training initiative.

EPA benefits from eTraining in FY 2008 are anticipated to be the same as those described for FY 2007.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Fiscal Year	Account Code	Estimated Fee Amount (in thousands)
2007	020-00-01-16-04-1200-24-403-250	\$80.0
2008	020-00-01-16-1217-24	\$80.0

Human Resources LoB

The Human Resources Line of Business (HR LoB) provides Federal government the infrastructure to support pay-for-performance systems, modernized HR systems, and the core functionality necessary for the strategic management of human capital.

The HR LoB offers common solutions that will enable Federal agencies to work more effectively, and it provides managers and executives across the Federal government improved means to meet strategic objectives. EPA is expected to benefit by ensuring it supports an effective program management activity, which should deliver more tangible results in 2009 and beyond.

Fiscal Year	Account Code	Budget (in thousands)
2007	020-00-01-16-04-1200-24-403-250	\$65.2
2008	020-00-01-16-04-1200-24	\$65.2

Financial Management Line of Business

In FY 2007 EPA will complete the planning and acquisition phase of its Financial System Modernization Project (FSMP) and will begin migration to a shared service provider. This work will benefit from the migration guidance developed in FY 2006, including the use of performance metrics developed for service level agreements and the use of standard business processes developed for four core financial management sub-functions: Payments, Receipts, Funds and Reporting. The Agency expects to benefit from the use of the shared service provider for operations and maintenance of the new system in the future.

Fiscal Year	Account Code	Budget (in thousands)
2007	020-00-01-01-04-1100-24-402-124	\$83.3
2008	020-00-01-01-04-1100-24	\$44.4

Grants LoB

The Grants Management Line of Business (GM LoB) is creating a common solution to grants management that will promote citizen access, customer service, and agency financial and technical stewardship. The initiative focuses on developing a standardized and streamlined approach to grants management across the Federal government as required under Public Law 106-107, *Federal Financial Assistance Management Improvement Act of 1999*. The

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

initiative also seeks to consolidate over 100 grants management systems deployed at 26 grant-making agencies.

Benefits from this initiative may include:

- shared costs of system development and maintenance as well as modernization and enhancement
- increased efficiencies through automation
- reduced technical assistance needs
- leveraged training resources
- development of government-wide standards.

EPA benefits from Grants LoB in FY 2008 are anticipated to be the same as those described for FY 2007.

Fiscal Year	Account Code	Budget (in thousands)
2007	020-00-04-00-04-1300-24-108-025	\$60.1
2008	020-00-04-00-04-1300-24	\$59.3

Budget Formulation and Execution (BFE) LoB

The BFE LoB task force is currently working on a ten year implementation plan and therefore benefits in FY 2007 and FY 2008 cannot be identified at this time.

Fiscal Year	Account Code	Budget (in thousands)
2007	Code not established	\$75.0
2008	-----	\$0.0

IT Infrastructure LoB

The IT Infrastructure Optimization Initiative Line of Business (IOI LoB) represents a more coordinated approach to spending for IT infrastructure investments. The IOI LoB will improve IT service levels and enable agencies to concentrate more on mission priorities and results. EPA is expected to benefit from this initiative in several ways:

- Improved ability to examine costs for infrastructure services within EPA and to streamline these services and lower costs.
- Increased ability to compare EPA costs and services with other agencies, providing a benchmark for improved services and lower costs.
- Increased ability to identify Agencies with management practices that EPA can adopt to provide better IT services while lowering cost.

Specific benefits of the initiative in FY 2007 for EPA include:

- The establishment of the Program Performance Measurement Office (PPMO) at GSA under the Executive Steering Committee (ESC) for the IOI LoB.

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

- The development of common cost efficiency and service level metrics for Desktop/Seat Management and Support.
- The development of a Desktop/Seat Management and Support baseline using the common metrics.

In FY 2008, the IOI LoB will continue to grow to encompass the other service delivery areas, namely Data Centers and Networks.

Fiscal Year	Account Code	Budget (in thousands)
2007	No UPI code prior to FY08	\$20.0
2008	020-00-02-00-04-3300-24	\$20.0

Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification

Discontinued Programs

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Research: Environmental Technology Verification (ETV)

Program Area: Research: Sustainability

Goal: Compliance and Environmental Stewardship

Objective(s): Enhance Societies Capacity for Sustainability through Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Science & Technology</i>	<i>\$2,761.9</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$2,761.9	\$0.0	\$0.0	\$0.0
Total Workyears	6.5	0.0	0.0	0.0

Program Project Description:

The Environmental Technology Verification (ETV) program¹⁰ verifies the performance of environmental technologies that address high-priority, high-risk environmental issues. The ETV Program operates as a public-private partnership through agreements between EPA and private nonprofit testing and evaluation organizations. These organizations work with EPA technology experts to create efficient and quality-assured testing procedures that verify the performance of innovative technologies. These technologies are submitted voluntarily by private industry, which cite ETV's findings to support claims about a product's capabilities. ETV only verifies the performance of commercial-ready technologies, allowing the program to respond to the immediate needs of the environmental technology market. ETV operates using centers and one pilot program covering a broad range of environmental technology categories, and has verified over 350 environmental technologies since 1995. An active community of nearly 500 collaborating stakeholders assists the centers in developing protocols for testing, prioritizing the types of technologies to be verified, and designing and implementing outreach activities to the customer groups they represent.

FY 2008 Activities and Performance Plan:

In FY 2007, EPA funding for the verification centers was discontinued. Workforce and associated resources were shifted to the Sustainability research program where they continue to provide in-kind programmatic and technical oversight, and quality assurance/quality control of the partner centers' verifications.

Performance Targets:

Work under this program supports EPA's Enhance Science and Research objective. Research milestones are identified in the program's multi-year planning documents, but currently there are no PART performance measures for this specific program project.

¹⁰ For more information, see: <http://www.epa.gov/etv>.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

CAA; CWA; FIFRA; PPA; RCRA; SDWA; SARA; TSCA.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Research: SITE Program

Program Area: Research: Land Protection

Goal: Land Preservation and Restoration

Objective(s): Enhance Science and Research

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>Hazardous Substance Superfund</i>	\$4,628.0	\$0.0	\$0.0	\$0.0
Total Budget Authority / Obligations	\$4,628.0	\$0.0	\$0.0	\$0.0
Total Workyears	5.5	0.0	0.0	0.0

Program Project Description:

The Superfund Innovative Technology Evaluation (SITE)¹¹ program conducted high-quality field demonstrations of remediation technologies at sites that pose high risks to human health and the environment.

FY 2008 Activities and Performance Plan:

In FY 2007, resources for the SITE program were discontinued. As the Superfund program matured, innovative approaches evaluated through the SITE program and other mechanisms became standard tools for remediation (R&D Criteria: Quality, Relevance, Performance).

Performance Targets:

Work under this program supports EPA's Enhance Science and Research objective. Currently, there are no PART performance measures for this specific program project.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding. The SITE program concluded demonstration of innovative remediation, monitoring, and measurement approaches in FY 2007.
- Workyears associated with the SITE program were redirected to land protection and restoration research in FY 2007.

Statutory Authority:

SWDA; HSWA; SARA; CERCLA; RCRA; OPA; BRERA.

¹¹ For more information about EPA's SITE program, see <http://www.epa.gov/ORD/SITE/>

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Categorical Grant: Wastewater Operator Training

Program Area: Categorical Grants

Goal: Clean and Safe Water

Objective(s): Protect Water Quality

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$1,382.1</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$1,382.1	\$0.0	\$0.0	\$0.0
Total Workyears	0.0	0.0	0.0	0.0

NOTE: Total Budget Authority/Obligations number represents obligations from previous appropriation. This program did not receive appropriations in FY 2006.

Program Project Description:

Section 104(g)(1) of the Clean Water Act authorizes funding for the Wastewater Treatment Plant Operator On-site Assistance Training program. This program targets small publicly-owned wastewater treatment plants, with a discharge of less than 5,000,000 gallons per day. Federal funding for this program is administered through grants to states, often in cooperation with educational institutions or non-profit agencies. In most cases, assistance is administered through an environmental training center.

The goal of the program is to provide direct on-site assistance to operators at these small wastewater treatment facilities. The assistance focuses on issues such as wastewater treatment plant capacity, operation training, maintenance, administrative management, financial management, trouble-shooting, and laboratory operations.

FY 2008 Activities and Performance Highlights:

There is no request for this program in FY 2008.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

CWA.

**Environmental Protection Agency
FY 2008 Annual Performance Plan and Congressional Justification**

Categorical Grant: Water Quality Cooperative Agreements

Program Area: Categorical Grants

Goal: Clean and Safe Water

Objective(s): Protect Water Quality

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
<i>State and Tribal Assistance Grants</i>	<i>\$11,136.7</i>	<i>\$0.0</i>	<i>\$0.0</i>	<i>\$0.0</i>
Total Budget Authority / Obligations	\$11,136.7	\$0.0	\$0.0	\$0.0
Total Workyears	0.0	0.0	0.0	0.0

NOTE: Total Budget Authority/Obligations number represents obligations from previous appropriation. This program did not receive appropriations in FY 2006.

Program Project Description:

Under authority of Section 104(b)(3) of the Clean Water Act, EPA makes grants to a wide variety of recipients, including states, Tribes, state water pollution control agencies, interstate agencies, and other nonprofit institutions, organizations, and individuals to promote the coordination of environmentally beneficial activities. This competitive funding vehicle is used by EPA's partners to further the Agency's goals of providing clean and safe water. The program is designed to fund a broad range of projects, including: innovative water efficiency programs, research, training and education, demonstration, best management practices, stormwater management planning, and innovative permitting programs and studies related to the causes, effects, extent, and prevention of pollution.

FY 2008 Activities and Performance Highlights:

There is no request for this program in FY 2008.

FY 2008 Change from FY 2007 President's Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

CWA.

VERIFICATION AND VALIDATION

GOAL 1 OBJECTIVE 1

FY 2008 Performance Measures:

- **Tons of SO₂ emissions from electric power generation sources (tons/yr from 1980 baseline) (PART measure)**
- **Percent change in average sulfur deposition and mean ambient sulfate concentrations reduced (% from baseline) (PART measure)**
- **Percent change in average nitrogen deposition and mean ambient nitrate concentrations reduced (% from baseline) (PART measure)**

Performance Databases:

Emissions Tracking System (ETS) - SO₂ and NO_x emissions

- Clean Air Status and Trends Network (CASTNET) - dry deposition
- National Atmospheric Deposition Program (NADP) - wet deposition
- Temporally Integrated Monitoring of Ecosystems program (TIME) - surface water chemistry
- Long-Term Monitoring Network program (LTM) – surface water chemistry

Data Sources: On a quarterly basis, ETS receives and processes hourly measurements of SO₂, NO_x, volumetric flow, CO₂, and other emission-related parameters from more than 3,400 fossil fuel-fired utility units affected under the Title IV Acid Rain Program. These measurements are collected by certified continuous emission monitoring systems (CEMS) or equivalent continuous monitoring methods.

CASTNET measures particle and gas acidic deposition chemistry. Specifically, CASTNET measures sulfate and nitrate dry deposition and meteorological information at approximately 88 monitoring sites, primarily in the East. Two additional sites are planned as part of a multi-year network refurbishment and modernization project. These sites are scheduled to be in operation by 2007 and will help fill the coverage gap in the middle of country. CASTNET is a long-term dry deposition network funded, operated and maintained by EPA's Office of Air and Radiation (OAR). The National Park Service operates approximately 30 of the monitoring stations in cooperation with EPA.

NADP is a national long-term wet deposition network that measures precipitation chemistry and provides long-term geographic and temporal trends in concentration and deposition of precipitation components. Specifically, NADP provides measurements of sulfate and nitrate wet deposition at approximately 255 monitoring sites. EPA, along with several other Federal agencies, states, and private organizations, provide funding and support for NADP. The Illinois State Water Survey/University of Illinois maintains the NADP database.

The deposition monitoring networks have been in operation for over 25 years. They provide invaluable measurements on long-term trends and episodes in acid deposition; such data are essential for assessing progress toward the program's intended environmental outcomes. These networks need to be modernized to ensure the continued availability of these direct environmental measures. Maintaining a robust long-term atmospheric deposition monitoring network is critical for the accountability of the Acid Rain and Clean Air Interstate Rule (CAIR) Programs (and/or Clear Skies if new legislation is enacted).

The TIME project measures surface water chemistry and is based on the concept of a probability sample, where each site is chosen to be statistically representative of a target population. In the Northeast (New England and the Adirondacks), this target population consists of lakes likely to be responsive to changes in rates of acidic deposition (i.e., those with Gran ANC < 100 µeq/L). In the Mid-Atlantic, the target population is upland streams with a high probability of responding to changes in acidic deposition (i.e., Northern Appalachian Plateau streams with Gran ANC < 100 µeq/L). Each lake or stream is sampled annually (in summer for lakes, in spring for streams), and results are extrapolated to the target population. The most recent (2003) TIME trends analysis reported data from 43 Adirondack lakes, 30 New England lakes, and 31 Appalachian Plateau streams.

The TIME project goals are to determine not only how a representative sample of water bodies is changing through time, but also whether the proportion of the population that is acidic has changed. The project is operated cooperatively with numerous collaborators in state agencies, academic institutions and other federal agencies.

The LTM project complements TIME's statistical approach to sampling lakes and streams. LTM samples a subset of sensitive lakes and streams with long-term data, most dating back to the early 1980s. These sites are sampled 3 to 15 times per year. This information is used to characterize how the most sensitive aquatic systems in each region are responding to changing deposition, as well as providing information on seasonal chemistry and episodic acidification. In most regions, a small number of higher ANC (e.g., GranANC >100 µeq/L) sites are also sampled, and help separate temporal changes due to acidic deposition from those attributable to other disturbances such as changes in land use. The most recent (2003) LTM trends analysis reported data from 48 Adirondack lakes, 24 New England lakes, 9 Northern Appalachian Plateau streams, and 69 streams in the Blue Ridge region of Virginia and West Virginia. The project is operated cooperatively with numerous collaborators in state agencies, academic institutions and other federal agencies.

Methods, Assumption, and Suitability Promulgated methods are used to aggregate emissions data across all United States' utilities for each pollutant and related source operating parameters such as heat input.

QA/QC Procedures:

Promulgated QA/QC requirements dictate performing a series of quality assurance tests of CEMS performance. For these tests, emissions data are collected under highly structured, carefully designed testing conditions, which involve either high quality standard reference materials or multiple instruments performing simultaneous emission measurements. The

resulting data are screened and analyzed using a battery of statistical procedures, including one that tests for systematic bias. If a CEM fails the bias test, indicating a potential for systematic underestimation of emissions, the source of the error must be identified and corrected or the data are adjusted to minimize the bias. Each affected plant is required to maintain a written QA plan documenting performance of these procedures and tests. Further information is available at: <http://www.epa.gov/airmarkets/reporting/index.html>.

CASTNET established a Quality Assurance Project Plan (QAPP) in November 2001; The QAPP contains data quality objectives and quality control procedures for accuracy and precision. {U.S. EPA, Office of Air Quality Planning and Standards, *Clean Air Status and Trends Network (CASTNet) Quality Assurance Project Plan* (Research Triangle Park, NC: U.S. EPA, November 2001). In addition, the program publishes annual quality assurance reports. Both the CASTNET QAPP and 2003 Annual Quality Assurance Report may be found at <http://www.epa.gov/castnet/library.html>.

NADP has established data quality objectives and quality control procedures for accuracy, precision and representation, available on the Internet: <http://nadp.sws.uiuc.edu/QA/>. The intended use of these data is to establish spatial and temporal trends in wet deposition and precipitation chemistry.

For TIME and LTM, the field protocols, laboratory methods, and quality assurance procedures are specific to each research group. QA/QC information is contained in the cited publications of each research group and compiled in Newell et al. (1987). The EMAP and TIME protocols and quality assurance methods are generally consistent with those of the LTM cooperators, and are detailed in Peck (1992) and in Table 3 of Stoddard et al (2003).

Data Quality Review:

The ETS provides instant feedback to sources on data reporting problems, format errors, and inconsistencies. The electronic data file QA checks are described at <http://www.epa.gov/airmarkets/reporting/index.html> (see *Electronic Data Report Review Process*, *ETS Tolerance Tables*, *Active ETS Error Codes/Messages* and *Range Format Errors*). All quarterly reports are analyzed to detect deficiencies and to identify reports that must be resubmitted to correct problems. EPA also identifies reports that were not submitted by the appropriate reporting deadline. Revised quarterly reports, with corrected deficiencies found during the data review process, must be obtained from sources by a specified deadline. All data are reviewed, and preliminary and final emissions data reports are prepared for public release and compliance determination.

CASTNET underwent formal peer review in 1997 by a panel of scientists from EPA and the National Oceanic Atmospheric Administration (NOAA). Findings are documented in *Examination of CASTNET: Data, Results, Costs, and Implications* (United States EPA, Office of Research and Development, National Exposure Research Laboratory, February 1997).

The NADP methods of determining wet deposition values have undergone extensive peer review; this process has been managed by NADP program office at the Illinois State Water Survey/University of Illinois. Assessments of changes in NADP methods are developed

primarily through the academic community and reviewed through the technical literature process.

The TIME and LTM data used in EPA trends analysis reports are screened for internal consistency among variables, including ion balance and conductance balance. Samples with unexplained variation in these variables are deleted. Sites with mean Gran ANC greater than 200 $\mu\text{eq/L}$ also are deleted. EPA trends analyses exclude sites with chloride values that are outliers in their region, because high Cl^- is typically associated with human development in the watershed. The Cl^- and associated Na^+ would alter normal soil ion exchange relationships, thus obscuring the response to acidic deposition.

Data Limitations: In order to improve the spatial resolution of CASTNET, additional monitoring sites are needed, particularly in the middle of the country.

Error Estimate: None

New/Improved Data or Systems: The program plans to modernize and enhance CASTNET to ensure network viability and enhance the monitoring capacity to support ongoing and future accountability needs, particularly relating to long range pollutant transport. The refurbishment of CASTNET will result in more comprehensive air quality data and information, made available faster by enabling real-time access to air quality information and promoting integration with other networks through regional/rural monitoring strategies. Refurbishment activities to be pursued in FY 2007 include: (1) completion of a pilot phase study to evaluate options for upgrading CASTNET with new advanced measurement instrumentation; (2) selection and procurement of advanced technology monitoring equipment for up to 10 sites; (3) establishment of 2 new sites in the middle of the country to improve geographic coverage and spatial resolution; and (4) implementation of new ecological indicators of air quality and atmospheric deposition to expand the suite of environmental metrics available for measuring the performance and efficiency of EPA's clean air programs.

References: For additional information about CASTNET, see <http://www.epa.gov/castnet.html> and for NADP, see <http://nadp.sws.uiuc.edu/>.

For a description of EPA's Acid Rain program, see <http://www.epa.gov/airmarkets/arp/index.html/> and in the electronic Code of Federal Regulations at <http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-C.html> (40 CFR parts 72-78.)

For TIME and LTM data quality and QA/QC procedures, see Newell, A. D., C. F. Powers, and S. J. Christie. 1987. Analysis of Data from Long-term monitoring of Lakes. U.S. Environmental Protection Agency, Corvallis, OR.

Peck, D. V. 1992. Environmental Monitoring and Assessment Program: Integrated Quality Assurance Project Plan for the Surface Waters Resource Group. EPA/600/X-91/080, U.S. Environmental Protection Agency.

Stoddard, J. L., J. S. Kahl, F. A. Deviney, D. R. DeWalle, C. T. Driscoll, A. T. Herlihy, J. H. Kellogg, P. S. Murdoch, J. R. Webb, and K. E. Webster. 2003. Response of surface water chemistry to the Clean Air Act Amendments of 1990. EPA/620/R-03/001, U.S. Environmental Protection Agency, Corvallis, Oregon.

FY 2008 Performance Measures:

- **Reduction in population-weighted ambient concentration of fine particulate matter (PM 2.5) in all monitored counties (PART measure)**
- **Reduction in population-weighted ambient concentration of ozone in monitored counties (PART measure)**

Performance Databases:

AQS —The Air Quality Subsystem (AQS) stores ambient air quality data used to evaluate an area's air quality levels relative to the NAAQS.

FREDS—The Findings and Required Elements Data System is used to track progress of states and Regions in reviewing and approving the required data elements of the State Implementation Plans (SIP). SIPs are clean air plans and define what actions a state will take to improve the air quality in areas that do not meet national ambient air quality standards

Data Sources:

AQS: State & local agency data from State and Local Air Monitoring Stations (SLAMS).

Population: Data from Census-Bureau/Department of Commerce

FREDS: Data are provided by EPA's Regional offices.

Methods, Assumptions, and Suitability: Design values are calculated for every county with adequate monitoring data (for more information on and a definition for design values, see www.epa.gov/ttn/oarpg/t1/memoranda/cdv.pdf). Air quality levels are evaluated relative to the baseline level and the design value. The change in air quality concentrations is then multiplied by the number of people living in the county. This analysis assumes that the populations of the areas are held constant at 2000 Census levels. Data comparisons over several years allow assessment of the air program's success.

QA/QC Procedures: AQS: The QA/QC of the national air monitoring program has several major components: the Data Quality Objective (DQO) process, reference and equivalent methods program, EPA's National Performance Audit Program (NPAP), system audits, and network reviews (Available on the Internet: www.epa.gov/ttn/amtic/npaplist.html). To ensure quality data, the SLAMS are required to meet the following: 1) each site must meet network design and site criteria; 2) each site must provide adequate QA assessment, control, and corrective action functions according to minimum program requirements; 3) all sampling methods and equipment must meet EPA reference or equivalent requirements; 4) acceptable data validation and record keeping procedures must be followed; and 5) data from SLAMS must be summarized and reported annually to EPA. Finally, there are system audits that regularly review the overall air

quality data collection activity for any needed changes or corrections. Further information available on the Internet: <http://www.epa.gov/cludygxb/programs/namslam.html> and through United States EPA's Quality Assurance Handbook (EPA-454/R-98-004 Section 15)

Populations: No additional QA/QC beyond that done by the Census Bureau/Department of Commerce.

FREDS: No formal QA/QC procedures.

Data Quality Review:

AQS: No external audits have been done in the last 3 years. However, internal audits are regularly conducted.

Populations: No additional QA/QC beyond that done by the Census Bureau/Department of Commerce.

FREDS: None

Data Limitations:

AQS: None known

Populations: Not known

FREDS: None known

Error Estimate: At this time it is not possible to develop an error estimate. There is still too much uncertainty in the projections and near term variations in air quality (due to meteorological conditions for example) exist.

New/Improved Data or Systems:

AQS: In January 2002, EPA completed the reengineering of AQS to make it a more user friendly, Windows-based system. As a result, air quality data are more easily accessible via the Internet. AQS has also been enhanced to comply with the Agency's data standards (*e.g.*, latitude/longitude, chemical nomenclature). Beginning in July 2003, agencies submitted air quality data to AQS thru the Agency's Central Data Exchange (CDX). CDX is intended to be the portal through which all environmental data coming to or leaving the Agency will pass.

Population: None

FREDS: None

References: For additional information about criteria pollutant data, non-attainment areas, and other related information, see: <http://www.epa.gov/airtrends/>.

FY 2008 Performance Measures:

- **Percent of significant Title V operating permit revisions issued within 18 months of receiving a complete permit application. (PART measure)**
- **Percent of new Title V operating permits issued within 18 months of receiving a complete permit application. (PART measure)**

Performance Databases: TOPS (Title V Operating Permit System).

Data Sources: Permitting Agencies (State and Local) via EPA Regional Offices

Methods, Assumptions, and Suitability: The performance measure is calculated by comparing the number of new permits or significant permit modifications issued during past 18 months to the total number of new permits or significant permit modifications received during the same period. Data are collected every 6 months. There are no underlying assumptions in the development of this measure.

QA/QC Procedures: Some data quality checks include: 1) making sure the number of permits issued in 18 months is equal to or less than the total number of permits received. 2) ensuring the percentages seem reasonable compared to previous reporting periods, and 3) making sure clock does not restart when additional information is submitted after the application is received.

Data Quality Review: Same as QA procedures

Data Limitations: None

Error Estimate: There is no estimate on the number of errors that could have been made during data entry.

New/Improved Data or Systems: TOPS has been revised and improved for 2006 to ensure better consistency between states and to specifically track PART measures.

References: For additional information about criteria pollutant data, non-attainment areas, and other related information, see: <http://www.epa.gov/airtrends/>.

FY 2008 Performance Measure:

- **Percent of major NSR permits issued within one year of receiving a complete permit application. (PART measure)**

Performance Databases: RBLC (RACT (Reasonably Available Control Technology) BACT (Best Available Control Technology) LAER (Lowest Achievable Emissions Rate) Clearinghouse)

Data Sources: Permitting Agencies (State and Local)

Methods, Assumptions, and Suitability: The performance measure is calculated by determining the time period between the date of complete permit application and permit issuance. The percentage represents the number of major NSR permits issued within one year

of complete application to the total number of permits issued within that same period. There are no underlying assumptions in the development of this performance measure.

QA/QC Procedures: Some data quality checks include: 1) making sure the permit issuance dates are after the complete permit application dates and appear reasonable, 2) ensuring the permit processing times are similar for comparable permits in previous reporting periods and 3) making sure the time period does not restart when additional information is submitted after the application is received.

Data Quality Review: Same as QA procedures

Data Limitations: None

Error Estimate: There is no estimate on the number of errors that could have been made during data entry.

New/Improved Data or Systems: N/A

References: For additional information about criteria pollutant data, non-attainment areas, and other related information, see: <http://www.epa.gov/airtrends/>.

FY 2008 Performance Measure:

- **Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value. (PART measure)**

Performance Databases:

AQS —The Air Quality Subsystem (AQS) stores ambient air quality data used to evaluate an area's air quality levels relative to the NAAQS.

AIRNow DMC —The AIRNow Data Management System (DMC) stores real-time ambient air quality data used for the sole purpose of reporting real-time AQI and air quality forecasting.

Data Sources:

AQS/DMC: State & local agency data from State and Local Air Monitoring Stations (SLAMS) and National Air Monitoring Stations (NAMS).

Methods, Assumptions, and Suitability:

Data are gathered from monitors using EPA-approved federal reference and/or equivalent methods, all of which are published via the Federal Register. EPA assumes the collecting agency has properly maintained each monitor and that the data sent to EPA have passed at least an automated QA/QC check. The monitoring networks have been providing data for decades

and the data are considered highly reliable. In addition these data form the basis of EPA's attainment decisions, trend analysis, and health impact assessments.

QA/QC Procedures:

AQS: The QA/QC of the national air monitoring program has several major components: the Data Quality Objective (DQO) process, reference and equivalent methods program, EPA's National Performance Audit Program (NPAP), system audits, and network reviews (Available on the Internet: www.epa.gov/ttn/amtic/npaplist.html). To ensure quality data, the SLAMS are required to meet the following: 1) each site must meet network design and site criteria; 2) each site must provide adequate QA assessment, control, and corrective action functions according to minimum program requirements; 3) all sampling methods and equipment must meet EPA reference or equivalent requirements; 4) acceptable data validation and record keeping procedures must be followed; and 5) data from SLAMS must be summarized and reported annually to EPA. Finally, there are system audits that regularly review the overall air quality data collection activity for any needed changes or corrections. Further information available on the Internet: <http://www.epa.gov/cludygxb/programs/namslam.html> and through United States EPA's Quality Assurance Handbook (EPA-454/R-98-004 Section 15)

DMC: The QA/QC procedures at each State, local, Tribal, or Federal agency are the same as documented above. Because the DMC handles real-time data, additional QA/QC data checks are built into the data flow process to further guard against erroneous values being passed through the system. Data in the DMC are not considered final and are not used for any regulatory purpose. Data in the AQS system are the official values used for regulatory analyses.

Data Quality Review:

AQS: No external audits have been done in the last 3 years. However, internal audits are regularly conducted.

DMC: No external audits have been done in the last 3 years. However, internal audits are regularly conducted and data are routinely processed by external users where applicable.

Data Limitations:

AQS: None known

DMC: None known

Error Estimate: At this time it is not possible to develop an error estimate. There is still too much uncertainty in the projections and near term variations in air quality (due to meteorological conditions for example) exist.

New/Improved Data or Systems:

AQS: In January 2002, EPA completed the reengineering of AQS to make it a more user friendly, Windows-based system. As a result, air quality data are more easily accessible via the Internet. AQS has also been enhanced to comply with the Agency's data standards (*e.g.*, latitude/longitude, chemical nomenclature). Beginning in July 2003, agencies submitted air quality data to AQS thru the Agency's Central Data Exchange (CDX). CDX is intended to be the portal through which all environmental data coming to or leaving the Agency will pass.

DMC: AIRNow Data Management Center was redesigned in 2004 to more efficiently handle additional pollutants and provide for easier access to real-time data. In addition, automated QA/QC procedures were updated and increased flexibility for state/local agencies to update information was included.

References: For additional information about criteria pollutant data, non-attainment areas, and other related information, see: <http://www.epa.gov/airtrends/>. For more information on the monitoring network, as well as reference and equivalent methods, see the Ambient Monitoring Technology Information Center (AMTIC) at: <http://www.epa.gov/ttn/amtic> . For information on the AIRNow real-time program, see: <http://www.airnow.gov/>.

FY 2008 Performance Measures:

- **Millions of tons of volatile organic compounds (VOCs) reduced since 2000 from mobile sources. (PART measure)**
- **Millions of tons of nitrogen oxide (NOx) reduced since 2000 from mobile sources. (PART measure)**
- **Tons of particular matter (PM 10) reduced since 2000 from mobile sources (PART measure)**
- **Tons of particular matter (PM 2.5) reduced since 2000 from mobile sources (PART measure)**
- **Limit the increase of CO Emissions (in tons) from mobile sources (PART measure)**

Performance Database: National Emissions Inventory Database. See: <http://www.epa.gov/ttn/chief/trends/>

Data Source: Mobile source emissions inventories and Regulatory Impact Analyses

Estimates for on-road, off-road mobile source emissions are built from inventories fed into the relevant models, which in turn provide input to the National Emissions Inventory Database.

The MOBILE vehicle emission factor model is a software tool for predicting gram per mile emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, carbon dioxide, particulate matter, and toxics from cars, trucks, and motorcycles under various conditions. Inputs to the model include fleet composition, activity, temporal information, and control program characteristics.

The NONROAD emission inventory model is a software tool for predicting emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, particulate matter, and sulfur dioxides from small and large off road vehicles, equipment, and engines. Inputs to the model include fleet composition, activity and temporal information.

Certain mobile source information is updated annually. Inputs are updated annually only if there is a rationale and readily available source of annual data. Generally, Vehicle Miles Traveled (VMT), the mix of VMT by type of vehicle (Federal Highway Administration (FHWA)-types), temperature, gasoline properties, and the designs of Inspection/Maintenance (I/M) programs are updated each year. Emission factors for all mobile sources and activity estimates for non-road sources are changed only when the Office of Transportation and Air Quality requests that this be done and is able to provide the new information in a timely manner. The most recent models for mobile sources are Mobile 6 and Nonroad 2002. (Available on the Internet at <http://www.epa.gov/otaq/models.htm>.)

EPA regulatory packages always include detailed Regulatory Impact Analysis which estimates the costs industry is projected to accrue in meeting EPA regulations. These cost estimates will form the basis of the numbers in the EPA performance measures. Also, costs for the EPA mobile source program (including personnel costs) will be included also. Estimates will be made for various years for tons/dollar for pollutants (the total of HC, CO, NO_x, and PM) removed.

Methods, Assumptions, and Suitability: EPA issues emissions standards that set limits on how much pollution can be emitted from a given mobile source. Mobile sources include vehicles that operate on roads and highways ("on road" or "highway" vehicles), as well as nonroad vehicles, engines, and equipment. Examples of mobile sources are cars, trucks, buses, earthmoving equipment, lawn and garden power tools, ships, railroad locomotives, and airplanes. Vehicle and equipment manufacturers have responded to many mobile source emission standards by redesigning vehicles and engines to reduce pollution.

EPA uses models to estimate mobile source emissions, for both past and future years. The estimates are used in a variety of different settings. The estimates are used for rulemaking.

The most complete and systematic process for making and recording such mobile source emissions is the "Trends" inventory process executed each year by the Office of Air Quality Planning and Standards' (OAQPS) Emissions, Monitoring, and Analysis Division (EMAD). The Assessment and Standards Division, within the Office of Transportation and Air Quality, provides EMAD information and methods for making the mobile source estimates. In addition, EMAD's contractors obtain necessary information directly from other sources; for example, weather data and the Federal Highway Administration's (FHWA) Vehicle Miles Traveled (VMT) estimates by state. EMAD creates and publishes the emission inventory estimate for the most recent historical year, detailed down to the county level and with over 30 line items representing mobile sources. At irregular intervals as required for regulatory analysis projects, EMAD creates estimates of emissions for future years. When the method for estimating emissions changes significantly, EMAD usually revises its older estimates of emissions in years prior to the most recent year, to avoid a sudden discontinuity in the apparent emissions trend. EMAD publishes the national emission estimates in hardcopy; county-level estimates are

available electronically. Additional information about transportation and air quality related to estimating, testing for, and measuring emissions, as well as research being conducted on technologies for reducing emissions is available at <http://www.epa.gov/otaq/research.htm>

When major changes are made in the emission models or resulting inventories (and even the cost estimates), the performance measures will be reviewed to determine if they should be updated.

QA/QC Procedures: The emissions inventories are continuously improved.

Data Quality Review: The emissions inventories are reviewed by both internal and external parties, including the states, locals and industries.

Data Limitations: The limitations of the inventory estimates for mobile sources come from limitations in the modeled emission factors (based on emission factor testing and models predicting overall fleet emission factors in g/mile) and also in the estimated vehicle miles traveled for each vehicle class (derived from Department of Transportation data).<http://www.epa.gov/otaq/m6.htm>. For nonroad emissions, the estimates come from a model using equipment populations, emission factors per hour or unit of work, and an estimate of usage. This nonroad emissions model accounts for over 200 types of nonroad equipment. Any limitations in the input data will carry over into limitations in the emission inventory estimates.

Error Estimate: Additional information about data integrity is available on the Internet: <http://www.epa.gov/otaq/m6.htm>.

New/Improved Data or Systems: To keep pace with new analysis needs, new modeling approaches, and new data, EPA is currently working on a new modeling system termed the Multi-scale Motor Vehicles and Equipment Emission System (MOVES). This new system will estimate emissions for on road and off road sources, cover a broad range of pollutants, and allow multiple scale analysis, from fine scale analysis to national inventory estimation. When fully implemented, MOVES will serve as the replacement for MOBILE6 and NONROAD. The new system will not necessarily be a single piece of software, but instead will encompass the necessary tools, algorithms, underlying data and guidance necessary for use in all official analyses associated with regulatory development, compliance with statutory requirements, and national/regional inventory projections. Additional information is available on the Internet: <http://www.epa.gov/otaq/ngm.htm>

References: For additional information about mobile source programs see: <http://www.epa.gov/otaq/>.

FY 2008 Performance Measures:

- **Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics (PART measure)**
- **Cumulative percentage reduction in tons of toxicity-weighted (for noncancer risk) emissions of air toxics (PART measure)**

Performance Databases:

- National Emissions Inventory (NEI) for Hazardous Air Pollutants (HAPs)
- EPA's Health Criteria Data for Risk Characterization

Data Source:

To better measure the percentage change in cancer and noncancer risk to the public, a toxicity-weighted emission inventory performance measure has been developed. This measure utilizes data from the NEI for air toxics along with data from EPA's Health Criteria Data for Risk Characterization (found at www.epa.gov/ttn/atw/toxsource/summary.html), which is a compendium of cancer and noncancer health risk criteria used to develop a risk metric. This compendium includes tabulated values for long-term (chronic) inhalation for many of the 188 hazardous air pollutants. These health risk data were obtained from various data sources including EPA, the U.S. Agency for Toxic Substances and Disease Registry, California Environmental Protection Agency, and the International Agency for Research on Cancer. The numbers from the health risk database are used for estimating the risk of contracting cancer and the level of hazard associated with adverse health effects other than cancer.

The NEI for HAPs includes emissions from large and small industrial sources inventoried as point sources, smaller stationary area and other sources, such as fires inventoried as non-point sources, and mobile sources. Prior to 1999 NEI for HAPs, there was the National Toxics Inventory (NTI). The baseline NTI (for base years 1990 - 1993) includes emissions information for 188 hazardous air pollutants from more than 900 stationary sources and from mobile sources. It is based on data collected during the development of Maximum Achievable Control Technology (MACT) standards, state and local data, Toxics Release Inventory (TRI) data, and emissions estimates using accepted emission inventory methodologies. The baseline NTI contains county level emissions data and cannot be used for modeling because it does not contain facility specific data.

The 1996 NTI and the 1999 NEI for HAPs contain stationary and mobile source estimates. These inventories also contain estimates of facility-specific HAP emissions and their source specific parameters such as location (latitude and longitude) and facility characteristics (stack height, exit velocity, temperature, etc).

The primary source of data in the 1996 and 1999 inventories are state and local air pollution control agencies and Tribes. These data vary in completeness, format, and quality. EPA evaluates these data and supplements them with data gathered while developing MACT and residual risk standards, industry data, and TRI data.

For more information and references on the development of the 1996 NTI, please go to the following web site: www.epa.gov/ttn/chief/nti/index.html#nti. For more information and references on the development of the 1999 NEI for HAPs, please go to the following web site: www.epa.gov/ttn/chief/net/index.html#1999.

Methods, Assumptions and Suitability: As the NEI is only developed every three years, EPA utilizes an emissions modeling system to project inventories for "off-years" and to project the inventory into the future. This model, the EMS-HAP (Emissions Modeling System for

Hazardous Air Pollutants), can project future emissions, by adjusting stationary source emission data to account for growth and emission reductions resulting from emission reduction scenarios such as the implementation of the Maximum Achievable Control Technology (MACT) standards.

Once the EMS-HAP process has been performed, the EPA would tox-weight the inventory by “weighting” the emissions for each pollutant with the appropriate health risk criteria. This would be accomplished through a multi-step process. Initially, pollutant by pollutant values would be obtained from the NEI for the current year and the baseline year (1990/93). Conversion of actual tons for each pollutant for the current year and the baseline year to “toxicity-weighted” tons would be accomplished by multiplying the appropriate values from the health criteria database such as the unit risk estimate (URE) or lifetime cancer risk (defined at www.epa.gov/ttn/atw/nata/gloss.htm#rfc) to get the noncancer tons. These toxicity-weighted values act as a surrogate for risk and allow EPA to compare the toxicity-weighted values against a 1990/1993 baseline of toxicity-weighted values to determine the percentage reduction in risk on an annual basis

Complete documentation on development of the NEI for HAPs can be found at <http://www.epa.gov/ttn/chief/net/index.html>. For more information and references on EMS-HAP, go to the following web sites: <http://www.epa.gov/scram001/tt22.htm#aspen> and <http://www.epa.gov/ttn/chief/emch/projection/emshap.html>. The growth and reduction information used for the projections are further described at <http://www.epa.gov/ttn/chief/emch/projection/emshap.html>.

QA/QC Procedures: The NTI and the NEI for HAPs are databases designed to house information from other primary sources. The EPA performs extensive quality assurance/quality control (QA/QC) activities, including checking data provided by other organizations, to improve the quality of the emission inventory. Some of these activities include: (1) the use of an automated format QC tool to identify potential errors of data integrity, code values, and range checks; (2) use of geographical information system (GIS) tools to verify facility locations; and (3) automated content analysis by pollutant, source category and facility to identify potential problems with emission estimates such as outliers, duplicate sites, duplicate emissions, coverage of a source category, etc. The content analysis includes a variety of comparative and statistical analyses. The comparative analyses help reviewers prioritize which source categories and pollutants to review in more detail based on comparisons using current inventory data and prior inventories. The statistical analyses help reviewers identify potential outliers by providing the minimum, maximum, average, standard deviation, and selected percentile values based on current data. The EPA has developed an automated QC content tool for data providers to use prior to submitting their data to EPA. After investigating errors identified using the automated QC format and GIS tools, the EPA follows specific guidance on augmenting data for missing data fields. This guidance is available at the following web site: http://www.epa.gov/ttn/chief/emch/invent/qaaugmentationmemo_99nei_60603.pdf

The NTI database contains data fields that indicate if a field has been augmented and identifies the augmentation method. After performing the content analysis, the EPA contacts data providers to reconcile potential errors. The draft NTI is posted for external review and includes

a README file, with instructions on review of data and submission of revisions, state-by-state modeling files with all modeled data fields, and summary files to assist in the review of the data. One of the summary files includes a comparison of point source data submitted by different organizations. During the external review of the data, state and local agencies, Tribes, and industry provide external QA of the inventory. The EPA evaluates proposed revisions from external reviewers and prepares memos for individual reviewers documenting incorporation of revisions and explanations if revisions were not incorporated. All revisions are tracked in the database with the source of original data and sources of subsequent revision.

The external QA and the internal QC of the inventory have resulted in significant changes in the initial emission estimates, as seen by comparison of the initial draft NEI for HAPs and its final version. For more information on QA/QC of the NEI for HAPs, please refer to the following web site for a paper presented at the 2002 Emission Inventory Conference in Atlanta. “QA/QC - An Integral Step in the Development of the 1999 National Emission Inventory for HAPs”, Anne Pope, et al. www.epa.gov/ttn/chief/conference/ei11/qa/pope.pdf

EPA’s Office of Environmental Information (OEI) has created uniform data standards or elements, which provide “meta” information on the standard NEI Input Format (NIF) fields. These standards were developed by teams representing states, Tribes, EPA and other Federal agencies. The use of common data standards among partners fosters consistently defined and formatted data elements and sets of data values, and provides public access to more meaningful data. The standards relevant to the NEI for HAPs are the: SIC/NAICS, Latitude/Longitude, Chemical Identification, Facility Identification, Date, Tribal and Contact Data Standards. The 1999 NEI for HAPs is compliant with all new data standards except the Facility Identification Standard because OEI has not completed its assignment of Facility IDs to the 1999 NEI for HAPs facilities.

For more information on compliance of the NEI for HAPs with new OMB Information Quality Guidelines and new EPA data standards, please refer to the following web site for a paper presented at the 2003 Emission Inventory Conference in San Diego. “The Challenge of Meeting New EPA Data Standards and Information Quality Guidelines in the Development of the 2002 NEI Point Source Data for HAPs”, Anne Pope, et al. www.epa.gov/ttn/chief/conference/ei12/dm/pope.pdf The 2002 NEI for HAPs will undergo scientific peer review in early 2005.

The tables used in the EPA’s Health Criteria Data for Risk Characterization (found at www.epa.gov/ttn/atw/toxsource/summary.html) are compiled assessments from various sources for many of the 188 substances listed as hazardous air pollutants under the Clean Air Act of 1990. Because different sources developed these assessments at different times for purposes that were similar but not identical, results are not totally consistent. To resolve these discrepancies and ensure the validity of the data, EPA applied a consistent priority scheme consistent with EPA risk assessment guidelines and various levels of scientific peer review. These risk assessment guidelines can be found at <http://www.epa.gov/ncea/raf/car2sab/preamble.pdf>.

Data Quality Review: EPA staff, state and local agencies, Tribes, industry and the public review the NTI and the NEI for HAPs. To assist in the review of the 1999 NEI for HAPs, the

EPA provided a comparison of data from the three data sources (MACT/residual risk data, TRI, and state, local and Tribal inventories) for each facility. For the 1999 NEI for HAPs, two periods were available for external review - October 2001 - February 2002 and October 2002 - March 2003. The final 1999 NEI was completed and posted on the Agency website in the fall of 2003. Beginning in 2005, the NTI will undergo an external scientific peer review.

The EMS-HAP has been subjected to the scrutiny of leading scientists throughout the country in a process called “scientific peer review”. This ensures that EPA uses the best available scientific methods and information. In 2001, EPA’s Science Advisory Board (SAB) reviewed the EMS-HAP model as part of the 1996 national-scale assessment. The review was generally supportive of the assessment purpose, methods, and presentation; the committee considers this an important step toward a better understanding of air toxics. Additional information is available on the Internet: www.epa.gov/ttn/atw/nata/peer.html.

The data compiled in the Health Criteria Data for Risk Characterization (found at www.epa.gov/ttn/atw/toxsource/summary.html) are reviewed to make sure they support hazard identification and dose-response assessment for chronic exposures as defined in the National Academy of Sciences (NAS) risk assessment paradigm (www.epa.gov/ttn/atw/toxsource/paradigm.html). Because the health criteria data were obtained from various sources they are prioritized for use (in developing the performance measure, for example) according to 1) conceptual consistency with EPA risk assessment guidelines and 2) various levels of scientific peer review. The prioritization process is aimed at incorporating the best available scientific data.

Data Limitations and Error Estimates: While emissions estimating techniques have improved over the years, broad assumptions about the behavior of sources and serious data limitations still exist. The NTI and the NEI for HAPs contain data from other primary references. Because of the different data sources, not all information in the NTI and the NEI for HAPs has been developed using identical methods. Also, for the same reason, there are likely some geographic areas with more detail and accuracy than others. Because of the lesser level of detail in the baseline NTI, it is currently not suitable for input to dispersion models. For further discussion of the data limitations and the error estimates in the 1999 NEI for HAPs, please refer to the discussion of Information Quality Guidelines in the documentation at: www.epa.gov/ttn/chief/net/index.html#haps99.

In 2004, the Office of the Inspector General (OIG) released a final evaluation report on “EPA’s Method for Calculating Air Toxics Emissions for Reporting Results Needs Improvement” (report can be found at www.epa.gov/oig/reports/2004/20040331-2004-p-00012.pdf). The report stated that although the methods used have improved substantially, unvalidated assumptions and other limitations underlying the NTI continue to impact its use as a GPRA performance measure. As a result of this evaluation and the OIG recommendations for improvement, EPA prepared an action plan and is looking at ways to improve the accuracy and reliability of the data. EPA will meet bi-annually with OIG to report on its progress in completing the activities as outlined in the action plan.

While the Agency has made every effort to utilize the best available science in selecting appropriate health criteria data for toxicity-weighting calculations there are inherent limitations and errors (uncertainties) associated with this type of data. While it is not practical to expose humans to chemicals at target doses and observe subsequent health implications over long periods of time, most of the agencies health criteria is derived from response models and laboratory experiments involving animals. The parameter used to convert from exposure to cancer risk (i.e. the Unit Risk Estimate or URE) is based on default science policy processes used routinely in EPA assessments. First, some air toxics are known to be carcinogens in animals but lack data in humans. These have been assumed to be human carcinogens. Second, all the air toxics in this assessment were assumed to have linear relationships between exposure and the probability of cancer (i.e. effects at low exposures were extrapolated from higher, measurable, exposures by a straight line). Third, the URE used for some air toxics compounds represents a maximum likelihood estimate, which might be taken to mean the best scientific estimate. For other air toxics compounds, however, the URE used was an “upper bound” estimate, meaning that it probably leads to an overestimation of risk if it is incorrect. For these upper bound estimates, it is assumed that the URE continues to apply even at low exposures. It is likely, therefore, that this linear model over-predicts the risk at exposures encountered in the environment. The cancer weighting-values for this approach should be considered “upper bound” in the science policy sense.

All of the noncancer risk estimates have a built-in margin of safety. All of the Reference Concentrations (RfCs) used in toxicity-weighting of noncancer are conservative, meaning that they represent exposures which probably do not result in any health effects, with a margin of safety built into the RfC to account for sources of uncertainty and variability. Like the URE used in cancer weighting the values are, therefore, considered “upper bound” in the science policy sense. Further details on limitations and uncertainties associated with the agencies health data can be found at: www.epa.gov/ttn/atw/nata/roy/page9.html#L10

New/Improved Data or Systems: The 1996 NTI and 1999 NEI for HAPs are a significant improvement over the baseline NTI because of the added facility-level detail (e.g., stack heights, latitude/longitude locations), making it more useful for dispersion model input. Future inventories (2002 and later years) are expected to improve significantly because of increased interest in the NEI for HAPs by regulatory agencies, environmental interests, and industry, and the greater potential for modeling and trend analysis. During the development of the 1999 NEI for HAPs, all primary data submitters and reviewers were required to submit their data and revisions to EPA in a standardized format using the Agency’s Central Data Exchange (CDX). For more information on CDX, please go the following web site: www.epa.gov/ttn/chief/nif/cdx.html

Beginning in 2006, the toxicity-weighted emission inventory data will also be used as a measurement to predict exposure and risk to the public. This measure will utilize ambient monitoring of air toxics as a surrogate for population exposure and compare these values with health benchmarks to predict risks.

References:

The NTI and NEI data and documentation are available at the following sites:

Emissions Inventory Data:	ftp://ftp.epa.gov/EmisInventory/
Available inventories:	1996 NTI, 1999 NEI for HAPs
Contents:	Modeling data files for each state Summary data files for nation Documentation README file
Audience:	individuals who want full access to NTI files
NEON:	http://ttnwww.rtpnc.epa.gov/Neon/
Available inventories:	1996 NTI and 1999 NEI for HAPs
Contents:	Summary data files
Audience:	EPA staff
CHIEF:	www.epa.gov/ttn/chief 1999 NEI for HAPs data development materials 1999 Data Incorporation Plan - describes how EPA compiled the 1999 NEI for HAPs QC tool for data submitters Data Augmentation Memo describes procedures EPA will use to augment data 99 NTI Q's and A's provides answers to frequently asked questions NIF (Input Format) files and descriptions CDX Data Submittal Procedures - instructions on how to submit data using CDX Training materials on development of HAP emission inventories Emission factor documents, databases, and models
Audience:	State/local/Tribal agencies, industry, EPA, and the public
Information on the Emissions Modeling System for Hazardous Air Pollutants:	
EMS-HAP:	http://epa.gov/scram001/tt22.htm#aspen http://www.epa.gov/ttn/chief/emch/projection/emshap.html
Contents:	1996 NTI and 1999 NEI for HAPs
Audience:	public
Information on EPA's Health Criteria Data for Risk Characterization:	
Health Criteria Data:	http://www.epa.gov/ttn/atw/toxsource/summary.html
Contents:	Tabulated dose response values for long-term (chronic) inhalation and oral exposures; and values for short-term (acute) inhalation exposure
Audience:	public

GOAL 1 OBJECTIVE 2

FY 2008 Performance Measure:

- **Number of additional homes (new and existing) with radon reducing features (PART measure)**

Performance Database: Annual industry survey data of home builders provided by the National Association of Home Builders.

Data Source: The survey is an annual sample of home builders in the United States most of whom are members of the National Association of Home Builders (NAHB). NAHB members construct 80% of the homes built in the United States each year. Using a survey methodology reviewed by EPA, NAHB Research Center estimates the percentage of these homes that are built radon resistant. The percentage built radon resistant from the sample is then used to estimate what percent of all homes built nationwide are radon resistant. To calculate the number of people living in radon resistant homes, EPA assumes an average of 2.67 people per household. NAHB Research Center has been conducting this annual builder practices survey for over a decade, and has developed substantial expertise in the survey's design, implementation, and analysis. The statistical estimates are typically reported with a 95 percent confidence interval.

Methods, Assumptions, and Suitability: NAHB Research Center conducts an annual survey of home builders in the United States to assess a wide range of builder practices. NAHB Research Center voluntarily conducts this survey to maintain an awareness of industry trends in order to improve American housing and to be responsive to the needs of the home building industry. The annual survey gathers information such as types of houses built, lot sizes, foundation designs, types of lumber used, types of doors and windows used, etc. The NAHB Research Center Builder Survey also gathers information on the use of radon-resistant design features in new houses, and these questions comprise about two percent of the survey questionnaire.

In January of each year, the survey of building practices for the preceding calendar year is typically mailed out to home builders. For the most-recently completed survey, for building practices during calendar year 2003, NAHB Research Center reported mailing the survey to about 45,000 active United States home building companies, and received about 2,300 responses, which translates to a response rate of about 5 percent. The survey responses are analyzed, with respect to State market areas and Census Divisions in the United States, to assess the percentage and number of homes built each year that incorporate radon-reducing features. The data are also used to assess the percentage and number of homes built with radon-reducing features in high radon potential areas in the United States (high risk areas). Other analyses include radon-reducing features as a function of housing type, foundation type, and different techniques for radon-resistant new home construction. The data are suitable for year-to-year comparisons.

QA/QC Procedures: Because data are obtained from an external organization, QA/QC procedures are not entirely known. According to NAHB Research Center, QA/QC procedures have been established, which includes QA/QC by the vendor that is utilized for key entry of data.

Data Quality Review: Because data are obtained from an external organization, Data Quality Review procedures are not entirely known. NAHB Research Center indicates that each survey is

manually reviewed, a process that requires several months to complete. The review includes data quality checks to ensure that the respondents understood the survey questions and answered the questions appropriately. NAHB Research Center also applies checks for open-ended questions to verify the appropriateness of the answers. In some cases, where open-ended questions request numerical information, the data are capped between the upper and lower three percent of the values provided in the survey responses. Also, a quality review of each year's draft report from NAHB Research Center is conducted by the EPA project officer.

Data Limitations: The majority of home builders surveyed are NAHB members. The NAHB Research Center survey also attempts to capture the activities of builders that are not members of NAHB. Home builders that are not members of NAHB are typically smaller, sporadic builders that in some cases build homes as a secondary profession. To augment the list of NAHB members in the survey sample, NAHB Research Center sends the survey to home builders identified from mailing lists of builder trade publications, such as Professional Builder magazine. There is some uncertainty as to whether the survey adequately characterizes the practices of builders who are not members of NAHB. The effects on the findings are not known.

Although an overall response rate of 5 percent could be considered low, it is the response rate for the entire survey, of which the radon-resistant new construction questions are only a very small portion. Builders responding to the survey would not be doing so principally due to their radon activities. Thus, a low response rate does not necessarily indicate a strong potential for a positive bias under the speculation that builders using radon-resistant construction would be more likely to respond to the survey. NAHB Research Center also makes efforts to reduce the potential for positive bias in the way the radon-related survey questions are presented.

Error Estimate: See Data Limitations

New/Improved Data or Systems: None

References: The results are published by the NAHB Research Center in annual reports of radon-resistant home building practices. See <http://www.nahbrc.org/> last accessed 12/21/2005 for more information about NAHB. The most recent report, "Builder Practices Report: Radon Reducing Features in New Construction 2003," Annual Builder and Consumer Practices Surveys by the NAHB Research Center, Inc., November, 2004. Similar report titles exist for prior years.

FY 2008 Performance Measure:

- **Number of people taking all essential actions to reduce exposure to indoor environmental asthma triggers (PART measure)**

Performance Database: The national telephone survey (*National Survey on Environmental Management of Asthma and Children's Exposure to ETS*) seeks information about the measures taken by people with asthma, and parents of children with asthma to minimize exposure to indoor environmental asthma triggers. Additional information about asthma morbidity and mortality in the US is obtained from the Centers for Disease Control and Prevention (CDC). Annual expenditures for health and lost productivity due to asthma are obtained from the

EPA also collects data on children exposed to environmental tobacco smoke in the home. This information is used in supporting the asthma goals of the program. EPA focuses its work on ETS on children in low income and minority populations, and on children with asthma. The *National Survey on Environmental Management of Asthma and Children's Exposure to ETS*, which includes a series of questions about whether respondents allow smoking in their home, whether young children are in the home, what resident family members smoke and how often, and how much visitors contribute to exposure, is used to track progress toward reducing childhood ETS exposure. Information about ETS is obtained periodically from the Centers for Disease Control and Prevention (CDC) including the National Health Interview, the National Health and Nutrition Examination Survey (for cotinine data), and the Behavioral Risk Factor Surveillance Survey (for state tobacco/ETS exposure data).

Data Source: The *National Survey on Environmental Management of Asthma and Children's Exposure to ETS* (OMB control number 2060-0490) source is EPA. Data on asthma morbidity and mortality is available from the National Center for Health Statistics at the CDC (www.cdc.gov/nchs last accessed 12/21/2005). Data on annual expenditures for health and lost productivity due to asthma are obtained from the NHLBI Chartbook.

Methods, Assumptions and Suitability: End-of-year performance for the asthma program is a best professional estimate using all data sources (including annual measures on partner performance and advertising awareness outlined below). The survey provides statistically sound results every three years for one period of time; Scheduled surveys will provide performance results for years 2006 and 2009. The estimate of the number of people with asthma who have taken steps to reduce their exposure to indoor environmental asthma triggers as of 2007 will be based on a projection from previous surveys, and this estimate will be verified using the 2009 survey data. Data on annual measures is also used to support progress towards the long term performance measure.

National Survey on Environmental Management of Asthma and Children's Exposure to ETS (OMB control number 2060-0490): This survey is the most robust data set for this performance measure, but it is not administered annually. The first survey, administered in 2003, was designed in consultation with staff from EPA and the CDC National Center for Health Statistics (NCHS) to ensure that respondents will understand the questions asked and will provide the type of data necessary to measure the Agency's objectives. In addition, care has been taken to ensure that the survey questions target the population with asthma by using the same qualifier question that appears on other national surveys on asthma collected by the CDC.

From an initial sampling frame of 124,994 phone numbers, 14,685 households were contacted successfully and agreed to participate in the screening survey. Of the 14,685 individuals screened, approximately 18 percent, or 2,637 individuals, either have asthma or live with someone who does. Only those individuals who have asthma or live with someone who does were considered to be eligible respondents.

Respondents were asked to provide primarily yes/no responses. In some cases, respondents were given a range of responses in the form of multiple choice questions and were asked to indicate the one which best defined their response. The survey seeks information on those environmental management measures that the Agency considers important in reducing an individual's exposure to known indoor environmental asthma triggers. By using yes/no and multiple choice questions, the Agency has substantially reduced the amount of time necessary for the respondent to complete the survey and has ensured consistency in data response and interpretation.

The information collected has been used to establish a baseline to reflect the characteristics of our nation's asthma population and future iterations of this survey will measure additional progress toward achieving performance goals. The next survey will take place in 2006.

QA/QC Procedures: The National Survey is designed in accordance with approved Agency procedures. Additional information is available on the Internet: <http://www.epa.gov/icr/players.html> last accessed 12/21/2005. The computer assisted telephone interview methodology used for this survey helps to limit errors in data collection. In addition, the QA/QC procedures associated with conducting the survey include pilot testing of interview questions, interviewer training to ensure consistent gathering of information, and random data review to reduce the possibility of data entry error.

Data Quality Review: EPA reviews the data from all sources to ascertain reliability.

Data Limitations: Asthma: Random digit dialing methodology is used to ensure that a representative sample of households has been contacted; however, the survey is subject to inherent limitations of voluntary telephone surveys of representative samples. For example, 1) survey is limited to those households with current telephone service; 2) interviewers may follow survey directions inconsistently. An interviewer might ask the questions incorrectly or inadvertently lead the interviewee to a response; or 3) the interviewer may call at an inconvenient time (i.e., the respondent might not want to be interrupted at the time of the call and may resent the intrusion of the phone call; the answers will reflect this attitude.).

ETS: Currently available cotinine (a chemical in environmental tobacco smoke) survey data do not address 50% of the age specific portion of EPA's target population. It does not include birth to three years old, the portion of children most susceptible to the effects of ETS.

Error Estimate: In its first data collection with this instrument, the Agency achieved results within the following percentage points of the true value at the 95 percent confidence level (survey instrument):

Adult Asthmatics	plus or minus	2.4%
Child Asthmatics	plus or minus	3.7%
Low Income Adult Asthmatics	plus or minus	6.1%

These precision rates are sufficient to characterize the extent to which the results measured by the survey accurately reflect the characteristics of our nation's asthmatic population.

New/Improved Data or Systems: Data from the *National Survey on Environmental Management of Asthma and Children's Exposure to ETS* (OMB control number 2060-0490) were collected from August 4-September 17, 2003 and represent the first data collection with this instrument.

References:

Asthma

National Center for Health Statistics, Centers for Disease Control and Prevention (www.cdc.gov/nchs/ last accessed 7/27/2005)

EPA Indoor Environments Division (www.epa.gov/iaq/ last accessed 12/21/2005)

ETS

National Health Interview Survey and National Health and Nutrition Examination Survey are part of the National Center for Health Statistics, Centers for Disease Control and Prevention (<http://www.cdc.gov/nchs/> last accessed 12/21/2005)

Behavioral Risk Factor Surveillance Survey, Centers for Disease Control and Prevention (<http://www.cdc.gov/brfss/index.htm> last accessed 12/21/2005),

US Surgeon General's report on tobacco (<http://www.cdc.gov/tobacco/sgr/index.htm/> last accessed 7/27/2005),

National Cancer Institute's (NCI) *Tobacco Monograph Series* (<http://cancercontrol.cancer.gov/tcrb/monographs/> last accessed 12/21/2005),

NCI funded *Tobacco Use Supplement* portion of the US Census Bureau's *Current Population Survey* (<http://riskfactor.cancer.gov/studies/tus-cps/> last accessed 12/21/2005),

Healthy People 2010 (<http://www.healthypeople.gov/> last accessed 12/21/2005).

FY 2008 Performance Measure:

- **Additional health care professionals trained annually by EPA and its partners on the environmental management of asthma triggers (PART measure)**

Performance Database: The performance database consists of quarterly Partner status reports used to document the outcomes of individual projects.

Data Source: Partner status reports are generated by those organizations receiving funding from EPA and are maintained by individual EPA Project Officers.

Methods, Assumptions and Suitability: On an annual basis, EPA requires (programmatic terms and conditions of the award) all funded organizations to provide reports identifying how many health care professionals are educated about indoor asthma triggers.

QA/QC Procedures: It is assumed that organizations report data as accurately and completely as possible; site-visits are conducted by EPA project officers.

Data Quality Review: Project officers review data quality.

Data Limitations: N/A

New/Improved Data or Systems: EPA is exploring the development of a centralized data base.

References: N/A

FY 2008 Performance Measure:

- **Percent of public that is aware of the asthma program's media campaign (PART measure)**

Performance Database: A media tracking study used to assess behavior change within that sector of the public viewing the public service announcements.

Data Source: An independent initiative of the Advertising Council provides media tracking of outcomes of all their public service campaigns and this is publicly available information.

Methods, Assumptions and Suitability: Methods are those of the Advertising Council, and not controlled by EPA.

QA/QC Procedures: Methods are those of the Advertising Council, and not controlled by EPA.

Data Quality Review: Methods are those of the Advertising Council, and not controlled by EPA.

Data Limitations: Methods are those of the Advertising Council, and not controlled by EPA.

New/Improved Data or Systems: Methods are those of the Advertising Council, and not controlled by EPA.

References: Advertising Council Reporting. EPA Assistance Agreement number X-82820301. For additional information see the Ad Council web site <http://www.adcouncil.org/> last accessed 12/21/05.

FY 2008 Performance Measure:

- **Estimated annual number of schools establishing Indoor Air Quality programs based on EPA's Tools for Schools guidance (PART measure)**

Performance Database:

EPA collects national data by conducting a survey of indoor air quality management practices in schools approximately every three years. The first survey was administered in 2002. EPA is partnering with CDC to incorporate IAQ management practice indicators, consistent with the benchmark survey, into the School Health Policies and Programs Study (SHPPS) to be administered in 2006. EPA will implement this IAQ module as a smaller survey in 2009, as the SHPPS survey is only conducted at 6 year intervals.

To measure annual progress, EPA estimates the number of schools who establish IAQ Tools for Schools (TfS) programs each year from reports from partner organizations and regional recruiters, supplemented by tracking the volume of guidances distributed and number of people trained by EPA and its partners. EPA also collects information on program benefits such as reduced school nurse visits, improved workplace satisfaction among staff, reduced absenteeism, and cost savings experienced by schools.

Data Source: The sources of the data include cooperative partners, USEPA and the statistical sample of all the public and private schools in the nation during the 1999 – 2000 school year (118,000); data are from the United States Department of Education National Center for Education Statistics.

Methods, Assumptions and Suitability: Calculations for the number of people experiencing improved IAQ are based upon an average 525 students, staff and faculty per school (data are from the United States Department of Education National Center for Education Statistics). That number, along with the number of schools that are adopting/implementing TfS, are used to estimate the performance result.

End-of-year performance is a best professional estimate using all data sources. The survey provides more statistically sound results for one period of time; the next scheduled survey will provide performance results for year 2006. EPA's 2006 survey will be included as part of CDC's 2006 School Health Policies and Programs Study, which is conducted every six years.

QA/QC Procedures: It is assumed that partner organizations report data as accurately and completely as possible; site visits and regular communication with grantees are conducted by EPA projects officers.

Data Quality Review: EPA reviews the data from all sources in the performance database to ascertain reliability and to resolve any discrepancies.

Data Limitations: The primary limitation associated with Cooperative Agreement Partner status reporting is the error introduced as a result of self-reporting.

Error Estimate: Not relevant for this year.

New/Improved Data or Systems: Prior to the 2002 survey, EPA tracked the number of schools receiving the TfS guidance and estimated the population of the school to determine the number of students/staff experiencing improved indoor air quality. The survey was administered to establish a baseline for schools implementing IAQ management practices. EPA queried a statistically representative sample of schools to estimate the number of schools that have actually adopted and implemented good IAQ management practices consistent with the TfS guidance. EPA plans to re-administer the survey as a component of CDC's School Health Policies and Programs Study, which will show progress from the baseline.

References: See the United States Department of Education National Center for Education Statistics, <http://nces.ed.gov/> last accessed 12/21/2005. See also Indoor Air Quality Tools for Schools Kit (402-K-95-001) at <http://www.epa.gov/iaq/schools> last accessed 12/21/2005 and see www.cdc.gov/nccdphp/dash/shpps/ For additional information about the School Health Policies and Programs Study (SHPPS), a national survey periodically conducted to assess school health policies and programs at the state, district, school, and classroom levels.

GOAL 1 OBJECTIVE 3

FY 2008 Performance Measure:

- **Remaining US consumption of HCFCs, measured in tons of ozone depleting potential (ODP) (PART measure)**

Performance Database: The Allowance Tracking System (ATS) database is maintained by the Stratospheric Protection Division (SPD). ATS is used to compile and analyze quarterly information on U.S. production, imports, exports, transformations, and allowance trades of ozone-depleting substances (ODS).

Data Source: Progress on restricting domestic exempted consumption of Class II HCFCs is tracked by monitoring industry reports of compliance with EPA's phase-out regulations. Data are provided by U.S. companies producing, importing, and exporting ODS. Corporate data are typically submitted as quarterly reports. Specific requirements as outlined in the Clean Air Act are available on the Internet at: <http://www.epa.gov/oar/caa/caa603.txt>. Monthly information on domestic production, imports, and exports from the International Trade Commission is maintained in the ATS.

Methods, Assumptions and Suitability: Data are aggregated across all U.S. companies for each individual ODS to analyze U.S. total consumption and production.

QA/QC Procedures: Reporting and record-keeping requirements are published in 40 CFR Part 82, Subpart A, Sections 82.9 through 82.13. These sections of the Stratospheric Ozone Protection Rule specify the required data and accompanying documentation that companies must submit or maintain on-site to demonstrate their compliance with the regulation.

The ATS data are subject to a Quality Assurance Plan (Quality Assurance Plan, USEPA Office of Atmospheric Programs, July 2002). In addition, the data are subject to an annual quality assurance review, coordinated by Office of Air and Radiation (OAR) staff separate from those on the team normally responsible for data collection and maintenance. The ATS is programmed to ensure consistency of the data elements reported by companies. The tracking system flags inconsistent data for review and resolution by the tracking system manager. This information is then cross-checked with compliance data submitted by reporting companies. SPD maintains a user's manual for the ATS that specifies the standard operating procedures for data entry and data analysis. Regional inspectors perform inspections and audits on-site at the producers', importers', and exporters' facilities. These audits verify the accuracy of compliance data submitted to EPA through examination of company records.

Data Quality Reviews: The Government Accounting Office (GAO) completed a review of U.S. participation in five international environmental agreements, and analyzed data submissions from the U.S. under the Montreal Protocol on Substances that Deplete the Ozone Layer. No deficiencies were identified in their January 2003 report.

Data Limitations: None, since companies are required by the Clean Air Act to report data. EPA's regulations specify a quarterly reporting system.

Error Estimate: None.

New/Improved Data or Systems: The Stratospheric Protection Division is developing a system to allow direct electronic reporting.

References: See <http://www.epa.gov/ozone/desc.html> for additional information on ODSs. See <http://www.unep.ch/ozone/montreal.shtml> for additional information about the Montreal Protocol. See <http://www.unmfs.org/> for more information about the Multilateral Fund. Quality Assurance Plan, USEPA Office of Atmospheric Programs, July 2002

GOAL 1 OBJECTIVE 4

FY 2008 Performance Measures:

- **Million metric tons of carbon equivalent (mmtce) of greenhouse gas emissions reduced in the building sector (PART measure)**
- **Million metric tons of carbon equivalent (mmtce) of greenhouse gas emissions reduced in the industry sector (PART measure)**
- **Million metric tons of carbon equivalent (mmtce) of greenhouse gas emissions reduced in the transportation sector (PART measure)**

Performance Database: Climate Protection Partnerships Division Tracking System. The tracking system's primary purpose is to maintain a record of the annual greenhouse gas emissions reduction goals and accomplishments for the voluntary climate program using

information from partners and other sources. It also measures the electricity savings and contribution towards the President's greenhouse gas intensity goal.

Data Source: EPA develops carbon and non-CO₂ emissions baselines. A baseline is the “business-as-usual” case” without the impact of EPA's voluntary climate programs. Baseline data for carbon emissions related to energy use comes from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model (IPM) of the U.S. electric power sector. These data are used for both historical and projected greenhouse gas emissions and electricity generation, independent of partners' information to compute emissions reductions from the baseline and progress toward annual goals. The projections use a “Reference Case” for assumptions about growth, the economy, and regulatory conditions. Baseline data for non-carbon dioxide (CO₂) emissions, including nitrous oxide and other high global warming potential gases, are maintained by EPA. The non-CO₂ data are compiled with input from industry and also independently from partners' information.

Data collected by EPA's voluntary programs include partner reports on facility- specific improvements (e.g. space upgraded, kilowatt-hours (kWh) reduced), national market data on shipments of efficient products, and engineering measurements of equipment power levels and usage patterns

Baseline information is discussed at length in the U.S. Climate Action Report 2002. The report includes a complete chapter dedicated to the U.S. greenhouse gas inventory (sources, industries, emissions, volumes, changes, trends, etc.). A second chapter addresses projected greenhouse gases in the future (model assumptions, growth, sources, gases, sectors, etc.)

U.S. Department of State. 2002. “U.S. Climate Action Report—2002. Third National Communication of the United States of America under the United Nations Framework Convention on Climate Change.”

Partners do contribute *actual* emissions data biannually after their facility-specific improvements but these emissions data are not used in tracking the performance measure. EPA, however, validates the estimates of greenhouse gas reductions based on the actual emissions data received.

Methods, Assumptions, and Suitability: Most of the voluntary climate programs' focus is on energy efficiency. For these programs, EPA estimates the expected reduction in electricity consumption in kilowatt-hours (kWh). Emissions prevented are calculated as the product of the kWh of electricity saved and an annual emission factor (e.g., metric tons carbon equivalent (MMTCE) prevented per kWh). Other programs focus on directly lowering greenhouse gas emissions (e.g., Natural Gas STAR, Landfill Methane Outreach, and Coalbed Methane Outreach); for these, greenhouse gas emission reductions are estimated on a project-by-project basis. EPA maintains a tracking system⁶ for emissions reductions.

The Integrated Planning Model, used to develop baseline data for carbon emissions, is an important analytical tool for evaluating emission scenarios affecting the U.S. power sector. The IPM has an approved quality assurance project plan that is available from EPA's program office.

QA/QC Procedures: EPA devotes considerable effort to obtaining the best possible information on which to evaluate emissions reductions from voluntary programs. Peer-reviewed carbon-conversion factors are used to ensure consistency with generally accepted measures of greenhouse gas (GHG) emissions, and peer-reviewed methodologies are used to calculate GHG reductions from these programs.

Partners do contribute *actual* emissions data biannually after their facility-specific improvements but these emissions data are not used in tracking the performance measure. EPA, however, validates the estimates of greenhouse gas reductions based on the actual emissions data received.

Data Quality Review: The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. The second such interagency evaluation, led by the White House Council on Environmental Quality, examined the status of U.S. climate change programs. The review included participants from EPA and the Departments of State, Energy, Commerce, Transportation, and Agriculture. The results were published in the *U.S. Climate Action Report-2002* as part of the United States' submission to the Framework Convention on Climate Change (FCCC). The previous evaluation was published in the *U.S. Climate Action Report-1997*. A 1997 audit by EPA's Office of the Inspector General concluded that the climate programs examined "used good management practices" and "effectively estimated the impact their activities had on reducing risks to health and the environment..."

Data Limitations: These are indirect measures of GHG emissions (carbon conversion factors and methods to convert material-specific reductions to GHG emissions reductions). Also, the voluntary nature of the programs may affect reporting. Further research will be necessary in order to fully understand the links between GHG concentrations and specific environmental impacts, such as impacts on health, ecosystems, crops, weather events, and so forth.

Error Estimate: These are indirect measures of GHG emissions. Although EPA devotes considerable effort to obtaining the best possible information on which to evaluate emissions reductions from its voluntary programs, errors in the performance data could be introduced through uncertainties in carbon conversion factors, engineering analyses, and econometric analyses. The only programs at this time aimed at avoiding GHG emissions are voluntary.

New/Improved Data or Systems: The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. EPA continues to update inventories and methodologies as new information becomes available.

References: The U.S. Climate Action Report 2002 is available at: www.epa.gov/globalwarming/publications/car/index.html. The accomplishments of many of EPA's voluntary programs are documented in the Climate Protection Partnerships Division Annual Report. The most recent version is *Protecting the Environment Together: ENERGY STAR and other Voluntary Programs*, Climate Protection Partnerships Division 2003 Annual Report.

GOAL 1 OBJECTIVE 5

FY 2008 Performance Measures:

- **Percent progress toward completion of a hierarchy of air pollutant sources based on the risk they pose to human health (PART Measure)**
- **Percent of planned actions accomplished toward the long-term goal of reducing uncertainty in the science that supports the standard-setting and air quality management decisions (PART Measure)**

Performance Database: EPA will track these program outputs annually using an internal database.

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: To provide an indication of progress towards achievement of the Clean Air Research Program's long-term goals, the program annually develops a list of key research milestones and outputs in support of the Multi-Year Plan that are scheduled for completion by the end of each fiscal year. This list is finalized by the start of the fiscal year, and no changes are made after this point. The program then tracks quarterly the progress towards completion of these key outputs against pre-determined schedules and milestones. The final score is the percent of key outputs from the original list that are successfully completed on-time. Additionally, the Clean Air research program includes in this metric completion of follow-up recommendations from external peer reviews.

QA/QC Procedures: Procedures are now in place to require that all annual milestones be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management.

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research milestones and outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Air Toxics Multi-Year Plan, available at: <http://www.epa.gov/osp/myr/airtox.pdf> (last accessed January 3, 2007)

Particulate Matter Multi-Year Plan, available at: <http://www.epa.gov/osp/myr/pm.pdf> (last accessed January 3, 2007)

GOAL 2 OBJECTIVE 1

FY 2008 Performance Measures:

- **The percentage of the population served by community water systems that receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection**
- **The percentage of the population in Indian country served by community water systems receiving drinking water that meets all applicable health-based standards**
- **The percentage of community water systems that will provide drinking water that meets all applicable health-based standards in person months**
- **Percent of community water systems that meet all applicable health-based drinking water standards through approaches that include effective treatment and source water protection (PART measure)**

Performance Database: Safe Drinking Water Information System - Federal Version (SDWIS or SDWIS/FED). SDWIS contains basic water system information, population served, and detailed records of violations of the Safe Drinking Water Act and the statute's implementing regulations. The performance measure is based on the population served by community water systems that were active during any part of the performance year and did not have any violations designated as "health based." Exceedances of a maximum contaminant level (MCL) and violations of a treatment technique are health-based violations. SDWIS has provided annual results for ten years and reports on a fiscal year basis.

Data Source: Data are provided by agencies with primacy (primary enforcement authority) for the Public Water System Supervision (PWSS) program. These agencies are either: States, EPA for non-delegated states or territories, and the Navajo Nation Indian tribe, the only tribe with primacy. Primacy agencies collect the data from the regulated water systems, determine compliance, and report a subset of the data to EPA (primarily inventory and summary violations).

Methods, Assumptions and Suitability: Under the drinking water regulations, water systems must use approved analytical methods for testing for contaminants. State certified laboratories report contaminant occurrence to states that, in turn, determine exceedances of maximum contaminant levels or non-compliance with treatment techniques and report these violations to EPA. These results are subject to periodic performance audits and compared to results that states report to SDWIS. Primacy agencies' information systems and compliance determinations are audited on an average schedule of once every 3 years, according to a protocol. To measure program performance, EPA aggregates the SDWIS data into national statistics on overall compliance with health-based drinking water standards using the measures identified above.

QA/QC Procedures: EPA conducts a number of Quality Assurance/Quality Control steps to provide high quality data for program use, including:

- (1) SDWIS/FED edit checks built into the software to reject erroneous data.

- (2) Quality assurance manuals for states and Regions, which provide standard operating procedures for conducting routine assessments of the quality of the data, including timely corrective action(s).
- (3) Training to states on reporting requirements, data entry, data retrieval, and error correction.
- (4) User and system documentation produced with each software release and maintained on EPA's web site. System, user, and reporting requirements documents can be found on the EPA web site, <http://www.epa.gov/safewater/>. System and user documents are accessed via the database link <http://www.epa.gov/safewater/databases.html>, and specific rule reporting requirements documents are accessed via the regulations, guidance, and policy documents link <http://www.epa.gov/safewater/regs.html>.
- (5) Specific error correction and reconciliation support through a troubleshooter's guide, a system-generated summary with detailed reports documenting the results of each data submission, and an error code database for states to use when they have questions on how to enter or correct data.
- (6) User support hotline available 5 days a week.

The SDWIS/FED equivalent of a quality assurance plan is the data reliability action plan¹ (DRAP). The DRAP contains the processes and procedures and major activities to be employed and undertaken for assuring the data in SDWIS meet required data quality standards. This plan has three major components: assurance, assessment, and control.

Data Quality Review: SDWIS data quality was identified as an Agency weakness in 1999 and has a corrective action completion target date that extends to 2007. SDWIS' weaknesses centered around five major issues: 1) completeness of the data (e.g., the inventory of public water systems, violations of maximum contaminant levels, enforcement actions) submitted by the states, 2) timeliness of the data sent by the states, i.e., if states do not report at specified times, then enforcement and oversight actions suffer, 3) difficulty receiving data from the states, 4) both cost and difficulty processing and storing data in SDWIS after it has been received, and 5) difficulty getting SDWIS data for reporting and analysis.

The first two issues are being addressed over a three-year period (2004-2007) through two (2000 and 2003) Data Reliability Action Plans. OGWDW is now working with the states to complete a 2006 data quality review and plan. An information strategic plan² (ISP) was developed and implemented to address the last three issues, which deal primarily with technology (hardware and software) concerns. Implementation of the ISP, which ended in 2005, documents ways to improve tools and processes for creating and transferring data to EPA and incorporates newer technologies and adapts the Agency's Enterprise Architecture Plan to integrate data and allow

¹ *Data Reliability Action Plan*. U.S. EPA, October 2002. Office of Ground Water and Drinking Water internal work plan document. *Drinking Water Data Reliability Analysis and Action Plan (2003) For State Reported Public Water System Data In the EPA Safe Drinking Water Information System/Federal Version (SDWIS/FED)*

² U.S. EPA, Office of Water, *Office of Ground Water and Drinking Water Information Strategy* (under revision). See *Options for OGWDW Information Strategy (Working Draft)*, EPA 816-P-01-001. Washington, DC, February 2001. Available on the Internet at <http://www.epa.gov/safewater/data/informationstrategy.html>

the flow of data from reporting entities to EPA via the Agency's secure central data exchange (CDX) environment.

Routine data quality assurance and quality control (QA/QC) analyses of the Safe Drinking Water Information System (SDWIS) by the Office Water (OW) have revealed a degree of non-reporting of violations of health-based drinking water standards, and of violations of regulatory monitoring and reporting requirements (discussed further under Data Limitations). As a result of these data quality problems, the baseline statistic of national compliance with health-based drinking water standards likely is lower than previously reported. The Agency is more accurately quantifying data quality and should be better able to estimate the impact on national compliance with health-based drinking water standards. OGWDW also is working with states to develop a data quality objective for these data to better gauge progress toward data quality improvement. Even as improvements are made, SDWIS serves as the best source of national information on compliance with Safe Drinking Water Act requirements for program management, the development of drinking water regulations, trends analyses, and public information.

Data Limitations: Recent state data verification and other quality assurance analyses indicate that the most significant data quality problem is under-reporting by the states of monitoring and health-based standards violations and inventory characteristics. The most significant under-reporting occurs in monitoring violations. Even though those are not covered in the health based violation category, which is covered by the performance measure, failures to monitor could mask treatment technique and MCL violations. Such under-reporting of violations limits EPA's ability to: 1) accurately portray the amount of people affected by health-based violations, 2) undertake geo-spatial analysis, 3) integrate and share data with other data systems, and 4) precisely quantify the population served by systems, which are meeting the health-based standards. Therefore, the estimates of population-served could be high or low. As described in the Data Quality Review section above, EPA is currently changing the protocol to enhance the results of data audits as the best near-term option to improve these estimates, while continuing to explore other approaches, including use of contaminant occurrence data.

Error Estimate: EPA will be analyzing data, derived from the improved data audit protocol, with a robust statistical basis from which to extrapolate national results, and better aligned with requirements of the Data Quality Act. The long-term value of the improved audit process is that each year's results will be statistically representative and provide information closer in time to the needed performance reporting; for example, 2006 results, the first year of the improved audit process will be reported in 2007.

New/Improved Data or Systems: Several approaches are underway.

First, EPA will continue to work with states to implement the DRAP and ISP, which have already improved the completeness, accuracy, timeliness, and consistency of the data in SDWIS/FED through: 1) training courses for specific compliance determination and reporting requirements, 2) state-specific technical assistance, 3) increased number of data audits conducted each year, and 4) assistance to regions and states in the identification and reconciliation of missing, incomplete, or conflicting data.

Second, more states (as of January 2007, 53 States, Tribes, and territories are using SDWIS/STATE) will use SDWIS/STATE,³ a software information system jointly designed by states and EPA, to support states as they implement the drinking water program.

Third, EPA has modified SDWIS/FED to (1) simplify the database, (2) minimize data entry options resulting in complex software, (3) enforce Agency data standards, and (4) ease the flow of data to EPA through a secure data exchange environment incorporating modern technologies, all of which will improve the accuracy of the data. In 2006, full use of SDWIS/FED for receiving state reports will be implemented. Data will be stored in a data warehouse system that is optimized for analysis, data retrieval, and data integration from other data sources. It will improve the program's ability to more efficiently use information to support decision-making and effectively manage the program.

Finally, EPA, in partnership with the states, is developing information modules on other drinking water programs: the Source Water Protection Program, the Underground Injection Control Program (UIC), and the Drinking Water State Revolving Fund. These modules will be integrated with SDWIS to provide a more comprehensive data set with which to assess the nation's drinking water supplies, a key component of the goal. Agreement will shortly be reached on the data elements for reporting source water and UIC data. Plans have now been developed for design of systems to address these data flows. Developing the systems to receive the data is scheduled for 2007.

References:

Plans*

- SDWIS/FED does not have a Quality Assurance Project Plan - it is a legacy system which has "evolved" since the early 80s prior to the requirement for a Plan. The SDWIS/FED equivalent is the Data Reliability Action Plan
- Information Strategy Plan – SDWIS/FED (see footnote 2)
- Office of Water Quality Management Plan, available at <http://www.epa.gov/water/info.html>
- Enterprise Architecture Plan

Reports*

- 1999 SDWIS/FED Data Reliability
- 2003 SDWIS/FED Data Reliability Report - contains the Data Reliability Action Plan and status report

Guidance Manuals, and Tools

³ SDWIS/STATE (Version 8.1) is an optional Oracle data base application available for use by states and EPA regions to support implementation of their drinking water programs.

U.S. EPA, Office of Ground Water and Drinking Water. Data and Databases. Drinking Water Data & Databases – SDWIS/STATE, July 2002. Information available on the Internet: http://www.epa.gov/safewater/sdwis_st/current.html

* These are internal documents maintained by EPA's Office of Ground Water and Drinking Water. Please call 202-564-3751 for further information.

- PWSS SDWIS/FED Quality Assurance Manual
- Various SDWIS/FED User and System Guidance Manuals (includes data entry instructions, data On-line Data Element Dictionary-a database application, Error Code Data Base (ECDB) - a database application, users guide, release notes, etc.) Available on the Internet at <<http://www.epa.gov/safewater/sdwisfed/sdwis.htm>>
- Regulation-Specific Reporting Requirements Guidance. Available on the Internet at <<http://www.epa.gov/safewater/regs.html>>

Web site addresses

- OGWDW Internet Site <<http://www.epa.gov/safewater/databases.html>> and contains access to the information systems and various guidance, manuals, tools, and reports.
- Sites of particular interest are:
 <<http://www.epa.gov/safewater/data/getdata.html>> contains information for users to better analyze the data, and
 <<http://www.epa.gov/safewater/sdwisfed/sdwis.htm>> contains reporting guidance, system and user documentation and reporting tools for the SDWIS/FED system.

FY 2007 Performance Measure:

- **The percentage of community water systems that have undergone a sanitary survey within the past three years**

Performance Database: Primary enforcement responsibility (e.g. primacy) for the Public Water System Supervision (PWSS) program is authorized under §1413 of the Safe Drinking Water Act (SDWA). States and Indian Tribes are given primacy for public water systems in their jurisdiction if they meet certain requirements. A critical component of primacy is the requirement that a state must have a program to conduct sanitary surveys of the systems in its jurisdiction. A sanitary survey is an on-site review of the water sources, facilities, equipment, operation, and maintenance of a public water system for the purpose of evaluating the adequacy of the facilities for producing and distributing safe drinking water. Inspectors conducting sanitary surveys must apply basic scientific information and have a working knowledge of the operation, maintenance, management, and technology of a water system to identify sanitary risks that may interrupt the multiple barriers of protection at a water system. There are eight essential elements of a sanitary survey as defined by the EPA/State Joint Guidance on Sanitary Surveys⁴ and the interim enhanced surface water treatment rule: water source; treatment; distribution system; finished water storage; pumps, pump facilities and controls; monitoring, reporting and data verification; water system management and operations; and operator compliance with state requirements.

⁴ Guidance Manual for Conducting Sanitary Surveys of Public Water Systems; Surface Water and Ground Water Under the Direct Influence (GWUDI), (EPA 815-R-99-016, April 1999)
<http://www.epa.gov/safewater/mdbp/pdf/sansurv/sansurv.pdf>

Performance data for this measure will be compiled from information collected during file audits of randomly selected community water systems (data verification or DV). The purpose of a DV is two-fold: (1) to detect discrepancies between the PWS data in the state files or database and the data reported to SDWIS/FED and (2) to ensure that the State is determining compliance in accordance with EPA approved state regulations. After the conduct of each DV, a report is generated which includes the findings for compliance with sanitary survey requirements. DVs are conducted on a cycle in order to visit each state at a frequency of every three years. Final reports for each state serve as the official data source for this measure until a new DV is conducted. Information derived for the DV reports will be calculated annually for this measure.

Data Source: State specific Final Data Verification Reports provide information on compliance with sanitary survey requirements. Information from DV reports for states will be calculated to measure performance.

Methods, Assumptions and Suitability: To assure that data collected during a DV is consistently captured and analyzed, the DV team follows the “EPA Protocol for Participation in a PWSS Program Data Verification” which includes revisions through April 4, 2005. The protocol provides guidance on statistical methodology for defining variables, calculating the statistical proportion (P), determining the appropriate sample size and selecting the systems for file review. Before selecting a sample of systems, the DV team must decide whether it wishes to stratify (or sort) the sample by some characteristic. Stratifying the sample permits more precision, allowing the team to make observations about subsets of systems. A sample may be stratified by system type, size, source, or a combination of these factors. For DV purposes, the sample is always stratified by system type (i.e., CWSs, NTNCWSs, and TNCWSs) since different regulations apply to different types of systems. Once the DV team determines the subset of systems from which the sample will be drawn, along with the number of systems which must be reviewed from that subset of systems, the SDWIS/FED random number generator selects the systems for review. Statistical principles dictate that samples must be selected in a truly random fashion in order to obtain unbiased estimates and achieve the desired precision level. For states whose files are kept in one central office, sample selection is straightforward. The SDWIS/FED random number generator pulls a random sample of systems from the entire subset of systems within the state. Hence, all systems have an equal chance of being chosen.

QA/QC Procedures: To assure the data collected during a DV is complete and accurate, the DV team follows the “EPA Protocol for Participation in a PWSS Program Data Verification.” This protocol is intended as a “handbook” for people performing a DV. The protocol contains detailed instructions for reviewing and analyzing data for sanitary surveys. Since neither time nor resources allow a complete review of all sanitary survey data, the DV team must use a random sample of systems that is drawn from the total number of systems in each state. This random sample is statistically representative of systems in the state. The team then uses the statistical sampling results to draw reasonably accurate assumptions about all of the systems in the state, based on just a few systems.

Data Quality Reviews: Information derived from DVs is captured in a draft report and submitted to EPA (HQ and Regions) as well as the state where the DV was conducted for review. States and EPA conduct data quality reviews and provide additional information or data

as necessary to assure accuracy and completeness. EPA works with states to resolve data issues. Reports are finalized and thus used to measure performance.

Data Limitations: OGWDW has an existing database for PWSS program information, the Safe Drinking Water Information System (SDWIS). Violations of sanitary survey requirements are captured in SDWIS. However, the data field to record sanitary survey frequency is not a mandatory field. Due to resource limitations, sanitary survey data cannot be verified for every system in every state each year. OGWDW employs a methodology to analyze a representative sample of systems during an audit.

FY 2008 Performance Measures:

- **Fund Utilization Rate for the DWSRF**
- **Number of additional projects initiating operations**

Performance Database: Drinking Water State Revolving Fund National Information Management System (DWNIMS.)

Data Sources: Data are entered by state regulatory agency personnel and by EPA's Regional staff; they are collected and reported once yearly.

Methods, Assumptions and Suitability: Data entered into DWNIMS directly represent the units of performance for the performance measure. These data are suitable for year-to-year comparison and trend indication.

QA/QC Procedures: EPA's headquarters and Regional offices are responsible for compiling the data and querying states as needed to assure data validity and conformance with expected trends. States receive data entry guidance from EPA headquarters in the form of annual memoranda (e.g., "2005 DWNIMS Data Collection.")

Data Quality Reviews: EPA's headquarters and Regional offices annually review the data submitted by the states. State data are publicly available at <http://www.epa.gov/safewater/dwsrf/dwnims.html> in individual state reports. Headquarters addresses significant data variability issues directly with states or through the appropriate EPA Regional office. Additionally, EPA's contractor tests the data for logical consistency. An annual EPA headquarters' "DWNIMS Analysis" provides detailed data categorization and comparison. This analysis is used during:

1. Annual EPA Regional office and state reviews to identify potential problems with the program's pace which might affect the performance measure.
2. Reviews by EPA's headquarters of regional oversight of state revolving funds.
3. Annual reviews by EPA's Regional offices of their states' revolving funds operations.

State data quality is also evaluated during annual reviews performed by EPA Regions. Any inconsistencies that are found in need of correction are incorporated into future DWNIMS reports. These adjustments are historically rare and very minor.

Data Limitations: There are no known limitations in the performance data, which states submit voluntarily. Erroneous data can be introduced into the DWNIMS database by typographic or definitional error. Typographic errors are controlled and corrected through data testing performed by EPA's contractor. Definitional errors due to varying interpretations of information requested for specific data fields have been largely reduced. These definitions are publicly available at: <http://www.epa.gov/safewater/dwsrf/nims/dwdatadefs.pdf> . There is typically a lag of approximately two months from the date EPA asks states to enter their data into the DWNIMS database, and when the data are quality-checked and available for public use.

New/Improved Data or Systems: This system has been operative since DWSRF inception. It is updated annually, and data fields are changed or added as needed.

References:

State performance data as shown in NIMS are available by state at:

<http://www.epa.gov/safewater/dwsrf/dwnims.html>

Definitions of data requested for each data field in NIMS is available at:

<http://www.epa.gov/safewater/dwsrf/nims/dwdatadefs.pdf>

2005 DWNIMS Data Collection – memo from Jeff Bryan, 7/12/05

DWNIMS analysis

FY 2008 Performance Measure:

- **Percentage of state-monitored shellfish-growing acres impacted by anthropogenic sources that are approved or conditionally approved for use.**

Performance Database: There is no database currently available, although one is under development (see below)². In the past, data to support this measure came from surveys of States that are members of the Interstate Shellfish Sanitation Conference (ISSC), conducted by NOAA at 5-year intervals and periodic updates requested from the Interstate Shellfish Sanitation Conference (most recent, 2003 2005 data released in 2004 2006³).

Data Source: The ISSC requests the data on approved acreages from shellfish producing states and prepares reports. Survey responses are voluntary.

Methods, Assumptions and Suitability: The methods used by the state programs to produce the data used by the ISSC are based on the National Shellfish Sanitation Plan and Model Ordinance; the operation of those state programs is overseen by the FDA⁴.

QA/QC Procedures: States are responsible for the internal QA/QC of their data.

Data Quality Reviews: The ISSC reviews the state data during report preparation to ensure completeness and accuracy, and follows up with states where necessary.

Data Limitations: Based on NOAA's previous surveys and the voluntary nature of the information collected, potential data limitations may include incomplete coverage of shellfish growing areas.

Error Estimate: No estimates are available.

New/Improved Data or Systems: The ISSC initiated development of the Shellfish Information Management System (SIMS) in July 2002. The database is being developed and implemented by the National Oceanographic and Atmospheric Administration (NOAA) on behalf of the Interstate Shellfish Sanitation Conference (ISSC), a Cooperative Program chartered by the Food and Drug Administration (FDA). The database will include relevant information that is collected by State Shellfish Control Authorities. Historically, NOAA collected shellfish-growing area data in 5-year intervals, 1985, 1990, and 1995. These data were not stored in a database. Once operational, SIMS will be the first national shellfish growing area database and will include NOAA's 1995⁵ and the states' baseline (the ISSC is considering the most appropriate baseline year) and most current year data. State summary information can then be used to track trends relevant to the performance measure, with the 1995 data as against the baseline. The SIMS database is designed as a real time database. The ISSC plans to request data updates annually, but states may update their data any time. These data may be accessed at any time so timely status reports can be generated.

Currently, no long-term database management plan exists.

References:

1. U.S. Environmental Protection Agency. 2006 - 2011 EPA Strategic Plan. Washington, D.C. Pre-publication Copy, September 29, 2006. <http://www.epa.gov/ocfo/plan/plan.htm>
2. Kracker, L.M., Comar P.G., Meaburn, G.M., and K Murugesan. 2005. SIMS: A Shellfish Information Management System for Molluscan Shellfish. NOAA Technical Memorandum NOS NCCOS 17. 53 pp.
3. Interstate Shellfish Sanitation Conference. Analysis of Classified Shellfish Waters 1985-2005. Columbia, South Carolina. September 2006. <http://www.issc.org>
4. U.S. Food and Drug Administration. National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish 2005. Washington D.C. <http://www.cfsan.fda.gov/~ear/nss3-toc.html>
5. National Oceanic and Atmospheric Administration (NOAA), 1997. The 1995 National Shellfish Register of Classified Growing Waters. Silver Spring, MD: Office of Ocean Resources Conservation and Assessment, Strategic Environmental Assessments Division. 398 pp.

FY 2008 Performance Measure:

- **Reduce the percentage of women of child-bearing age having mercury levels in blood above the level of concern identified by the National Health and Nutrition Examination Survey (NHANES).**

Performance Database: There is no publicly accessible database that contains this information.

Rather, the information is reported by the Centers for Disease Control and Prevention (CDC) every two years. The latest report is the *Third National Report on Human Exposure to Environmental Chemicals*, which presents findings for the years 2001 and 2002, and was published in 2005. In the report, CDC reported that 5.7% of the women of child-bearing age have mercury blood levels above the level of concern.¹

Data Source: CDC's National Center for Health Statistics conducts the National Health and Nutrition Examination Survey (NHANES) in which chemicals or their metabolites are measured in blood and urine samples from a random sample of participants. NHANES is a series of surveys designed to collect data on the health and nutritional status of the U.S. population. CDC reports the NHANES results in the *National Report on Human Exposure to Environmental Chemicals*. The *Second National Report on Human Exposure to Environmental Chemicals* was released in 2003 and presented biomonitoring exposure data for 116 environmental chemicals for the civilian, non-institutionalized U.S. population over the 2-year period 1999-2000. The *Third National Report on Human Exposure to Environmental Chemicals* presents similar exposure data for the U.S. population for 148 environmental chemicals over the period 2001-2002. The Third Report also includes the data from the Second Report.

Methods, Assumptions and Suitability: Biomonitoring measurements for the Report were from samples from participants in NHANES. NHANES collects information about a wide range of health-related behaviors, performs a physical examination and collects samples for laboratory tests. Beginning in 1999, NHANES became a continuous survey, sampling the U.S. population annually and releasing the data in 2-year cycles. The sampling plan follows a complex, stratified, multistage, probability-cluster design to select a representative sample of the civilian, noninstitutionalized population in the United States. Additional detailed information on the design and conduct of the NHANES survey is available at <http://www.cdc.gov/nchs/nhanes.htm>. The CDC National Center for Health Statistics (NCHS) provides guidelines for the analysis of NHANES data at http://www.cdc.gov/nchs/data/nhanes/nhanes_general_guidelines_june_04.pdf. Other details about the methodology including statistical methods are reported in the *Third National Report on Human Exposure to Environmental Chemicals*.

QA/QC Procedures: The CDC quality assurance and quality control procedures are not specified in the *Third National Report on Human Exposure to Environmental Chemicals*. However, the Data Sources and Data Analysis chapter in the report does delineate the assumptions inherent in the analysis.

Data Quality Review: The data comes from the NHANES study, which CDC has designed to have a high quality.

Data Limitations: NHANES is designed to provide estimates for the civilian, non-institutionalized U.S. population. The current design does not permit examination of exposure levels by locality, state, or region; seasons of the year; proximity to sources of exposure; or use of particular products. For example, it is not possible to extract a subset of the data and examine levels of blood lead that represent levels in a particular state's population.

Error Estimate: The *Third National Report on Human Exposure to Environmental Chemicals*

provides 95% confidence intervals for all statistics. At the point of interest for this measure, the 95% confidence interval is roughly 1.2 ug/l.

New/Improved Data or Systems: None.

References

Centers for Disease Control and Prevention. "Third National Report on Human Exposure to Environmental Chemicals." NCEH Pub. No. 05-0570. Atlanta, GA. July 2005. Available at <http://www.cdc.gov/exposurereport/>.

FY 2008 Performance Measure:

- **Number of waterborne disease outbreaks attributable to swimming in or other recreational contact with, coastal and Great Lakes waters measured as a five-year average.**

Performance Database: Data on waterborne disease outbreaks (WBDOs) are collected by the states and are submitted to the Centers for Disease Control (CDC) under an agreement with the Council of State and Territorial Epidemiologists, the organization that sponsors the collection of the data. EPA/ORD collaborates with CDC in the analysis of the data. The data are published every two years for the prior second and third years' occurrence of outbreaks as a Surveillance Summary in the CDC's Morbidity and Mortality Weekly Report (MMWR), e.g. data from 1997-1998 were published in 2000. Outbreaks of gastroenteritis, dermatitis, and other diseases are listed according to date of occurrence, state in which the outbreak occurred, etiological agent, the number of cases that resulted from the outbreak, class of the outbreak data (index of data quality for the reporting of the outbreak), and the type of source (e.g., lake, river, pool) involved.

Data Source: Since 1971, CDC and the U.S. Environmental Protection Agency have maintained a collaborative surveillance system for collecting and periodically reporting data that relate to occurrences and causes of WBDOs. The surveillance system includes data about outbreaks associated with drinking water and recreational water. State, territorial, and local public health departments are primarily responsible for detecting and investigating WBDOs and for voluntarily reporting them to CDC.

Methods, Assumptions and Suitability: State, territorial, and local public health agencies report WBDOs to CDC on a standard form (CDC form 52.12). CDC annually requests reports from state and territorial epidemiologists or from persons designated as WBDO surveillance coordinators. As indicated above, the data are submitted to CDC by the states under an agreement with the Council of State and Territorial Epidemiologists. Original data forms and the primary database itself are not available for external review because of concerns about the integrity and confidentiality of the data, which include information such as the names of data reporters, specific identities of water bodies, and identities of facilities and properties, both public and private, at which the outbreaks occurred. Many, if not most outbreaks occur in treated man-made water environments which are not reflective of outcomes of Clean Water Act

programs. Others occur in untreated natural waters in smaller waterbodies not impacted by EPA programs or activities. Accordingly, cooperation of database managers is required to identify specific outbreaks which should be counted under this measure as occurring in waters of the United States.

The unit of analysis for the WBDO surveillance system is an outbreak, not an individual case of a waterborne disease, although this information is reported. Two criteria must be met for an event to be defined as a water-associated disease outbreak. First, two or more people must have experienced a similar illness after exposure to water. This criterion is waived for single cases of laboratory-confirmed primary amebic meningoencephalitis (PAM). WBDOs associated with cruise ships are not summarized in the CDC report.

QA/QC Procedures: Data are submitted to CDC on a standard reporting form in hard copy by mail. Procedures for reporting outbreaks on the Internet for web-entry electronic submission are currently under development. Upgrades to the reporting system to incorporate electronic data reporting are anticipated to be implemented within the next three years¹. Currently, CDC annually obtains reports from state or territorial epidemiologists or persons designated as WBDO surveillance coordinators. Numeric and text data are abstracted from the outbreak form and supporting documents and entered into a database for analysis. Information on QA/QC procedures employed by the individual states or other reporting entities is not included in the CDC reporting.

Data Quality Review: The CDC and EPA/ORD report team review the outbreak reports to ensure the information is complete, following up with the state or local government to obtain additional information where needed. There are currently no external party reviews of this information conducted prior to publication.

WBDOs reported to the surveillance system are classified according to the strength of the evidence implicating water as the vehicle of transmission. The classification scheme (i.e., Classes I-IV) is based on the epidemiologic and water-quality data provided on the outbreak report form. Epidemiologic data are weighted more than water-quality data. Although outbreaks without water-quality data might be included in this summary, reports that lack epidemiologic data were excluded. Single cases of PAM are not classified according to this scheme. Weighting of epidemiologic data does not preclude the relative importance of both types of data. The purpose of the outbreak reporting system is not only to implicate water as the vehicle for the outbreak but also to understand the circumstances that led to the outbreak.

Data Limitations: There are two primary limitations to the CDC WBDO data with respect to this performance measure. The first limitation relates to original data forms and the primary database itself not being available for external review. The implication of this limitation is that database managers or report authors will have to be consulted to identify which of the reported outbreaks have, in fact, occurred in Waters of the United States. The second limitation is the fact that very few outbreaks have been reported over the ten years of data that have been reviewed in consideration of a baseline for this measure.²⁻⁶ The implication of this measure is that were a small number of outbreaks to occur within a given year, it may still be within the range of normal statistical variability and therefore not an effective performance measure.

One key limitation of the data collected as part of the WBDO surveillance system is that the information pertains only to disease outbreaks rather than endemic illness. The epidemiologic trends and water-quality concerns observed in outbreaks might not necessarily reflect or correspond with trends associated with endemic waterborne illness. To address this problem, EPA and CDC are collaborating on the NEEAR Water Study to assess the magnitude of waterborne illness associated with routine, non-outbreak-associated exposure to marine and freshwater recreational areas.

Error Estimate: The relative quality of data and the error estimate associated with data of a given quality are indicated by the classification of the outbreak report. A classification of I indicates that adequate epidemiologic and water-quality data were reported. Specifically, a classification of I indicates that adequate data were provided about exposed and unexposed persons with a relative risk or odds ratio of ≥ 2 or P value of ≤ 0.05 , which indicates statistical significance. Higher classification numbers (II-IV) indicate relatively higher error estimates based on factors such as completeness of data and sample size. For instance, outbreaks that affect fewer persons are more likely to receive a classification of III rather than I because of the relatively limited sample size available for analysis.

New/Improved Performance Data or Systems: The manual reporting of WBDOs has been practiced since the collaborative surveillance system for collecting and reporting data began in 1971. Plans are now in place to transform the outbreak reporting system over the next three years to incorporate electronic data reporting. It is anticipated that the implementation of these upgrades will increase the number of reported outbreaks substantially. An increased number of reported WBDOs resulting from electronic reporting would require the baseline for the performance measure to be reset to a baseline consistent with the new level of reporting in order to yield meaningful trends in the occurrence of waterborne outbreaks in the future.

References

1. U.S. EPA. Office of Research and Development. Personal Communication w/ Calderon RL, author. Washington, DC, December 2005.
2. Yoder JS, Blackburn BG, Craun GF, Hill V, Levy DA, Calderon RL, et al. Surveillance for waterborne-disease outbreaks---United States, 2001--2002. In: CDC Surveillance Summaries, October 22, 2004. MMWR 2004;53(SS-08): 1--22
3. Lee SH, Levy DA, Craun GF, Beach MJ, Calderon RL. Surveillance for waterborne-disease outbreaks---United States, 1999--2000. In: CDC Surveillance Summaries, November 22, 2002. MMWR 2002;51(SS-8): 1--47.
4. Barwick RS, Levy DA, Craun GF, Beach MJ, Calderon RL. Surveillance for waterborne disease outbreaks---United States, 1997--1998. In: CDC Surveillance Summaries, May 26, 2000. MMWR 2000;49 (No. SS-4):1--34.
5. Levy DA, Bens MS, Craun GF, Calderon RL, Herwaldt BL. Surveillance for waterborne-disease outbreaks---United States, 1995--1996. In: CDC Surveillance Summaries, December 11, 1998. MMWR 1998;47(No. SS-5):1--34.
6. Kramer MH, Herwaldt BL, Craun GF, Calderon RL, Juranek DD. Surveillance for waterborne-disease outbreaks---United States, 1993--1994. In: CDC Surveillance Summaries, April 12, 1996. MMWR 1996;45 (No. SS-1):1--33.

FY 2008 Performance Measure:

- **Percentage of days of the beach season that coastal and Great Lakes beaches monitored by state beach safety programs are open and safe for swimming**

Performance Database: The data are stored in PRAWN (Program tracking, beach Advisories, Water quality standards, and Nutrients), a database that includes fields identifying the beaches for which monitoring and notification information are available and the date the advisory or closure was issued, thus enabling trend assessments to be made. The database also identifies those states that have received a BEACH (Beaches Environmental Assessment and Coastal Health) Act [P.L. 106-284] grant. EPA reports the information annually, on a calendar year basis, each May. The calendar year data are then used to support fiscal year commitments (e.g., 2007 calendar year data are used to report against FY 2008 commitments). As of 2005, States and Territories monitor for pathogens at 4,025 coastal and Great Lakes beaches, up from 2,823 beaches in 2002¹.

Data Source: Since 1997 EPA has surveyed state and local governments for information on their monitoring programs and on their advisories or closures. The Agency created the PRAWN database to store this information. State and local governmental response to the survey was voluntary up through calendar year 2002. Starting in calendar year 2003, data for many beaches along the coast and Great Lakes had to be reported to EPA as a condition of grants awarded under the BEACH Act². Since 2005, states have used an on-line process called eBeaches to electronically transmit beach water quality and swimming advisory information to EPA instead of using the paper survey. The latest information reported by a state or local government is accessible to the public through the BEACON (Beach Advisory Closing On-line Notification) system.

Methods, Assumptions and Suitability: The data are an enumeration of the days of beach-specific advisories or closures issued by the reporting state or local governments during the year. Performance against the target is tracked using a simple count of the number of beaches responding to the survey and the days over which the advisory or closure actions were taken. This is compared to the total number of days that every beach could be open. Thus the data are suitable for the performance measure.

QA/QC Procedures: Since 1997, EPA has distributed a standard survey form, approved by OMB, to coastal and Great Lake state and county environmental and public health beach program officials in hard copy by mail. The form is also available on the Internet for web-entry electronic submission. When a state or local official enters data using the web-entry format, a password is issued to ensure the appropriate party is completing the survey. Currently the Agency has procedures for information collection (see Office of Water's "Quality Management Plan," approved September 2001 and published July 2002³). In addition, coastal and Great Lakes states receiving BEACH Act grants are subject to the Agency's grant regulations under 40 CFR 31.45. These regulations require states and tribes to develop and implement quality assurance practices for the collection of environmental information.

Data Quality Review: EPA reviews the survey responses to ensure the information is complete,

following up with the state or local government to obtain additional information where needed. The Agency also reviews the QA/QC reports submitted by States and Territories as part of their grant reporting. There have been no external party reviews of this information.

Data Limitations: From calendar year 1997 to calendar year 2002, participation in the survey and submission of data was voluntary. While the voluntary response rate has been high, it did not capture the complete universe of beaches. The voluntary response rate was 92% in calendar year 2002 (240 out of 261 contacted agencies responded). The number of beaches for which information was collected increased from 1,021 in calendar year 1997 to 2,823 in calendar year 2002. Participation in the survey is now a mandatory condition for implementation grants awarded under the BEACH Act program to coastal and Great Lakes states, with information now available for 4,025 of 6,099 coastal and Great Lakes beaches. All coastal and Great Lakes states and territories now apply annually for implementation grants.

Error Estimate: Not all coastal and Great Lakes beaches are monitored. In 2005, States and Territories report that they monitor at 4,025 of the 6,099 coastal and Great Lakes beaches. This monitoring varies between States. For example, North Carolina monitors all its 247 beaches whereas South Carolina monitors 23 of 299 beaches it identified. Where monitoring is done, there is some chance that the monitoring may miss some instances of high pathogen concentrations. EPA's 2002 National Health Protection Survey of Beaches found that 90% of the nation's beaches are monitored once a week or less⁴. Studies in southern California found that weekly sampling missed 75% of the pathogen exceedances⁵, and that 70% of the exceedances lasted for only one day⁶. An EPA Office of Research and Development (ORD) beach monitoring study found a positive correlation between pathogen indicator densities one day as compared to densities the next day, but that the correlation was negligible when compared to densities after four days⁷. These studies indicate that weekly sampling most likely misses many pathogen events that can affect public health. This information is not sufficient to calculate the potential error in the reporting, but it is sufficient to indicate that the reporting may understate the number of days that beaches should be closed or under advisory.

New/Improved Data or Systems: Participation in the survey is now a mandatory condition for grants awarded under the BEACH Act program. As the Agency awards these implementation grants, it will require standard program procedures, sampling and assessment methods, and data elements for reporting. The amount, quality, and consistency of available data will improve to the extent that state governments apply for and receive these grants. In FY 2008, EPA expects all 35 coastal and Great Lakes states to again apply for grants to implement monitoring and notification programs.

References:

- U.S. EPA. Office of Water. "EPA's Beach Report: 2005 Swimming Season." EPA-823-F-06-010. Washington, DC, June 2006. Available at <http://www.epa.gov/waterscience/beaches/seasons/2005/2005fs.pdf>
- U.S. EPA. Office of Water. "National Beach Guidance and Required Performance Criteria for Grants." EPA-823-B-02-004. Washington DC: EPA, June 2002. Available at <http://www.epa.gov/waterscience/beaches/guidance/all.pdf>

- U.S. EPA. Office of Water. "A Quality Management Plan." EPA 821-X-02-001. Washington, DC: EPA, July 2002. Available at http://www.epa.gov/water/programs/qmp_july2002.pdf
- U.S. EPA. Office of Water. "EPA's BEACH Watch Program: 2002 Swimming Season." EPA-823-F-03-007. Washington, DC, May 2003. Available at <http://www.epa.gov/waterscience/beaches/beachwatch2003-newformat.pdf>
- Leecaster. M.K. and S.B. Weisberg, Effect of Sampling Frequency on Shoreline Microbiology Assessments, *Marine Pollution Bulletin*, 42(11), 2001.
- Boehm, A.B., et. al., Decadal and Shorter Period Variability of Surf Zone Water Quality at Huntington Beach, California, *Environmental Science and Technology*, 36(18), 2002.
- U.S. EPA. Office of Research and Development. "The EMPACT Beaches Project, Results and Recommendations from a Study on Microbiological Monitoring In Recreational Waters." EPA 600/9-02/xxx. Washington, DC, Sept. 2002.(Draft Report).

GOAL 2 OBJECTIVE 2

FY 2008 Performance Measures:

- **The Percentage of identified Class V motor vehicle waste disposal wells closed or permitted.**
- **Class I, II, and III wells that maintain mechanical integrity without a failure that releases contaminants to underground sources of drinking water.**
- **Percentage of prohibited Class IV and high-priority, identified, potentially endangering Class V wells closed or permitted in ground-water based source water areas.**

Performance Database: The Underground Injection Control (UIC) program is authorized under Part C Sections 1422 -1426 of the Safe Drinking Water Act (SDWA). Regulations for the UIC program are in 40 CFR Parts 144 - 148. Basic program information is collected from states and EPA's regional offices (regions) with direct implementation (DI) responsibilities through the 7520 Federal Reporting forms 1, 2A, 2B, 3 and 4. In July 2005, EPA issued a measures reporting assistance memorandum, "Information to Assist Regions and States to Report on Underground Injection Control Program's National Water Program Guidance Performance Activity Measures." Starting in FY 2005, including annual updates thereafter, states report to EPA on the results of their UIC performance measures. In the initial 2005 reporting, states or the regions, if they have direct implementation of the program, report the following information: (1) The number of Class I, II, III, and V violations and significant violations that have been identified and addressed, (2) the number of Class I, II, III and V inspections, (3) The number of Class I, II and III salt solution mining wells that maintained mechanical integrity, (4) the number of Class V wells in Source Water Protection Areas (SWPAs) with surveys completed, and (5) the number of high priority wells in ground water based SWPAs that are closed or permitted. This information was reported to help determine the impact that the UIC program is having relative to public health protection. It also helps assess the progress being made to protect underground sources of drinking water (USDW).

In FY 2003, EPA maintained pilot state-level summary data for each of these reporting elements in a spreadsheet format. In FY 2005, states and/or regions reported summary measures information through a spreadsheet. In FY 2006, measures data was entered into a web-based reporting form which mirrored the spreadsheet from the previous year. The UIC program will begin collecting program information in a UIC national database in 2007; this system will electronically transfer information from state databases to EPA's national database using EPA's Exchange Network. EPA is currently working with the regions and several states to complete development of the system and to begin populating it.

Data Source: Until the UIC national database is deployed for use, states or DI programs will report to EPA using the UIC Inventory/Performance Activity Measures System. This is a web-base data entry system. Starting in 2007, states and DI programs will transition to the UIC national data system for reporting of UIC data. - See section "New/Improved Data or Systems."

Methods, Assumptions and Suitability: For these measures, the states' reporting of progress is based on EPA's 2005 guidance, "Information to Assist Regions and States to Report on Underground Injection Control Program's National Water Program Guidance Performance Activity Measures." States will only report state-level summary information, much of which is contained in state databases. State reporting will be based on definitions and procedures found in the guidance. EPA believes that the data will be reliable for use in making management decisions.

QA/QC Procedures: QA/QC procedures include validation of information using states' 7520 reporting forms. Additionally, a series of data checks are built into the web entry system. EPA's regional offices also will work with individual states to verify information. Additional checks are performed by EPA headquarters on randomly selected states.

Data Quality Reviews: EPA's regional offices will conduct data quality reviews of state data using the QA/QC procedures and work with states to resolve data issues. EPA headquarters will communicate any additional concerns that may occur. The national data system includes software to reject erroneous data. As a result, EPA expects the quality of data on the results of the assessments and source water protection activities to improve over time.

Data Limitations: Current reporting only provides summary-level information. There is no standard protocol for EPA to verify and validate this summary data against well-level information contained in state databases. Some of the information used for calculation of the measures has not been collected historically reducing the availability of information, which may cause the data to be incomplete and inconsistent across states.

Error Estimate: There is no basis for making an error estimate for these performance measures given the data limitations of state-level summary reporting described above.

New/Improved Data or Systems: The UIC national data base is being developed though consultation with regions and states. It will give EPA the ability to access the data directly from states through the Exchange Network using the Central Data Exchange (CDX). The data system

will not only include the data for the measures but all of the data necessary for EPA to effectively manage the national program.

References:

Guidance, Regulations and Data Forms

- Information to Assist Regions and States to Report on Underground Injection Control Program's National Water Program Guidance Performance Activity Measures (Reporting Assistance Memo)--7/06/06
- Code of Federal Regulations at 40 CFR Parts 144 through 148
- UIC Inventory/Performance Activity Measures System
- 7520 Federal Reporting Forms (OGWDW Homepage-UIC Program)
 - Form 7520-1 (summary of permit and non permit actions taken by state)
 - Form 7520-2A (summary of state compliance evaluation actions)
 - Form 7520- 2B (summary of significant non-compliance)
 - Form 7520-3(mechanical integrity test/remedial actions)
 - Form 7520-4 (Quarterly Exceptions List)

Web site addresses

- *Safe Drinking Water Act Amendments of 1996*. P.L. 104-182. (Washington: 6 August 1996). Available on the Internet at: <http://www.epa.gov/safewater/sdwa/sdwa.html>
- For more detailed information on Underground Injection topics, US EPA Office of Ground Water and Drinking Water/UIC Program. Available on website: <http://www.epa.gov/safewater/uic.html>

FY 2008 Performance Measure:

- **Percentage of waters assessed using statistically valid surveys**

Performance Database: Data generated from the national assessment will be housed in the EPA Office of Water's STORET (STOrage and RETrieval) data warehouse. Prior to entering the STORET warehouse, all datasets are housed in a temporary facility, such as ORD's SWIM database, where they are examined for QA purposes and undergo statistical analysis. Finalized datasets transferred to the STORET warehouse will include all water quality, physical and biological data and associated metadata for each survey. The STORET warehouse is available on the web at <http://www.epa.gov/STORET/index.html>. Once the data schema for biological and habitat data are developed and deployed for the Exchange Network-based water quality exchange (WQX) warehouse, these data will go directly to the WQX warehouse instead of STORET.

Data Source: Data are collected, processed and analyzed through EPA-State collaboration to assess and report on the condition of the nation's waters with documented confidence. Under this partnership, samples are collected across the country during a specified index period for each

resource. Sites are sampled one time, with additional repeat samples collected at 10 percent of the sites to determine precision of methods. Surveys collect a suite of indicators relating to the biological, physical habitat and water quality of the resource in order to assess the resource condition and determine the percentage meeting the goals of the CWA. Surveys will collect information on biological and abiotic factors at 30-50 sites on an ecoregion level II scale for each resource. Prior to sampling, field crews will undergo intensive training by EPA personnel on field sampling and collection techniques. Laboratory analysis will be conducted at either a state lab or contract lab following specified protocols for the survey. Data collection follows a Quality Assurance Project Plan (QAPP), with subsequent testing and auditing to ensure its application.

Methods, Assumptions and Suitability: The surveys are conducted using a probabilistic survey design, which allows extrapolation of results to the target population (specified water resource, e.g., wadeable streams, lakes, rivers, etc.). The collection design maximizes the spatial spread between sites, located by specific latitude and longitude combinations. The survey utilizes an indexed sampling period to increase the probability of accurately assessing condition and identifying any problems in water quality, physical or biological indices if they exist. Based on the QAPP and field protocol documents, a site is located by the sampling crew via Global Positioning System (GPS). Data are collected for each parameter following the protocols outlined in the field operations manual. Indices for the probabilistic surveys relate to the condition of the resource and the extent that the waters are supporting the fishable and swimmable goals of the Clean Water Act. Samples taken from the field are stored in accordance with field manual instructions and shipped to the processing laboratory. Laboratories will follow quality assurance (QA) plans and complete analysis and provide electronic information to the state or EPA. EPA and the state exchange data to ensure that each has a complete set. EPA and states analyze the data to assess regional and national condition of the water resource surveyed. Results of the analyses on a national and regional basis will be published in a publicly accessible peer reviewed report released within two years of sample collection. The overall change in condition of the water body type will be assessed on a five year cycle.

Assumptions: (1) The underlying target population (water resource sampled for the survey) has been correctly identified; (2) GPS is successful; (3) QAPP and field collection manuals are followed; (4) all samples are successfully collected; (5) all analyses are completed in accordance with the QAPP; and (6) a combination of data into indices is completed in a statistically rigorous manner.

Suitability: By design, all data are suitable to be aggregated up to the regional and national level to characterize the ecological condition of the waterbody resource and the associated stressors. Samples provide site specific point-in-time data and excellent representation of the entire resource (extrapolation to the entire resource supportable). Data will be used to characterize populations and subpopulations of waterbody resources through time and space. Data analysis and interpretation will be peer reviewed prior to completion of final report. The data are suitable for individual reports and to establish a baseline for subsequent surveys to evaluate trends.

QA/QC Procedures: Collection and processing of all samples are described in QAPP and Field Protocols documents associated with each survey. In addition, the QAPP will contain specific

Data Quality Objectives (DQOs) and Measurement Quality Objectives (MQOs) associated with each survey. To ensure that the survey is obtaining the DQOs and MQOs, there are several QA steps built into each survey. Training for all crew members is required before sampling begins. Field evaluations are conducted for all crews to ensure methods are being followed. Each laboratory involved in the sample processing will adhere to the specified laboratory protocols and undergo a thorough and documented quality assurance/quality control (QA/QC) process. Submitted data will undergo a final QC check before analysis begins.

Data Quality Reviews: A peer review and public comment period will be held for each survey. During this time, the draft report will be posted on the web for interested parties to review and submit comments. An independent group of experts will be selected to serve on a peer review panel for the report. In house audits will also be conducted over the course of the survey.

Data Limitations: Because the data are collected in a manner to permit calculations of uncertainty and designed to meet specific Data Quality Objectives (DQOs), the results at the regional level are within about 2-4% of true values dependent upon the specific sample type. Detailed QA/QC checks throughout the survey reduce the data limitations and errors in sampling. The scale of the reporting units is limited by the number of samples taken in a specific region. To make a statistically valid statement about the condition of the resource, sample size should minimally include 30-50 sites per region. Since samples are collected one time at each site per survey, trends analysis will depend on future survey work. Lag time between sample collection and reporting will be between 1-2 years.

Error Estimate: The estimation of condition will vary for the national condition and the regional condition for each survey. The condition estimates are determined from the survey data using cumulative distribution functions and statistically-based uncertainty estimates.

New/Improved Data or Systems: Additional indicators, addressing regional specific needs can be added to the survey over time. QA requirements will be met by all laboratories participating in the surveys. Probabilistic surveys repeated on the same water body type utilizing a similar sample design will show condition trends for the resource on a broad geographic scale.

References:

- Olsen, A. R. et al. 1999. *Statistical Issues for Monitoring Ecological and Natural Resources in the United States*. Environmental Monitoring and Assessment 54, 1-45
- Stevens Jr., D. L. & Urqhart, N. S. 2000. *Response Designs and Support Regions in Sampling Continuous Domains*. Environmetrics 11, 11-41
- Stevens Jr., D. L. 1997. *Variable Density Grid-based Sampling Designs for Continuous Spatial Populations*. Environmetrics 8, 167-195
- STORET database website. <http://www.epa.gov/STORET/index.html>.
- U.S. Environmental Protection Agency. 2001. *National Coastal Condition Report*. EPA-620/R-01/005

FY 2008 Performance Measures:

- **Number of water body segments identified by States in 2002 as not attaining standards, where water quality standards are now fully attained (PART measure for the surface water protection program and the section 106 grant program)**
- **Number of waterbodies identified by States (in 2000 or subsequent years) as being primarily NPS-impaired that are partially or fully restored (Part measure for the section 319 grant program)**
- **Cost per water segment restored (section 106 grant program PART efficiency measure)**
- **Section 319 funds (\$million) expended per partially or fully restored waterbody (section 319 grant program PART measure)**

Performance Database: The Watershed Assessment Tracking Environmental Results System (WATERS— found at <http://www.epa.gov/waters/>) is EPA’s approach for viewing water quality information related to these measures. WATERS can be used to view “303(d) Information,” compiled from, *States’ Listings of Impaired Waters as Required by Clean Water Act Section 303(d)* (referred to here in brief as “303(d) lists”), which are recorded in the National Total Maximum Daily Load (TMDL) Tracking System. This information (found at <http://www.epa.gov/owow/tmdl/status.html>) is used to generate reports that identify waters that are not meeting water quality standards (“impaired waters”). This information, combined with information and comment from EPA Regions and States, information stored in the National Assessment Database (found at <http://www.epa.gov/waters/305b/index.html>) and, for a small number of waters tracked by these measures, stand-alone databases, yield the baseline data for these measures. As discussed below under “New and Improved Data Systems,” EPA is creating a single database in 2007 that will track all the impaired waters in the baseline for these measures.

As TMDL and other watershed-related activities are developed and implemented, water bodies which were once impaired will meet water quality standards, and thus will be removed from the year 2002 impaired totals. Changes will be recorded in reports from States, scheduled every two years through 2012, as removals of water body impairments and impaired water bodies.

The measure regarding the restoration of primarily NPS-impaired waters is being verified through a laborious and careful process, in which EPA Headquarters staff review and help prepare a detailed 2-page Fact Sheet that includes a description of the impairment and the causes of that impairment; a description of the activities that were undertaken to remove the impairment; the effect of those activities; and the partners involved in solving the problem. Each of these stories is uploaded to the public web site of www.epa.gov/nps/success, and only after uploaded is it counted towards the (250 waterbodies) goal.

Data Source: The primary data source for these measures is State 303(d) lists of their impaired water bodies needing development of TMDLs and State Integrated Reports covering their

required submittals of monitoring information pursuant to section 305(b) of the Clean Water Act. These lists/reports are submitted each biennial reporting cycle. The baseline for this measure is the 2002 list/2002 integrated reports. States prepare lists/reports using actual water quality monitoring data, probability-based monitoring information, and other existing and readily available information and knowledge the state has, in order to make comprehensive determinations addressing the total extent of the state's water body impairments. Once EPA approves a state's 303(d) list, the information is entered into WATERS, as described above. Throughout 2006, EPA worked with States that did not submit Integrated Reports in 2002 to supplement their 2002 303(d) lists of impaired waters needing TMDLs with waters that were also impaired in 2002 but were not on 303(d) lists because all needed TMDLs were complete. Thus, EPA now has a more complete list of impaired waters for tracking under these measures.

The efficiency measure for the section 106 grant program is derived by dividing the actual expenditures or President Budget requests for the section 106 grant program, plus State funding matches for these grants (as reported to EPA by the States) by the cumulative number of water body segments restored.

The efficiency measures for the section 319 grant program is based on the assumption that \$100 million dollars annually of 319 dollars will be devoted annually, from 2000 through 2007, to remediate impaired waters. These funds are assumed to be accompanied by a State/Federal match required by Section 319 of 40% to EPA's 60% (although the match requirements apply to the entire grant only, not to the remediation component alone). Thus the State match for \$700 million dollars is \$466 million, bringing the total funds available to a total of \$1.166 billion. The efficiency measure for this measure is that 250 waterbodies would be remediated for \$1.166 billion, or an average of or approximately \$4.66 million per waterbody.

Methods, Assumptions, and Suitability: States employ various analytical methods of data collection, compilation, and reporting including: 1) Direct water samples of chemical, physical, and biological parameters; 2) Predictive models of water quality standards attainment; 3) Probabilistic models of pollutant sources; and 4) Compilation of data from volunteer groups, academic interests and others. EPA-supported models include BASINS, QUAL2E, AQUATOX, and CORMIX. Descriptions of these models and instructions for their use can be found at www.epa.gov/OST/wqm/. The standard operating procedures and deviations from standard methods for data sampling and prediction processes are stored by many States in the STORage and RETrieval (STORET) database.

States exercise considerable discretion in using monitoring data and other available information to make decisions about which waters meet their designated uses in accordance with state water quality standards. EPA then aggregates State data to generate national performance measures.

Delays are often encountered in state 303d lists and 305b submissions, and in EPA's approval of the 303(d) portion of these biennial submissions. EPA encourages States to effectively assess their waters and make all necessary efforts to ensure the timely submittal of required § 303(d) lists of impaired waters. EPA will work with States to facilitate State submission of accurate, georeferenced, and comprehensive data. Also, EPA is heightening efforts to ensure expeditious review of the 303(d) list submissions with national consistency.

QA/QC Procedures: QA/QC of data provided by States pursuant to individual State 303(d) lists (under CWA Section 303(d)) and/or Integrated 305(b)/303(d) Reports) is dependent on individual state procedures. EPA regional staff interact with the States during the process of approval of the lists and before the information is entered into the database to ensure the integrity of the data, consistent with the Office of Water Quality Management Plan (QMP). EPA requires that each organization prepare a document called a QMP that: documents the organization's quality policy; describes its quality system; and identifies the environmental programs to which the quality system applies (e.g., those programs involved in the collection or use of environmental data).

Data Quality Review: Recent independent reports have cited that weaknesses in monitoring and reporting of monitoring data undermine EPA's ability to depict the condition of the Nation's waters and to support scientifically sound water program decisions. The most recent reports include the 1998 *Report of the Federal Advisory Committee on the Total Maximum Daily Load (TMDL) Program*⁵, the March 15, 2000 Government Accounting Office report *Water Quality: Key Decisions Limited by Inconsistent and Incomplete Data*⁶, the 2001 National Academy of Sciences Report *Assessing the TMDL Approach to Water Quality Management*⁷ and EPA's *Draft Report on the Environment*.⁸

In response to these evaluations, EPA has been working with states and other stakeholders to improve: 1) data coverage, so that state reports reflect the condition of all waters of the state; 2) data consistency to facilitate comparison and aggregation of state data to the national level; and 3) documentation so that data limitations and discrepancies are fully understood by data users.

First, EPA enhanced two existing data management tools (STORET and the National Assessment Database) so that they include documentation of data quality information.

Second, EPA has developed a GIS tool called WATERS that integrates many databases including STORET, the National Assessment Database, and a new water quality standards database. These integrated databases facilitate comparison and understanding of differences among state standards, monitoring activities, and assessment results.

⁵ USEPA, National Advisory Council for Environmental Policy and Technology, *Report of the Federal Advisory Committee on the Total Maximum Daily Load Program*. EPA 100-R-09-8006 (1998).

⁶ GAO. *Water Quality: Key EPA and State Decisions Limited by Inconsistent and Incomplete Data* (Washington, DC: 2000), RCED-00-54 and *Water Quality: Inconsistent State Approaches Complicate Nation's Efforts to Identify Its Most Polluted Waters*, GAO-02-186 (Washington, DC: 2002)

⁷ *Assessing the TMDL Approach to Water Quality Management*. 2001. Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction, Water Science and Technology Board, National Research Council

⁸ US EPA, *Draft Report on the Environment 2003*. EPA 260-R-02-006 (2003). Available at <http://www.epa.gov/indicators/roe/index.htm> (accessed 12 December 2005)

Third, EPA and states have developed guidance. The 2006 Integrated Report Guidance (released August 3, 2005 at <http://www.epa.gov/owow/tmdl/2006IRG>)⁹ provides comprehensive direction to states on fulfilling reporting requirements of Clean Water Act sections 305 (b) and 303(d). EPA also issued a 2008 Integrated Report clarification memo (released October 12, 2006; available at http://www.epa.gov/owow/tmdl/2008_ir_memorandum.html)¹⁰ which includes best practices for timely development/submission of lists and expresses continued commitment to support and populate the Assessment Database (ADB) (State-level system which EPA compiles into the National Assessment Database available via WATERS) and/or compatible data management systems.

Also, the *Consolidated Assessment and Listing Methodology – Toward a Compendium of Best Practices*¹¹ (released on the Web July 31, 2002 at www.epa.gov/owow/monitoring/calm.html) intended to facilitate increased consistency in monitoring program design and the data and decision criteria used to support water quality assessments.

Fourth, the Office of Water (OW) and EPA's Regional Offices have developed the *Elements of a State Water Monitoring and Assessment Program*, (August 2002).¹² This guidance describes ten elements that each state water quality monitoring program should contain and directs states to develop monitoring strategies that propose time-frames for implementing all ten elements.

In addition, a recent evaluation by the EPA Office of the Inspector General¹³ recommended that EPA focus on improving its watershed approach by:

- Facilitating stakeholder involvement in this approach
- Better integrating the watershed approach into EPA core programs,
- Refining the Agency strategic plan to better evaluate key programs and activities, and
- Improving the measurement system by which watershed progress is assessed.

Data Limitations: Data may not precisely represent the extent of impaired waters because states do not employ a monitoring design that monitors all their waters. States, territories and tribes collect data and information on only a portion of their water bodies. States do not use a consistent suite of water quality indicators to assess attainment of water quality standards. For example, indicators of aquatic life use support range from biological community assessments to levels of dissolved oxygen to concentrations of toxic pollutants. These variations in state practices limit how the CWA Sections 305(b) reports and the 303(d) lists provided by states can

⁹ USEPA, Office of Water, *2006 Guidance for Assessment, Listing, and Reporting Requirements Pursuant to Sections, 303(d), 305(b), and 314 of the Clean Water Act* (2005). Available at <http://www.epa.gov/owow/tmdl/2006IRG> (accessed 12 December 2005)

¹⁰ USEPA, Office of Water, *Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions* (2006). Available at http://www.epa.gov/owow/tmdl/2008_ir_memorandum.html (accessed 21 December 2006)

¹¹ U.S. EPA, Office of Water, *Consolidated Assessment and Listing Methodology- Toward a Compendium of Best Practices*. (Washington, DC: 2002) Available at www.epa.gov/owow/monitoring/calm.html (accessed 12 December 2005)

¹² USEPA, Office of Water, *Elements of a State Water Monitoring and Assessment Program*, EPA 841-B-03-003 (Washington, DC: 2003). Available at <http://www.epa.gov/owow/monitoirng/repguide.html> (accessed 12 December 2005)

¹³ USEPA Office of the Inspector General, *Sustained Commitment Needed to Further Advance the Watershed Approach* (2005). Available at <http://www.epa.gov/oig/reports/2005/20050921-2005-P-00025.pdf>.

be used to describe water quality at the national level. There are also differences among sampling techniques, and standards.

State assessments of water quality may include uncertainties associated with derived or modeled data. Differences in monitoring designs among and within states prevent the agency from aggregating water quality assessments at the national level with known statistical confidence. States, territories, and authorized tribes monitor to identify problems and typically lag times between data collection and reporting can vary by state.

Also, as noted above under Methods, Assumptions and Suitability, States exercise considerable discretion in using monitoring data and other available information to make decisions about which waters meet their designated uses in accordance with state water quality standards. EPA then aggregates these various State decisions to generate national performance measures.

Error Estimate: No error estimate is available for this data.

New/Improved Data Systems: The Office of Water has been working with states to improve the guidance under which 303(d) lists are prepared. EPA issued new listing guidance entitled *Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act* during summer 2005. The Guidance is a comprehensive compilation of relevant guidance EPA has issued to date regarding the Integrated Report. There are a few specific changes from the 2004 guidance. For example, the 2006 Integrated Report Guidance provides greater clarity on the content and format of those components of the Integrated Report that are recommended and required under Clean Water Act sections 303(d), 305(b), and 314. The guidance also gives additional clarity and flexibility on reporting alternatives to TMDLs for attaining water quality standards (e.g., utilization of reporting Category 4b).

EPA released *Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions* in October 2006 18 months in advance of the April 2008 Integrated Report due date. The primary goal of the 2008 memo is to help achieve 100 percent on-time submittals of the Integrated Reports (all 56 states and territories by April 1, 2008). Timely submittal and EPA review of Integrated Reports is important to demonstrate state and EPA success in accomplishing Strategic Plan goals for restoring and maintaining water quality.

EPA is also combining the National TMDL Tracking System and the National Assessment Database into one integrated system (the Assessment, TMDL Tracking, and Implementation System) that tracks the status of all assessed waters and waterbody impairments, including impaired waterbodies. EPA is also in the process of releasing the Water Quality Exchange (WQX) which provides data warehousing capability to any organization that generates data of documented quality and would like to contribute that data to the national WQX data warehouse so that their data may be used in combination with other sources of data to track improvements in individual watersheds. Currently data providers must transmit data and required documentation through their own Central Data Exchange (CDX) node. During 2007, EPA will make a web data entry tool available for users that have not invested in the CDX node.

References:

USEPA, Office of Water. 2006. Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions. Available at http://www.epa.gov/owow/tmdl/2008_ir_memorandum.html,

USEPA, Office of Water. 2005. Draft Handbook for Developing Watershed Plans to Restore and Protect Our Waters. Available at http://www.epa.gov/owow/nps/watershed_handbook/.

USEPA, Office of the Inspector General. 2005. *Sustained Commitment Needed to Further Advance the Watershed Approach*. Available at <http://www.epa.gov/oig/reports/2005/20050921-2005-P-00025.pdf>.

USEPA, Office of Water. 2005. *Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act*. Available at <http://www.epa.gov/owow/tmdl/2006IRG>.

USEPA, Office of the Chief Financial Officer. 2003. *2003-2008 Strategic Plan: Direction for the Future*. Available at <http://www.epa.gov/ocfo/plan/2003sp.pdf>.

USEPA. 2003. *Draft Report on the Environment 2003*. EPA 260-R-02-006. Available at <http://www.epa.gov/indicators/roe/index.htm>.

USEPA, Office of Water. 2003. *Elements of a State Water Monitoring and Assessment Program*. EPA 841-B-03-003. Washington, DC. Available at <http://www.epa.gov/owow/monitoring/repguid.html>.

USEPA, National Advisory Council for Environmental Policy and Technology. 1998. *Report of the Federal Advisory Committee on the Total Maximum Daily Load Program*. EPA 100-R-8006.

USEPA. 2002. *Consolidated Assessment and Listing Methodology – Toward a Compendium of Best Practices*. Washington, DC. Available at <http://www.epa.gov/owow/monitoring/calm.html>.

Government Accountability Office. 2002. *Water Quality: Inconsistent State Approaches Complicate Nation's Efforts to Identify its Most Polluted Waters*. GAO-02-186. Washington, DC.

Government Accountability Office. 2000. *Water Quality: Key EPA and State Decisions Limited by Inconsistent and Incomplete Data*. GAO-RCED-00-54. Washington, DC.

National Research Council, Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction. 2001. *Assessing the TMDL Approach to Water Quality Management*. Washington, DC: National Academy Press.

FY 2008 Performance Measures:

- **Number of TMDLs that are established or approved by EPA on schedule consistent with national policy (cumulative) (PART measure)**
- **Number of TMDLs that are established by States and approved by EPA on a schedule consistent with national policy (cumulative) (PART measure)**

Performance Database: The National Total Maximum Daily Load (TMDL) Tracking System (NTTS) is a database which captures water quality information related to this measure. Watershed Assessment Tracking Environmental Results System (WATERS– found at <http://www.epa.gov/waters/>) is EPA’s approach for viewing water quality information related to this measure. TMDL information (found at http://oaspub.epa.gov/waters/national_rept.control) is used to generate reports that identify waters for which EPA has approved state-established TMDLs and for which EPA has established TMDLs. Annual TMDL totals, spanning 1996 to the present, are available from NTTS on a fiscal year basis. As TMDLs and other watershed-related activities are developed and implemented, water bodies which were once impaired will meet water quality standards. Thus these TMDL measures are closely tied to the PART measure, “Number of water body segments identified by States in 2002 as not attaining standards, where water quality standards are now fully attained.” Restored water bodies will be removed from the list of impaired water segments.

Data Source: State-submitted and EPA-approved TMDLs and EPA-established TMDLs are the underlying data for this measure. Electronic and hard copies are made available by states and often linked to EPA Web sites. More specifically, WATERS allows search for TMDL documents at http://www.epa.gov/waters/tmdl/tmdl_document_search.html.

Methods, Assumptions, and Suitability: State and EPA TMDLs are thoroughly and publicly reviewed during their development. Upon approval by EPA, relevant information from each TMDL is entered into the NTTS by EPA Regional staff.

QA/QC Procedures: QA/QC of data is provided by EPA Regional staff and through cross-checks of WATERS information regarding impaired water listings, consistent with the Water Quality Management Plan (QMP). EPA requires that organizations prepare a document called a QMP that: documents the organization's quality policy; describes its quality system; and identifies the environmental programs to which the quality system applies (e.g., those programs involved in the collection or use of environmental data).

Data Quality Review: Internal reviews of data quality have revealed some errors in data and issues associated with the definition of certain database fields. In 2005 and 2006, EPA convened a meeting of NTTS users to discuss how to improve the database. As a result, data field definitions were clarified, the users’ group was reinstituted, several training sessions were scheduled, and a new Assessment, TMDL Tracking, and Implementation System workgroup is currently strategizing to improve the database (see “Data Limitations,” below).

In addition, a recent EPA Office of the Inspector General report included comments on the TMDL Program (*Sustained Commitment Needed to Further Advance the Watershed Approach*).

The report recognized “EPA has integrated principles of the watershed approach into the Total Maximum Daily Load (TMDL) Program by encouraging States to develop TMDLs on a watershed basis rather than by individual water segments. Stakeholder involvement with TMDLs is critical for both the conventional and watershed approaches, but the broader watershed approach may expand the number of stakeholders. Expanding both the geographic scale and the number of stakeholders may result in additional time and resources required to develop these TMDLs.” This demand for resources is challenging to overcome in the current budget environment. The EPA Office of Water has formed a Sustainable Finance Team to increase the capacity of local watershed groups and increase awareness of funding possibilities for watershed work, both from within EPA and outside of the Agency. Finally, the evaluation report states, “regardless of the approach taken for development of TMDLs, the regulatory requirements of the Clean Water Act must be met.” Current realization of targets shows the TMDL Program continues to make sizable steps in meeting Clean Water Act goals despite the challenges. EPA plans to evaluate the sufficiency of NTTS in handling watershed-based TMDLs given the increase in the use of this approach.

Data Limitations: There are usually no gaps in the fields required to identify the TMDLs; however, a number of the fields in NTTS are optional, and population of these fields is erratic. To meet the increasing need for readily accessible CWA information, EPA established an Assessment, TMDL Tracking, and Implementation System workgroup. This workgroup is fashioning an integrated system capable of documenting and managing the connections between state assessment and listing decisions reported under sections 305(b) and 303(d) (i.e., integrated reporting) and completed TMDL information. This system will allow seamless access to all information about assessment decisions and restoration actions across reporting cycles and over time until water quality standards are attained. The integrated system will have streamlined data entry requirements and an understandable interface for both EPA and the public. The system will also be able to support automated transactions with State assessment tracking systems through the EPA Central Data Exchange.

Error Estimate: No error estimate is currently available for this data.

New/Improved Data Systems: See above.

References:

USEPA, Office of the Inspector General. 2005. *Sustained Commitment Needed to Further Advance the Watershed Approach*. Available at <http://www.epa.gov/oig/reports/2005/20050921-2005-P-00025.pdf>.

National Research Council, Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction. 2001. *Assessing the TMDL Approach to Water Quality Management*. Washington, DC: National Academy Press.

FY 2008 Performance Measures:

- **Percentage of major NPDES permittees in Significant Noncompliance at any time during the fiscal year (PART measure)**

- **Percentage of all major publicly-owned treatment works (POTWs) that comply with their permitted wastewater discharge standards (PART measure)**

Performance Databases: The Permit Compliance System, (PCS) tracks permit compliance and enforcement data for sources permitted under the Clean Water Act National Pollutant Discharge Elimination System (NPDES). Data in PCS include major permittee self reported data contained in Discharge Monitoring Reports (DMR), data on permittee compliance status, data on state and EPA inspection and enforcement response.

Data Source: Permittee self reported DMR data are entered into PCS by either state or EPA Regional offices. PCS automatically compares the entered DMR data with the pollutant limit parameters specified in the facility NPDES permit. This automated process identifies those facilities which have emitted effluent in excess of permitted levels. Facilities are designated as being in Significant Noncompliance (SNC) when reported effluent exceedances are 20% or more above permitted levels for toxic pollutants and/or 40% or more above permitted levels of conventional pollutants. PCS contains additional data obtained through reports and on-site inspections, which are used to determine SNC, including: non-effluent limit violations such as unauthorized bypasses, unpermitted discharges, and pass through of pollutants which cause water quality or health problems; permit schedule violations; non-submission of DMRs; submission of DMRs 30 or more days late; and violation of state or federal enforcement orders.

Methods, Assumptions and Suitability: There are established computer algorithms to compare DMR effluent data against permitted effluent levels. The algorithms also calculate the degree of permitted effluent exceedance to determine whether toxic/conventional pollutant SNC thresholds have been reached.

QA/QC Procedures: Quality Assurance/Quality Control procedures [See references] are in place for PCS data entry. State and regional PCS data entry staff are required to take PCS training courses [See references]. Quality Management Plans (QMPs) are prepared for each Office within The Office of Enforcement and Compliance Assurance (OECA). The Office of Compliance (OC) has established extensive processes for ensuring timely input, review and certification of PCS information. OC's QMP, effective for 5 years, was approved July 29, 2003 by the Office of Environmental Information (OEI) and is required to be re-approved in 2008.

Data Quality Review: Information contained in PCS is required by policy to be reviewed by regional and headquarters= staff for completeness and accuracy. SNC data in PCS are reviewed quarterly.

Data Limitations: Legal requirements for permittees to self report data on compliance with effluent parameters in permits generally results in consistent data quality and accuracy. EPA monitors and measures the timeliness of DMR submissions and data entry quality. National trends over the past several years show an average of 94% of DMRs are entered timely and complete. Where data entry problems are observed, OECA works directly with regions and states to improve performance, and in limited circumstances has dedicated supplemental grant resources to help regions and states correct problems. As part of ICIS-NPDES implementation

OECA is working to deploy an electronic DMR process to save resources on data entry workload and reduce data input errors.

Error Estimate: Not available

New & Improved Data or Systems: PCS was developed during the 1980's and has undergone periodic revision and upgrade since then. OECA is currently developing a modernized data system to replace PCS, utilizing modern data entry, storage, and analytical approaches. The replacement of PCS with ICIS-NPDES (Integrated Compliance Information System – NPDES), a modernized and user-friendly NPDES data system, began in June 2006 when eleven states began using the system; seven other states will be migrated to the new system in August. During phased implementation of ICIS-NPDES across the states a combination of PCS and ICIS-NPDES will be used to generate SNC data. Once fully implemented, ICIS-NPDES will be the sole source of NPDES SNC data.

FY 2008 Performance Measures:

- **Percentage of States and Territories that within the preceding three year period submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other sources not considered in the previous standards. (PART measure)**
- **Percentage of submissions of new or revised water quality standards from States and Territories that are approved by EPA (PART measure)**

Performance Database: The Water Quality Standards Action Tracking Application (WATA), an internal tracking application managed by the Office of Science and Technology described at <http://intranet.epa.gov/ost/div/shpd/wata-manual.pdf>, is the performance database for these measures. The information in this system provides the baseline and performance data for these measures.

Data Source: The underlying data sources for this measure are submissions from states and territories of water quality standards to EPA pursuant to the Clean Water Act and EPA's water quality standards regulation at 40 CFR Part 131. States and territories are required to review their water quality standards at least once every three years and submit any new or revised water quality standards to EPA for review and approval. Each submission is accompanied by a letter from an appropriate official, and includes a certification by the state or territorial attorney general that the standards were duly adopted pursuant to state or territorial law.

EPA Regional Office staff members compile information from each submission and enter it into the WATA system. The information includes identifying data (name of jurisdiction, date of submission), data concerning components of the submission, and data concerning EPA's action on the submission. EPA has delegated approval and disapproval decisions to the Regional Administrator; the Regional Administrator may re-delegate the decisions to the appropriate Division Director, but no further. Approval decisions are judicially reviewable, and are accompanied by an appropriate administrative record.

Methods, Assumptions, and Suitability:

The Office of Science and Technology has established computation metrics in the Water Quality Standards Action Tracking Application (WATA) system to produce the baselines and performance data for both measures. These metrics are as follows:

- Percentage of State and Territorial water quality standards submissions (received in the 12 month period ending April 30th of the fiscal year) that are approved by EPA. Partial approvals receive fractional credit.

This metric considers all new or revised submissions from May 1 of the previous year through April 30 of the current year. This reporting period provides regions at least five months to reach and document a valid approval decision. EPA management believes this is an adequate time for processing submissions. A “submission” is determined by the submitting jurisdiction, as described above. The metric then searches for whether the Regional Office has made any approval decision concerning the submission. If EPA approves the submission in full by the end of the reporting period, it will be counted with an approval value of 1. If EPA disapproves all provisions of the standards, it will be counted with an approval value of 0 (zero). In some cases the Regional decision official may decide to approve some portions of the standards provisions, disapprove some portions, or defer actions on some portions. To accommodate these possibilities, and to reflect the complex nature of some submissions, the WATA system allows Regional staff to track portions of a submission as separate parts with weights corresponding to the number of actual provisions involved. When different decisions are reached on different parts or provisions of a submission, the metric calculates a fractional approval value. The fractional approval value is a number between 0 and 1, equal to the number of provisions approved, divided by the total number of provisions in the original submission. For example, if a submission contains 10 provisions and EPA approves 8 and disapproves 2, then the metric would count this as 0.8 submissions. The final performance metric is the sum of full or fractional approval values divided by the total number of submissions during the reporting period.

- Number of States and Territories that within the preceding three year period submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other sources not considered in the previous standards

This measure utilizes a Regional Office entry in the WATA system which indicates whether a submission or submission part includes one or more new water quality criteria or revised criteria that reflect new scientific information from EPA or other sources not considered in the previous criteria. Biological criteria that are reflected explicitly in designated uses would count under this entry. If a state or territory has not adopted any such criteria, the jurisdiction can nevertheless be counted under this measure if (a) EPA has issued new or revised water quality criteria, including revisions to the published table of EPA recommended criteria at <http://www.epa.gov/waterscience/criteria/wqcriteria.html>, but the state has determined through a scientific assessment that such a change is not relevant for its waters, or (b) the jurisdiction could certify to EPA that it has completed a defensible scientific review of the new scientific information EPA has issued and has determined that no changes are needed to their existing

water quality criteria. The metric searches for one or more qualifying submissions or submission parts for each jurisdiction during the three-year period ending five months before the end of the reporting period, and that have been approved by EPA by the end of the reporting period. For example, for FY 2008 any qualifying submissions from May 1, 2005, through April 30, 2008, that were approved by September 30, 2008, would enable the jurisdiction to be counted. Note the overlap from one reporting year to the next: a state that last made such a submittal, in, say, February 2005, would be counted in FY 2005, FY 2006, and FY 2007 but not in FY 2008.

QA/QC Procedures: States and territories conduct QA/QC of water quality standards submissions pursuant to individual state procedures. Because such submissions are subject to judicial review, the attorney general's certification described above provides assurance of the content of each submission. EPA regional staffs provide support to and interact with the jurisdictions as they develop, review, and adopt water quality standards. Each Regional Office provides data quality review of its entries in the WATA system. For example, Regional Offices generally assure that each entry is reviewed by the water quality standards coordinator, usually a senior scientist or environmental protection specialist with extensive experience in water quality standards actions. Data validation algorithms built into each entry screen also help improve data quality. In addition, a sample of entries is spot-checked by Headquarters' Office of Science and Technology staff. The Regions and Headquarters have been able to conduct the data quality reviews fairly easily because the number of submissions has averaged about 50 submissions per year in recent years, well within their available resources to provide adequate review.

Data Quality Review: No external reviews of the data have been conducted.

Data Limitations: Submissions may vary considerably in size and complexity. For example, a submission may include statewide water quality standards revisions, use attainability analyses for specific water bodies, site-specific criteria applicable to specific types of waters, general statewide policies, antidegradation policies or procedures, and variances. Therefore, these measures – the number of submissions approved, and the number of jurisdictions with updated scientific information contained in adopted standards – do not provide an indicator of the scope, geographic coverage, policy importance, or other qualitative aspects of water quality standards. This information would need to be obtained in other ways, such as by reviewing the content of adopted and approved standards available at <http://www.epa.gov/waterscience/standards/wqslibrary/>, or contacting the appropriate Regional Office or state/territorial personnel.

Error Estimate: No error estimate is available for this data.

New/Improved Data Systems: The Office of Science and Technology has no immediate plans for developing a new data system or enhancing the existing WATA system, other than refining metrics for assessing and interpreting performance results, or for assessing data quality.

References:

USEPA. September 8, 2005. *Water Quality Standards Acting Tracking Application: Users Manual*. Available at <http://intranet.epa.gov/ost/div/shpd/wata-manual.pdf>.

USEPA. 2000. *Water Quality Standards Regulation*. Code of Federal Regulations, 40 CFR part 131. Available at http://www.access.gpo.gov/nara/cfr/waisidx_05/40cfr131_05.html.

USEPA. August 1994. *Water Quality Standards Handbook*, 2nd edition.
<http://www.epa.gov/waterscience/standards/handbook/>.

FY 2008 Performance Measure:

- **Estimated annual reduction of nitrogen (reported in pounds), phosphorous (pounds), and sediment (tons) from nonpoint sources to waterbodies (Section 319 funded projects only).**

Performance Database: The Section 319 Grant Reporting and Tracking System (GRTS) is used by grant recipients (State agencies) to supply information about State NPS Management Programs and annual Section 319 funded work programs, which include watershed-based BMP implementation projects. GRTS includes information about Best Management Practices (BMPs) implemented under 319-funded watershed projects, and the NPS load reductions achieved as a result of implementation. EPA uses GRTS to compile and report information about state section 319 program projects, including load reductions for nitrogen, phosphorus, and sediment to waterbodies.

State reporting via GRTS in part fulfills requirements of the Clean Water Act (CWA) Sections 319(h)(11) and 319(m)(1); however, GRTS also provides EPA and other stakeholders greater and more efficient access to data, information, and program accomplishments than would otherwise be available. Besides load reduction information, GRTS, in conjunction with WATERS (see below) provides detailed georeferencing (i.e., National Hydrography Dataset – or “NHD”-- reach addresses) for 319-funded projects, project cost information, and a host of other elements.

GRTS is also part of the Watershed Assessment, Tracking, and Environmental Results System (WATERS), which is used to provide water program information and display it spatially using a geographic information system integrated with several existing databases. These databases include the STorage and RETrieval (STORET) database, the National Assessment Database (NAD), the TMDL Tracking System (NTTS), the Water Quality Standards Database (WQSDB), and GRTS.

Data Source: States enter load reduction data for individual 319-funded projects into GRTS. Various watershed models are used in the States to estimate the load reductions resulting from implementation of BMPs. Two models used by many states, and directly supported by EPA, are the Spreadsheet Tool for Estimating Pollutant Loads (STEPL) model, and the “Region 5” model. States, at their discretion, may use other models or methods (e.g., AGNPs, SWAT, GWLF, etc), or may use actual water monitoring data to generate estimates of pollutant load reduction resulting from BMP implementation. The load reduction data generated by modeling and/or monitoring efforts are entered by State staff directly into the appropriate GRTS data fields.

Methods, Assumptions and Suitability: States employ two main methods to make pollutant load reduction estimates for the purpose of entering information into GRTS: 1) watershed models to estimate load reductions after watershed project BMPs are implemented, and 2) direct sampling over time of pollutants using targeted site selection. Even direct sampling methods, however, usually involve some type of modeling to separate BMP effects from other variables when determining load reductions.

EPA aggregates the load reduction data entered into GRTS to generate the national load reduction number for each pollutant. With each successive time period – each of which includes load reduction estimates from projects funded under more than one fiscal year grant (since BMPs are still “working” for some time after initial installation) -- the total from the previous period is subtracted from the total of the current time period to get the incremental total. For example, our first report on national load reduction numbers in the PART included projects funded from FY 2002 and most of FY 2003 (FY 2002 was the first grant year for which load reduction information was mandated). For the next report in PART, we totaled load reductions for projects from FY 2002 through 2004, with a smattering of projects for FY 2005 for which information was available in GRTS. The total from the first time around was subtracted from this latter total to give us the increment. This increment is what we reported in OMB’s Program Assessment Rating Tool (PART) in November 2005.

This method of determining the increment has been necessary because of the particular structure and previous software used for GRTS, which houses projects by grant year. A project funded in a single grant year is usually implemented over several years. Within a single project form, the load reduction number (or numbers if more than one watershed is being addressed by the project) is updated at least annually, but there is no requirement to keep the “original” load reduction number in the system. Therefore, we did not always have a record of how load reductions have increased over time for a given project; hence, we use the method described above to estimate the national load reduction increment from one time period to the next.

QA/QC Procedures: QA/QC of load reduction estimates generated by states is dependent on individual state procedures, such as state Quality Management Plans (QMPs), which are periodically reviewed and approved by EPA Regions.

EPA provides user support and training to states in the use of the STEPL and Region 5 models. EPA emphasizes that Quality Assurance Project Plans (QAPPs) should be developed (in accordance with EPA approved State QMPs) for watershed projects, especially where water quality models are being used or where monitoring is being conducted. EPA also stresses that site-specific parameters be used whenever possible for input to water quality models, as opposed to default input values provided by some modeling tools.

States have continual access and opportunity to review the information in GRTS to ensure it accurately reflects the data they entered (according to their QA procedures). EPA periodically reviews GRTS and reminds states of the critical importance of their completing mandated data elements in a timely, high-quality manner.

Data Quality Review: Data entered in GRTS are periodically reviewed by EPA Regions and Headquarters. Regional personnel also maintain hardcopies of the states work programs, watershed project implementation plans, and Annual Progress Reports. Verification of data in GRTS can be cross-checked with these documents to ensure quality, consistency, and reliability in progress reporting on an incremental (such as, year-to-year) basis, or to note any problems in data quality in GRTS. EPA frequently reviews various aggregation(s) of all the data in GRTS by our use of “ad-hoc” and standard reports available in the GRTS reporting system.

In the past, Nonpoint Source Program reporting under Section 319 had been identified as an Agency-level weakness under the Federal Managers Financial Integrity Act. The Agency’s establishment and subsequent enhancements of GRTS has served to mitigate this problem by requiring states to identify the activities and results of projects funded with Section 319(h). In response to the FMFIA evaluation, EPA has been working with states and other stakeholders to improve data input and quality. We sponsor national GRTS-users group meetings each year. These meetings serve not only to meet the training needs of the user community, but also provide a forum for discussing needed enhancements to GRTS. These enhancements range from better capturing environmental results to improving consistency of data entry to facilitate state-by-state comparisons.

The CWA Sections 319(h)(11) and 319(m)(1) require States to report their Nonpoint Source Management Program (NPSMP) milestones, nonpoint source pollutant load reductions, and water quality improvements. These sections provide the EPA Office of Water (OW) authority to require water quality monitoring and/or modeling, and to require reporting by states to demonstrate their success in reducing nonpoint source pollutant loads and improving water quality. OW has issued several guidance documents designed to improve state NPSMPs, watershed-based projects, and consistency in state progress reporting, including their use of GRTS. In September 2001, EPA issued “Modifications to Nonpoint Source Reporting Requirements for Section 319 Grants.” This memorandum outlines the process for reporting in GRTS load reductions for nutrients and sediment (for applicable Section 319(h) funded projects). Our current “National Nonpoint Source Program and Grants Guidelines” (October, 2003) includes sections on all nonpoint source grant reporting requirements, including GRTS reporting. Furthermore, EPA, in consultation with the States, has established the nonpoint source program activity measures (PAMs) -- including nonpoint load reductions -- which are now part of EPA’s Strategic Plan and the PART. We have also communicated (e.g., via email) to states further detailed explanations of the NPS program activity measures, expected reporting sources and dates, and results of our reviews of data input to GRTS by the States.

Data Limitations: State NPSMP work to model (and monitor) watersheds is often not integrated or coordinated with state water quality monitoring and assessment strategies, and therefore use of the data may be rather limited. Load reduction data are typically generated from the use of water quality models, and there is a great deal of uncertainty in model inputs and outputs. States generally do not apply model results to decision-making for implementing and/or revising their NPS Management Programs.

State assessments of load reductions and water quality typically include uncertainties associated with any measuring or modeling tools. Variability in the environment, as well as in state

methods and application of tools limit the accuracy of data for describing load reductions and water quality at the project level. Aggregating the load reduction data up to the national measure compounds the level of uncertainty, thereby preventing the Agency from assigning a reasonable numerical confidence level to it.

Error Estimate: No error estimate is available for these data.

New/Improved Data or Systems: GRTS has recently been converted to an Oracle database. Oracle is the standard database used by Federal agencies. Conversion to Oracle will allow GRTS to seamlessly connect with WATERS, as well as facilitate potential linkages to a variety of other databases, models, and watershed planning tools. The Oracle-based GRTS will greatly improve reporting capabilities for all end users, and make it easier to quickly answer questions for stakeholders. Questions which will be easier to answer include, “Where are watershed projects being developed and implemented? Are they concurrent with impaired waters and established TMDLs? Do they pursue actions necessary to reduce pollutant loads and attain water quality standards?”

Oracle provides users the capability of customizing data entry screens to facilitate various reporting needs of the States and EPA. We can customize screens to reflect various programmatic needs of Regional offices and States, such as to view only the mandated elements, or a mix of mandated elements and other Regionally-required data fields.

Training on STEPL and the Region 5 model are ongoing in hopes of minimizing operational mistakes for State staff utilizing one or both of these models to estimate section 319 project load reductions.

FY 2008 Performance Measures:

- **Percentage of high priority EPA and State NPDES permits that are reissued as scheduled (PART Measure)**
- **Percentage of high priority state NPDES permits reissued as scheduled (PART Measure)**

Performance Database:

- U.S. EPA. Permit Compliance System (PCS). [database]. Washington, DC [Office of Enforcement and Compliance Assurance]
- U.S. EPA Integrated Compliance Information System (ICIS-NPDES). [database]. Washington, DC [Office of Enforcement and Compliance Assurance]
- Electronic Permit Issuance Forecasting Tool (E-PIFT) [database]. Washington, DC [Office of Water]
- Priority Permits Data Base. [web-based database]. Washington, DC [Office of Water]

EPA has carried out detailed permit renewal backlog tracking with PCS data since November 1998. The Permit Compliance System (PCS) and the Integrated Compliance Information System

(ICIS-NPDES) are used to determine which individual permits are current through date fields for permit issuance and expiration. To supplement the individual permit data from PCS, EPA uses the Electronic Permit Issuance Forecasting Tool (E-PIFT) to track the current or expired status of facilities covered under non-storm water general permits. E-PIFT has been used to track non-storm water general permit facilities since January 2001.

In March 2004 a new priority permit issuance strategy was initiated under the Permitting for Environmental Results (PER) program. The priority permits issuance strategy focuses permitting activities on environmentally and administratively significant expired permits. The Priority Permits Database is a web-based system that tracks the specific permits that each State and Region has identified as priority. States and Regions enter the permits, and EPA HQ uses PCS/ICIS-NPDES to track permit issuance status of these permits.

Data Source: EPA=s Regional offices and NPDES authorized states enter data into PCS and/or ICIS-NPDES and EPA=s Regional offices are responsible for entering data to the E-PIFT. EPA=s Regional offices and States also enter permit identification information into the Priority Permits database.

Methods, Assumptions and Suitability: Annually, Office of Wastewater Management (OWM) provides State and Regional authorities with a list of candidate priority permits, defined as permits that have been expired for two years or more. States and Regions then use several programmatic and environmental criteria to select which of those candidate permits should be prioritized for issuance. They then commit to issue these permits over the next two fiscal years, with the goal of achieving a 95% issuance rate. Regions enter their commitments into the Priority Permits Data Base. Results are confirmed using PCS/ICIS-NPDES reports.

QA/QC Procedures: The PCS and ICIS-NPDES databases are managed by the Office of Enforcement and Compliance Assurance (OECA); E-PIFT and Priority Permits Database are web-based systems that are managed by the Office of Water (OW). EPA Headquarters (HQ) staff in OECA review data submitted by states as part of the QA/QC process. In addition, OW continues to work with States and Regions to improve the quality and completeness of the data. EPA generates state-by-state reports that list PCS/ICIS-NPDES Akey data@ fields, including permit issuance and expiration dates, as well as compliance and enforcement data, and provides these lists to NPDES states and Regions for review and cleanup. EPA also created a spread sheet comparing latitude/longitude (lat/long) data for municipal treatment systems collected by the Clean Water Needs Survey to the lat/long data in PCS. This spread sheet is provided to States and Regions so that, where discrepancies exist between state and PCS/ICIS-NPDES data, EPA and States can make corrections in PCS/ICIS-NPDES. EPA will continue to focus on improving the lat/long data in PCS/ICIS-NPDES, especially at the pipe level.

Additionally, where States maintain Akey@ permit data in separate state-level systems, EPA is providing support to upload these data to PCS.

Data Quality Review: The Office of Inspector General (OIG) has issued several findings regarding poor PCS data quality, and PCS has been listed as an Agency-Level Weakness under the Federal Managers Financial Integrity Act since 1999. This weakness affects EPA=s ability to

obtain a true picture of the status of the NPDES program. Fortunately, permit event data such as the permit issuance and expiration data needed for this performance measure are generally better populated than other Akey@ data elements. As noted previously, OW is offering support to States for data upload, data entry, and, if necessary, data compilation to improve data quality. This has resulted in improved tracking of data, particularly industrial permits.

The replacement of PCS with ICIS-NPDES, a modernized and user-friendly NPDES data system, began in June 2006 and nineteen states and several territories have successfully migrated to the new system. Use of ICIS-NPDES should greatly increase state participation and data quality. Batch states (those states with their own data systems) will not be migrated to ICIS-NPDES until appropriate mechanisms are in place to transfer the data.

Data Limitations: Priority Permits data are verified and reliable. We are aware of data gaps in PCS in general, particularly for minor facilities, and of discrepancies between state databases and PCS; however, EPA=s data clean-up over the past five years has significantly improved data quality. E-PIFT has enabled EPA to report on inventories and status of non-storm water facilities covered by NPDES general permits, but the data are not as comprehensive as those tracked in PCS. In addition, to date, there has been no national-level data system to track permit issuance and expiration status of facilities covered by *stormwater* general permits. In 2007, OWM is planning to improve E-PIFT to enable tracking of stormwater general permits and facilities covered under them.

Error Estimate: We believe that the permit renewal backlog data for major facilities is accurate within 2 percent based on input from EPA=s Regional offices and states through a quarterly independent verification. For minor facilities, however, the confidence interval is less precise and probably overestimates the permit renewal backlog for minor facilities by 5 percent based on anecdotal information from EPA=s Regional offices and states.

New/Improved Data or Systems: EPA headquarters has been providing contractor assistance to improve the data quality in PCS and will continue to do so. The new modernized ICIS-NPDES was rolled out in June 2006, with nineteen states and several territories now using the system. ICIS –NPDES will be easier to use and will improve the quality of data needed to manage the NPDES program.

References:

Information for PCS and ICIS-NPDES is publicly available at:
<http://www.epa.gov/compliance/data/systems/modernization/index.html>

FY 2008 Performance Measures:

- **Loading (pounds) of pollutants removed per program dollar expended (PART efficiency measure)**

Performance Database: Data for this measure are derived using different methods for industries subject to effluent guidelines, Publicly Owned Treatment Works (POTWs), municipal

storm water and construction storm water (industrial storm water is not included nor are reductions from water quality based effluent limits). The values derived from these methods are summed to obtain the total pollutant load reductions achieved under the surface water program. To calculate the PART efficiency measure, the total cumulative pollutant reductions are divided by the total number of dollars devoted to the EPA Surface Water Program (SWP), grants to States under Clean Water Act (CWA) section 106, plus State ‘match’ dollars, annually. SWP and CWA Section 106 budget is pulled from EPA’s Integrated Financial Management System (IFMS). State ‘match’ dollars are reported to EPA by States.

Data Sources: For industry sectors subject to **effluent guidelines**, estimated loading reductions are taken from reductions estimated in the Technical Development Document (TDD) when the effluent guideline is developed. The common components for such analyses include wastewater sampling, data collection from the regulated industry, and some amount of estimation or modeling. TDDs are available for: Pulp & Paper, Pharmaceuticals, Landfills, Industrial Waste Combustors, Centralized Waste Treatment, Transportation Equipment Cleaning, Pesticide Manufacturing, Offshore Oil & Gas, Coastal Oil & Gas, Synthetic Based Drilling Fluid, Concentrated Animal Feeding Operations, Meat and Poultry, Metal Products and Machinery, Aquaculture. States and EPA’s Regional offices enter data into PCS and ICIS.

For **Publicly Owned Treatment Works (POTWs)**, trend data is taken from a detailed analysis for BOD and TSS loadings from POTWs in *A Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment*®, USEPA, June 2000, EPA-832-R-00-008. The report provides flow estimates, loading estimates and a distribution of treatment class for every 2 to 4 years from 1968 through 1996. In addition, the report uses data from the Clean Watershed Needs Survey (CWNS) to provide projections for 2016. EPA has also prepared a *A2004 Update to Progress in Water Quality*® that uses data from the 2004 CWNS to provide flow and loading estimates for the year 2000 and projections for 2025. The 2004 CWNS is currently at OMB for clearance.

For **Municipal Stormwater**, estimates were derived from EPA models of the volume of storm water discharged from municipal separate storm sewer systems (MS4s) developed as part of a 1997 EPA draft report. The methodology and results of the 1997 draft report are described in *A Economic Analysis of the Final Phase II Storm Water Rule*®, EPA, October 1999.¹⁴

Estimates of the sediment load present in **Construction Stormwater** is derived using a model developed by the US Army Corps of Engineers. The model uses the construction site version of the Revised Universal Soil Loss Equation (RUSLE). Uncontrolled (i.e. prior to implementation of Best Management Practices (BMPs)) and controlled (i.e. after the implementation of BMPs) sediment loadings were estimated for 15 climatic regions with three site sizes (one, three, and five acres), three soil erodability levels (low, medium, and high), three slopes (3%, 7%, and 12%), and various BMP combinations. The methodology and results are described in “Economic Analysis of the Final Phase II Storm Water Rule.”

¹⁴ Economic Analysis of the Final Phase II Storm Water Rule, Oct. 1, 1999, US EPA. Available at: <http://www.epa.gov/npdes> or http://cfpub.epa.gov/npdes/docs.cfm?program_id=6&view=allprog&sort=name

Combined Sewer Overflow (CSO) loadings are estimated based on data obtained from the Clean Watershed Needs Survey and from the “Report to Congress on the Impacts and Control of Combined Sewer Overflows and Sanitary Sewer Overflows.” States and EPA’s Regional offices provide data for the CSO Report to Congress and the Clean Watershed Needs Survey.

Data for the PART denominator, i.e. the total number of dollars devoted to the EPA Surface Water Program (SWP), are assembled and updated as new data becomes available. EPA Surface Water Program funds and CWA Section 106 budget are initially based on the President’s Budget until a final budget is adopted; it is then pulled from EPA’s Integrated Financial Management System (IFMS). State ‘match’ dollars are reported to EPA by States; where updated data is not available, the last year of confirmed data is carried forward.

Methods, Assumptions and Suitability: EPA uses the spreadsheet described above to estimate loadings. The data are aggregated across different sources to determine loading reductions at the national level. Loadings appear to be the best surrogate for determining the environmental impacts of point sources. Pollutant load reductions, along with some of the water quality improvement measures, tell the story about environmental outcomes. Pollutant reductions per dollar spent provides a snapshot of the effectiveness and efficiency of the surface water program, and comparing this over time helps to delineate a trend.

QA/QC Procedures: The loadings spreadsheets are based on information from rulemakings and policies that have undergone extensive review. The effluent guidelines follow EPA quality assurance/quality control (QA/QC) procedures.

Data Quality Reviews: The methodology for this measure was submitted to OMB for review during the PART process.

Data Limitations: Loadings data must be modeled rather than measured as there is inconsistent and poor data quality in the PCS data base with respect to flow and discharge monitoring, including missing data for minor facilities which has not been required to be entered. Neither monitoring nor flow data are required for certain categories of general permits. The Agency, therefore, is not able to measure actual loadings reductions for all of the approximately 550,000 facilities that fall under the NPDES program. As a result, loadings estimates are based upon models.

When the ICIS-NPDES Policy Statement is issued, the quality and quantity of Discharge Monitoring Report (DMR) data is expected to improve. This will enable development of improved methods for estimating and validating loading reductions.

Error Estimate: At this time we are unable to estimate error due to the lack of actual national level data to compare to estimates based on models.

New/Improved Data or Systems: EPA continues to evaluate and explore improved methods for calculating loadings reductions nation-wide from all sources.

References:

Clean Watershed Needs Survey 2000 [Electronic data base]. (2000). Washington, D.C. U.S. Environmental Protection Agency [Office of Wastewater Management].

Effluent guidelines development documents are available at:

<http://www.epa.gov/waterscience/guide>.

Modeling databases and software being used by the Office of Water are available at:

<http://www.epa.gov/water/soft.html>

SWP PART Efficiency Measure Spreadsheet [Excel Spreadsheet]. Washington, D.C. U.S. Environmental Protection Agency [Office of Wastewater Management].

Report to Congress: Impacts and Control of CSOs and SSOs, EPA 8330R-04-001, August 2004; available at

http://cfpub.epa.gov/npdes/cso/cpolicy_reort2004.cfm

Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment, USEPA, June 2000, EPA-832-R-00-008; available at: <http://www.epa.gov/OW-OWM.html/wquality/benefits.htm>

Report to Congress: National Pretreatment Program, EPA 1991; available at:

<http://www.epa.gov/npdes/pubs/owm0244.pdf>

FY 2008 Performance Measure:

- **Fund utilization rate for the CWSRF**
- **CWSRF Long-Term Revolving Level (\$billions/yr)**

Performance Database: Clean Water State Revolving Fund National Information Management System (NIMS.)

Data Sources: Data are from reporting by municipal and other facility operators, state regulatory agency personnel and by EPA's regional staff. Data are collected and reported once yearly.

Methods, Assumptions and Suitability: Data entered into NIMS are the units of performance. These data are suitable for year-to-year comparison and trend indication.

QA/QC Procedures: EPA's headquarters and regional offices are responsible for compiling the data and querying states as needed to assure data validity and conformance with expected trends. States receive data entry guidance from EPA headquarters in the form of annual memoranda. A generic memorandum would be titled: "Request for Annual Update of Data for the Clean Water State Revolving Fund National Information Management System, July 1, 200X through June 30, 200X."

Data Quality Reviews: EPA's headquarters and regional offices annually review the data submitted by the states. These state data are publicly available at <http://www.epa.gov/owm/cwfinance/cwsrf> in individual state reports. EPA's headquarters addresses significant data variability issues directly with states or through the appropriate EPA regional office. An annual EPA headquarters' "N IMS Analysis" provides detailed data categorization and comparison. This analysis is used during annual EPA regional office and state reviews to identify potential problems which might affect the performance measure, biennial reviews by EPA's headquarters of regional oversight of state revolving funds and, annual reviews by EPA's regional offices of their states' revolving funds operations.

State data quality is also evaluated during annual audits performed by independent auditors or by the appropriate regional office of the EPA Inspector General. These audits are incorporated into EPA headquarters' financial management system.

Data Limitations: There are no known limitations in the performance data, which states submit voluntarily. Erroneous data can be introduced into the NIMS database by typographic or definitional error. Typographic errors are controlled and corrected through data testing performed by EPA's contractor. Definitional errors due to varying interpretations of information requested for specific data fields have been virtually eliminated in the past two years as a result of EPA headquarters' clarification of definitions. These definitions are publicly available at: <http://www.epa.gov/owm/cwfinance/cwsrf>. There is typically a lag of approximately two months from the date EPA asks states to enter their data into the NIMS database, and when the data are quality-checked and available for public use.

Error Estimate: Due to the rapid growth of this program, past estimates of annual performance (relative to a target), compared to actual performance data received two years later, have been accurate to an average of approximately plus or minus 2 percentage points.

New/Improved Data or Systems: This system has been operative since 1996. It is updated annually, and data fields are changed or added as needed.

References:

State performance data as shown in NIMS are available by state at:

<http://www.epa.gov/owm/cwfinance/cwsrf>

Definitions of data requested for each data field in NIMS is available at:

<http://www.epa.gov/owm/cwfinance/cwsrf>

The Office of Water Quality Management Plan, July 2001 (approved September 28, 2001) addresses the quality of data in NIMS. Not publicly available.

FY 2008 Performance Measures:

- **Number of waterbodies restored or improved per million dollars of CWSRF assistance provided. (PART measure)**
- **Number of waterbodies protected per million dollars of CWSRF assistance provided. (PART measure)**

Performance Databases: Clean Water State Revolving Fund Benefits Reporting (CBR) Database

CBR contains state-by-state data on the environmental benefits achieved by each loan made by the 51 state CWSRFs. CBR is a new database and therefore does not contain data on all CWSRF loans since the inception of the program. CBR contains complete data on all loans made from capitalization grants received after January 1, 2005. Some states have chosen to report the environmental benefits of loans made from earlier capitalization grants. Data is entered into CBR by states on a rolling basis; however, states must enter all loans for a given fiscal year by the end of the state fiscal year. As of July 2006, the environmental benefits of \$9.5 billion in CWSRF assistance had been reported in the CBR.

CBR contains general information about each loan, including borrower, loan execution date, loan amount, repayment period and interest rate. Data on the environmental benefits of each loan include population served, wastewater volume, needs categories addressed, discharge information (i.e. ocean, surface water, groundwater, etc), permit type/number (if applicable), affected waterbody name and ID number, and affected waterbody status (impaired or meeting standards). CBR also collects information on whether each loan helps a system to achieve or maintain compliance, and whether it contributes to water quality improvement or maintenance. The designated uses of the waterbody are identified, as well as whether the loan contributes to protection or restoration of each designated use.

Data Sources: State regulatory agency personnel report and enter data into the CBR database on a rolling basis, based on state fiscal year.

Methods, Assumptions and Suitability: Data entered into CBR directly represent the units of performance for the performance measure. Data collected in the CBR database is suitable for calculating these performance and efficiency measures.

QA/QC Procedures: EPA regional offices are responsible for assuring state personnel enter all data by the end of the state fiscal year. States receive data entry guidance from EPA headquarters in the form of data definitions, available online at: <http://12.170.50.10/cwbenefits/login.aspx> by clicking on the “help” menu in the top right corner of the screen.

Data Quality Review: Quarterly checks of the data are performed by EPA’s contractor to ensure that states are entering data in a manner consistent with data definitions. Headquarters addresses significant data variability issues directly with states.

Data Limitations: Erroneous data can be introduced into the CBR database by typographic or definitional error. Typographic errors are controlled and corrected through data testing performed by EPA’s contractor. Definitional errors due to varying interpretations of information requested for specific data fields are minimized as a result of EPA headquarters’ clarification of definitions. Data is entered into the system on a rolling basis due to variations in state fiscal

years. This new database has been in operation for approximately one year. As a result, comprehensive data is not available for all states for years prior to 2005.

Error Estimate: As this is a new database, an error estimate is not available at this time.

New & Improved Data or Systems: This system has been operative since 2005. Data fields are changed or added as needed.

References:

Definitions of data requested for each data field in the CBR database is available at: <http://12.170.50.10/cwbenefits/login.aspx> by clicking on the “help” menu in the top right corner of the screen.

FY 2008 Performance Measures:

- **Percent of serviceable rural Alaska homes with access to drinking water supply and wastewater disposal. [PART annual measure]**
- **Number of homes that received improved service per \$1,000,000 of State and Federal funding. [PART efficiency measure]**

Performance Database: Sanitation Tracking and Reporting System (STARS), the Indian Health Service (IHS), Office of Environmental Health and Engineering (OEHE), Division of Sanitation Facilities Construction (DSFC). This database has been modified to include rural Alaska communities and Alaska Native Villages (ANVs).

Data Sources: The STARS includes data on sanitation deficiencies, Indian homes and construction projects. STARS is currently comprised of two sub-data systems, the Sanitation Deficiency System (SDS) and the Project Data System (PDS).

Methods, Assumptions and Sustainability: The SDS is an inventory of sanitation deficiencies for Indian and rural Alaska homes, ANVs and communities. It is updated annually. The identification of sanitation deficiencies can be made several ways, the most common of which follow:

- Consultation with Tribal members, community members and other Agencies
- Field visits by engineers, sanitarians, Community Health Representatives (CHRs) nurses, State of Alaska IHS or tribal health staff
- PWSS Sanitary Surveys
- Tribal Master Plans for Development
- Telephone Surveys
- Feasibility Studies

The most reliable and preferred method is a field visit to each community to identify and obtain accurate numbers of homes with sanitation deficiencies. The number of Indian homes within the communities must be consistent among the various methods cited above. If a field visit cannot be made, it is highly recommended that more than one method be used to determine sanitation deficiencies to increase the accuracy and establish greater credibility for the data.

The PDS is a listing of funded construction projects and is used as a management and reporting tool. The PDS supports the annual calculation of the program efficiency measure.

QA/QC Procedures: Quality assurance for the Indian country water quality performance measure depends on the quality of the data in the STARS. The STARS data undergo a series of quality control reviews at various levels within the IHS and the State of Alaska.

Data Quality Reviews: The SDS data undergo a series of highly organized reviews by experienced tribal, IHS field, IHS district, State of Alaska and IHS area personnel. The data quality review consists of performing a number of established data queries and reports, which identify errors and/or inconsistencies. In addition, the top SDS projects and corresponding community deficiency profiles for each area are reviewed against their budgets. Detailed cost estimates are required for the review.

Data Limitations: The data are limited by the accuracy of reported data in STARS.

Error Estimate: The higher-level projects (those with the possibility of funding prior to the next update) must be developed to allow for program implementation in an organized, effective and efficient manner. Those SDS projects (top 20%) must have cost estimates within 10% of the actual costs.

New/Improved Data or Systems: The STARS is a web-based application and therefore allows data to be continuously updated by personnel at various levels and modified as program requirements are identified. PDS has been modified to meet 40CFR31.40 reporting requirements. In 2007 the STARS application will be modified so that STARS' administrators can allow specific users to access their relevant portions of the STARS database.

References:

1. Indian Health Service (IHS), Division of Sanitation Facilities (DSFC). Criteria for the Sanitation Facilities Construction Program, June 1999, Version 1.02, 3/13/2003.
http://www.dsfc.ihs.gov/Documents/Criteria_March_2003.cfm
2. Indian Health Service (IHS), Division of Sanitation Facilities (DSFC). Sanitation Deficiency System (SDS), Working Draft, "Guide for Reporting Sanitation Deficiencies for Indian Homes and Communities", May 2003.
<http://www.dsfc.ihs.gov/Documents/SDSWorkingDraft2003.pdf>

FY 2008 Performance Measures:

- **National Coastal Condition Report (NCCR) score for overall aquatic ecosystem health of coastal waters nationally (1-5 scale)**

Performance Database: EMAP/NCA [Environmental Monitoring and Assessment Program/National Coastal Assessment] database (housed EPA/ORD/NHEERL/AED,

Narragansett, RI)(Environmental Protection Agency/Office of Research and Development/National Health and Environmental Effects Research Laboratory/Gulf Ecology Division); pre-database information housed in ORD/NHEERL facility in Gulf Breeze, FL (Gulf Ecology Division) (pre-database refers to a temporary storage site for data where they are examined for QA purposes, have appropriate metadata attached and undergo initial statistical analyses); data upon QA acceptance and metadata completion are transferred to EMAP/NCA database and are web available at www.epa.gov/emap/nca. The final data are then migrated to the STORET data warehouse for integration with other water quality data with metadata documenting its quality.

Data Source: Probabilistic surveys of ecological condition completed throughout the Mid-Atlantic and Gulf of Mexico by EPA's Office of Research and Development (ORD) in 1991-1994, in southern Florida in 1995, in the Southeast in 1995-1997, in the Mid-Atlantic in 1997-1998, in each coastal state in 2000-2004 (except Alaska and Hawaii), in Alaska in 2002 and 2004, in Hawaii in 2002 and 2004, and in Puerto Rico in 2000 and 2004, and in other island territories (Guam, American Samoa and U.S. Virgin Islands) in 2004. Surveys collect condition information regarding water quality, sediment quality and biotic condition at 70-100 sites/region (e.g., mid-Atlantic) each year of collection prior to 1999 and at 35-150 sites in each state or territory/year (site number dependent upon state) after 1999. Additional sampling by the National Estuary Program (NEP) included all individual national estuaries; the total number of sites within NEP boundaries was 30 for the two-year period 2000-2002.

These data are collected through a joint EPA-State cooperative agreement and the States follow a rigid sampling and collection protocol following intensive training by EPA personnel. Laboratory processing is completed at either a state laboratory or through a national EPA contract. Data collection follows a Quality Assurance Project Plan (QAPP) (either the National Coastal QAPP or a variant of it) and QA testing and auditing by EPA.

Methods, Assumptions and Suitability: The surveys are conducted using a probabilistic survey design which allows extrapolation of results to the target population (in this case - all estuarine resources of the specific state.) The collection design maximizes the spatial spread between sites, located by specific latitude-longitude combinations. The survey utilizes an indexed sampling period (generally late summer) to increase the probability of encountering water quality, sediment quality and biotic condition problems, if they exist. Based on the QAPP and field collection manual, a site in a specific state is located by sampling vessel via Global Positioning System (GPS) and water quality is measured on board at multiple depths. Water samples are taken for chemistry; sediment samples are taken for chemistry, toxicity testing and benthic community assessment; and fish trawls are conducted to collect community fish data and provide selected fish (target species) for analysis of whole body and/or fillet contaminant concentrations. Samples are stored in accordance with field manual instructions and shipped to the processing laboratory. Laboratories follow QA plans and complete analyses and provide electronic information to the state or EPA. EPA and the state exchange data to ensure that each has a complete set. EPA analyzes the data to assess regional conditions, whereas the states analyze the data to assess conditions of state-specific waters. Results of analyses on a national and regional basis are reported as chapters in the National Coastal Condition Report (NCCR) series. The overall regional condition index is the simple mean of the five indicators' scores

used in the Coastal Condition Report (in the NCCR2 a recalculation method was provided for direct comparison of the successive reports). An improvement for one of the indicators by a full category unit over the eight year period will be necessary for the regional estimate to meet the performance measurement goal (+0.2 over an eight year period).

Assumptions: (1) The underlying target population (estuarine resources of the United States) has been correctly identified; (2) GPS is successful; (3) QAPP and field collection manuals are followed; (4) all samples are successfully collected; (5) all analyses are completed in accordance with the QAPP; and (6) all combinations of data into indices are completed in a statistically rigorous manner.

Suitability: By design all data are suitable to be aggregated to the state and regional level to characterize water quality, sediment quality, and biotic condition. Samples represent “reasonable”, site-specific point-in-time data (not primary intention of data use) and an excellent representation of the entire resource (extrapolation to entire resource supportable). The intended use of the data is the characterization of populations and subpopulations of estuarine resources through time. The data meet this expectation and the sampling, response, analysis and reporting designs have been peer reviewed successfully multiple times. The data are suitable for individual calendar year characterization of condition, comparison of condition across years, and assessment of long-term trends once sufficient data are collected (7-10 years). Data are suitable for use in National Coastal Condition calculations for the United States and its regions to provide performance measurement information. The first long-term trends analysis will appear in the next NCCR (NCCRIII) representing trends between 1990-2002.

QA/QC Procedures: The sampling collection and analysis of samples are controlled by a Quality Assurance Project Plan (QAPP) [EPA 2001] and the National Coastal Assessment Information Management Plan (IMP)[EPA 2001]. These plans are followed by all twenty-three coastal states and 5 island territories. Adherence to the plans are determined by field training (conducted by EPA ORD), field audits (conducted by EPA/ORD), round robin testing of chemistry laboratories (conducted by EPA/ORD), overall systems audits of state programs and national laboratory practices (conducted by EPA), sample splits (sent to reference laboratories), blind samples (using reference materials) and overall information systems audits (conducted by EPA/ORD). Batch sample processing for laboratory analyses requires the inclusion of QA samples in each batch. All states are subject to audits at least once every two years. All participants received training in year 2000 and retraining sessions are scheduled every two years.

Data Quality Reviews: Data quality reviews have been completed in-house by EPA ORD at the regional and national level in 2000-2003 (National Coastal Assessment 2000-2003) and by the Office of Environmental Information (OEI) in 2003 (assessment completed in June, 2003 and written report not yet available; oral debriefing revealed no deficiencies). No deficiencies were found in the program. A national laboratory used in the program (University of Connecticut) for nutrient chemistry, sediment chemistry and fish tissue chemistry is being evaluated by the Inspector General's Office for potential falsification of laboratory results in connection with other programs not related to NCA. The NCA has conducted its own audit assessment and only one incorrect use of a chemical digestion method for inorganic chemistry samples (metals) was

found. This error was corrected and all samples "digested" incorrectly were reanalyzed at no cost.

Data Limitations: Data limitations are few. Because the data are collected in a manner to permit calculation of uncertainty and designed to meet a specific Data Quality Objective (DQO) (<10% error in spatial calculation for each annual state estimate), the results at the regional level (appropriate for this performance measure) are within about 2- 4% of true values dependent upon the specific sample type. Other limitations as follows: (a) Even though methodology errors are minimized by audits, in the first year of the NCA program (2000) some errors occurred resulting in loss of some data. These problems were corrected in 2001 and no problems have been observed since. (b) In some instances, (<5%) of sample results, QA investigation found irregularities regarding the precision of measurement (e.g., mortality toxicity testing of controls exceeded detection limit, etc.). In these cases, the data were "flagged" so that users are aware of the potential limitations. (c) Because of the sampling/ analysis design, the loss of data at a small scale (~ 10%) does not result in a significant increase in uncertainty in the estimate of condition. Wholesale data losses of multiple indicators throughout the U.S. coastal states and territories would be necessary to invalidate the performance measure. (d) The only major source of external variability is year-to-year climatic variation (drought vs. wet, major climatic event, etc.) and the only source of internal variation is modification of reporting indicators (e.g., new indices, not a change in data collected and analyzed). This internal reporting modification requires a re-analysis of earlier information to permit direct comparison. (e) There is generally a 2-3 year lag from the time of collection until reporting. Sample analysis generally takes one year and data analysis another. Add another year for report production and peer review. (f) Data collections are completed annually; The EPA/ORD data collection collaboration will continue through 2004. Beginning in 2005, ORD began assisting OW, as requested, with expert advice, but discontinued its financial support of the program.

Error Estimate: The estimate of condition (upon which the performance measure is determined) has an annual uncertainty rate of about 2-3% for national condition, about 5-7% for individual regional indicators (composite of all five states data into a regional estimate), and about 9-10% for individual state indicators. These condition estimates are determined from the survey data using cumulative distribution functions and the uncertainty estimates are calculated using the Horvitz-Thompson estimator.

New/Improved Data or Systems:

- (1) Changes have occurred in the data underlying the performance measure based on scientific review and development. A change in some reporting indicators has occurred in order to more accurately represent the intended ecological process or function. For example, a new eutrophication index was determined for the 2000 data. In order to compare this new index to the 1991-1994 data, the earlier data results must be recomputed using the new technique. This recalculation is possible because the underlying data collection procedures have not changed.
- (2) New national contract laboratories have been added every year based on competition. QA requirements are met by the new facilities and rigorous testing at these facilities is

completed before sample analysis is initiated. QA adherence and cross-laboratory sample analysis has minimized data variability resulting from new laboratories entering the program.

- (3) The only reason for the discontinuation of the National performance goal would be the elimination of the surveys after 2004 or any other year thereafter.

In order to continue to utilize the 2001 National Coastal Condition report as the baseline for this performance measure, the original scores reported in 2001 have been re-calculated in the 2004 report using the index modifications described above (#1). These “new” results for the baseline (re-calculated scores) are reported in Appendix C of the 2005 report.

References:

1. Environmental Monitoring and Assessment Database (1990-1998) and National Coastal Assessment Database (2000- 2004) websites: www.epa.gov/emap and www.epa.gov/emap/nca (NCA data for 2000 is only data available at present)
2. National Coastal Assessment. 2000-2003. Various internal memoranda regarding results of QA audits. (Available through John Macauley, National QA Coordinator NCA, USEPA, ORD/NHEERL/GED, 1 Sabine Island, Gulf Breeze, FL 32561)
3. National Coastal Assessment. 2001. Quality Assurance Project Plan. EPA/620/R-01/002.(Available through John Macauley above)
4. National Coastal Assessment. 2001. Information Management Plan. EPA/620/R-01/003 (Available through Stephen Hale, NCA IM Coordinator, ORD/NHEERL/AED, 27 Tarzwell Drive, Narragansett, RI)
5. U.S. Environmental Protection Agency. 2001. National Coastal Condition Report. EPA-620/R- 01/005.
6. U.S. Environmental Protection Agency. 2004. National Coastal Condition Report II. In review Assigned Report Number EPA-620/R-03/002.

FY 2008 Performance Measure:

- **Percent of active dredged material ocean dumping sites achieving environmentally acceptable conditions (as reflected in each site’s Site Management Plan)**

Performance Database: Data for this measure are entered into EPA’s Annual Commitment System (ACS) database by those EPA Regional offices (Regions) responsible for the management and oversight of dredged material ocean dumping sites. This performance measure, which is a target in the 2006-2011 Strategic Plan, will be tracked on an annual basis as a management tool for the ocean dumping program. The baseline year for the measure is 2005.

Data Source: EPA’s Regional offices are responsible for data collection and management. Under section 102 of the Marine Protection, Research, and Sanctuaries Act (MPRSA), EPA Regions may designate ocean sites for the disposal of dredged material. The Act requires that each site have a Site Management and Monitoring Plan (SMMP), which includes, but is not limited to, a baseline assessment of the conditions at the site, a program for monitoring the site,

and management practices at the site to protect the aquatic environment. Each SMMP is unique to the dump site and is developed in conjunction with all relevant stakeholders. The SMMP generally defines monitoring requirements, the conditions under which a site is deemed to be environmentally acceptable, and triggers for corrective action. Based on the requirements of each SMMP, the responsible Regions may conduct monitoring surveys of the dump sites to determine benthic impacts, spatial distribution of dredged material, characterize physical changes to the seafloor resulting from disposal, pH, turbidity, and other water quality indicators. Utilizing sampling results (as necessary), EPA Regions determine if a site is achieving environmentally acceptable conditions.

Methods, Assumptions and Suitability: As each SMMP defines the required monitoring and environmentally acceptable conditions for an ocean dumping site, any survey/sampling methodologies and assumptions will be site-specific. However, if a Region utilizes EPA's Ocean Survey Vessel (OSV) *Bold*, established procedures for use of the equipment and handling samples on the OSV *Bold* must be followed. In addition, for each survey the Region is required to submit to Headquarters a survey plan that presents types of sampling techniques, including equipment used, and how data are recorded. These data are highly suitable for tracking the performance of this measure, as they are collected for the specific purpose of determining the environmental conditions of the dredged material ocean dump sites. The periodicity of monitoring is determined by the SMMP, and is suitable for tracking this measure.

QA/QC Procedures: Regions must develop a Quality Assurance Project Plan (QAPP), as prescribed by their regional quality assurance procedures, when collecting data at an ocean dumping site. These QAPPs are also submitted to Headquarters when a Region utilizes the OSV *Bold* for a sampling survey. The QAPP outlines the procedures for collection methods, use of analytical equipment, analytical methods, quality control, and documentation and records.

Data Quality Reviews: Regions must conduct data quality reviews as determined by their quality assurance procedures and included in their QAPPs.

Data Limitations: It is still early to determine the full extent of data limitations.

Error Estimate: No error estimate is available for this data.

New/Improved Data or Systems: This is a new program activity measure for FY 2007; therefore, any improvements to the collection and/or evaluation of data to support the measure will be determined following the initial tracking performance.

References: The Annual Commitment System is an internal EPA database that is a component of the Agency's Budget Automation System (BAS). EPA's Oceans and Coastal Protection Division has prepared a template for the Regions to use when preparing survey plans. QAPPs for those Regions responsible for ocean dumping sites may be found at the following internet sites:

EPA Region 1 - <http://www.epa.gov/ne/lab/qa/pdfs/QAPPPProgram.pdf>

EPA Region 2 - <http://www.epa.gov/region2/qa/documents.htm#qag>

EPA Region 3 - http://www.epa.gov/region3/esc/QA/docs_qapp.htm

EPA Region 4 - <http://www.epa.gov/region4/sesd/oqa/r4qmp.html>

EPA Region 6 - <http://www.epa.gov/earth1r6/6pd/qa/qatools.htm>

EPA Region 9 - http://www.epa.gov/region9/qa/pdfs/qaprp_guidance3.pdf

EPA Region 10 - <http://www.epa.gov/quality/qs-docs/g5-final.pdf>

GOAL 2 OBJECTIVE 3

FY 2008 Performance Measures:

- **Percentage of planned outputs delivered in support of Six Year Review decisions (PART Measure)**
- **Percentage of planned outputs delivered in support of Contaminated Candidate List decisions (PART Measure)**
- **Percentage of planned outputs (in support of WQRP long-term goal #1) delivered on time (PART Measure)**
- **Percentage of planned outputs (in support of WQRP long-term goal #2) delivered on time (PART Measure)**
- **Percentage of planned outputs (in support of WQRP long-term goal #3) delivered on time (PART Measure)**

Performance Database: Integrated Resources Management System (internal database)

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: To provide an indication of progress towards achievement of a program's long-term goals, each program annually develops a list of key research outputs scheduled for completion by the end of each fiscal year. This list is finalized by the start of the fiscal year, and no changes are made after this point. The program then tracks quarterly the progress towards completion of these key outputs against pre-determined schedules and milestones. The final score is the percent of key outputs from the original list that are successfully completed on-time.

QA/QC Procedures: Procedures are now in place to require that all annual milestones and outputs be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research milestones and outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Drinking Water Multi-Year Plan, available at: <http://epa.gov/osp/mydp/dw.pdf> (last accessed January 3, 2007).

Water Quality Multi-Year Plan, available at: <http://epa.gov/osp/mydp/wq.pdf> (last accessed January 3, 2007).

FY 2008 Performance Measure:

- **Peer-reviewed publications over FTE (Efficiency Measure)**

Performance Database: No internal tracking system.

Data Source: Data are derived from a self-produced list of program publications and financial records for FTE employees.

Methods, Assumptions and Suitability: The universe of peer-reviewed publications includes 1) journal articles, 2) books and book chapters, and 3) EPA reports, where at least one EPA author is listed or where the publication is the result of an EPA grant. If a publication includes more than one EPA author, that publication is counted only once. Materials submitted for publication but not yet published are not included. FTE are actual program full time equivalents.

QA/QC Procedures: N/A

Data Quality Reviews: All publications included in the data are peer reviewed according to EPA's Peer Review Handbook (3rd Edition).

Data Limitations: FTE data do not include extramurally-funded contributors. Additionally, data do not capture the quality or impact of the research publications. However, long-term performance measures and independent program reviews are used to measure research quality and impact.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: EPA's Peer Review Handbook, available at: <http://www.epa.gov/peerreview/pdfs/Peer%20Review%20HandbookMay06.pdf> (last accessed on January 3, 2007)

GOAL 3 OBJECTIVE 1

FY 2008 Performance Measures:

- **Daily per capita generation of municipal solid waste [PART performance]**
- **Millions of tons municipal solid waste diverted [PART performance]**

Performance Database: Data are provided by the Department of Commerce. EPA does not maintain a database for this information.

Data Source: The baseline numbers for municipal solid waste (MSW) source reduction and recycling are developed using a materials flow methodology employing data largely from the Department of Commerce and described in the EPA report titled "Characterization of Municipal Solid Waste in the United States." The Department of Commerce collects materials production and consumption data from various industries.

Methods, Assumptions and Suitability: Data on domestic production of materials and products are compiled using published data series. U.S. Department of Commerce sources are used, where available; but in several instances more detailed information on production of goods by end-use is available from trade associations. The goal is to obtain a consistent historical data series for each product and/or material. Data on average product lifetimes are used to adjust the data series. These estimates and calculations result in material-by-material and product-by-product estimates of MSW generation, recovery, and discards. To strategically support attainment of the 35% recycling goal, EPA has identified specific components of the MSW stream on which to focus: paper and paperboard, organics (yard and food waste), and packaging and containers. For these targeted efforts EPA will examine data on these waste components.

There are various assumptions factored into the analysis to develop estimates of MSW generation, recovery and discards. Example assumptions (from pages 141-142 of year 2000 "Characterization Report") include: Textiles used as rags are assumed to enter the waste stream the same year the textiles are discarded. Some products (e.g., newspapers and packaging) normally have short lifetimes and products are assumed to be discarded in the year they are produced.

QA/QC Procedures: Quality assurance and quality control are provided by the Department of Commerce's internal procedures and systems. The report prepared by the Agency, "Characterization of Municipal Solid Waste in the United States," is reviewed by a number of experts for accuracy and soundness.

Data Quality Review: The report, including the baseline numbers and annual rates of recycling and per capita municipal solid waste generation, is widely accepted among experts.

Data Limitations: Data limitations stem from the fact that the baseline statistics and annual rates of recycling and per capita municipal solid waste generation are based on a series of models, assumptions, and extrapolations and, as such, are not an empirical accounting of municipal solid waste generated or recycled.

Error Estimate: N/A. Currently, the Office of Solid Waste (OSW) does not collect data on estimated error rates.

New/Improved Data or Systems: Because the statistics on MSW generation and recycling are widely reported and accepted by experts, no new efforts to improve the data or the methodology have been identified or are necessary.

References: *Municipal Solid Waste in the United States: 2003 Facts and Figures*, EPA, April 2005 (EPA530-F-05-003), <http://www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm>

FY 2008 Performance Measures:

- **Percent of RCRA hazardous waste management facilities with permits or other approved controls in place [PART performance]**
- **Update controls for preventing releases at facilities that are due for permit renewals [PART performance]**

Performance Database: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database which supports EPA's RCRA program.

Data Source: Data are entered by the states. Supporting documentation and reference materials are maintained in Regional and state files. EPA's Regional offices and authorized states enter data on a rolling basis.

Methods, Assumptions and Suitability: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database which supports EPA's RCRA program. RCRAInfo contains information on entities (generically referred to as "handlers") engaged in hazardous waste generation and management activities regulated under the portion of RCRA that provides for regulation of hazardous waste. RCRAInfo has several different modules, including status of RCRA facilities in the RCRA permitting universe.

QA/QC Procedures: States and EPA's Regional offices generate the data and manage data quality related to timeliness and accuracy. Within RCRAInfo, the application software contains structural controls that promote the correct entry of the high-priority national components. RCRAInfo documentation, which is available to all users on-line at <http://www.epa.gov/rcrainfo/>, provides guidance to facilitate the generation and interpretation of data. Training on use of RCRAInfo is provided on a regular basis, usually annually, depending on the nature of system changes and user needs. Even with the increasing emphasis on data quality, with roughly 10,000 units in the baseline (e.g., a facility can have more than one unit), we hear of data problems with some facilities every year, particularly with the older inactive

facilities. When we hear of these issues, we work with the EPA Regional offices to see that they get resolved. It may be necessary to make a few adjustments to the permitting baseline as data issues are identified. Determination of whether or not the GPRA annual goal #1 (listed above) is met is based on the legal and operating status codes for each unit. Each year since 1999, in discussions with Regional offices and states, EPA has highlighted the need to keep the data that support the GPRA permitting goal current. RCRAInfo is the sole repository for this information and is a focal point for planning from the local to national level. Accomplishment of goal # 2 (listed above) is based on the permit expiration date code. This is a new code for the new goal and we have made changes to the database to make this code a high priority code. We have discussed the need for correct entry with the Regions. Since tracking this information is new, we anticipate that we will have to work out some reporting bugs, review the accuracy of tracking when it begins in October 1, 2005, and make adjustments if necessary.

Note: Access to RCRAInfo is open only to EPA Headquarters, Regional, and authorized state personnel. It is not available to the general public because the system contains enforcement sensitive data. The general public is referred to EPA's Envirofacts Data Warehouse to obtain filtered information on RCRA-regulated hazardous waste sites.

Data Quality Review: The 1995 GAO report *Hazardous Waste: Benefits of EPA's Information System Are Limited* (AIMD-95-167, August 22, 1995, <http://www.gao.gov/archive/1995/ai95167.pdf>) on EPA's Hazardous Waste Information System reviewed whether national RCRA information systems support EPA and the states in managing their hazardous waste programs. Recommendations coincide with ongoing internal efforts to improve the definitions of data collected, ensure that data collected provide critical information and minimize the burden on states. RCRAInfo, the current national database has evolved in part as a response to this report.

Data Limitations: The authorized states have ownership of their data and EPA has to rely on them to make changes. The data that determine if a facility has met its permit requirements are prioritized in update efforts. Basic site identification data may become out-of-date because RCRA does not mandate annual or other periodic notification by the regulated entity when site name, ownership and contact information changes. Nevertheless, EPA tracks the facilities by their IDs and those should not change even during ownership changes. The baselines are composed of facilities that can have multiple units. These units may consolidate, split or undergo other activities that cause the number of units to change. We aim to have static baselines, but there may be occasions where we would need to make minor baseline modifications. The baseline of facilities that are currently tracked for goal #2 are "due for permit renewals," but we anticipate that there will be some facilities that cease to be "due for permit renewals" due to a change in facility status.

Error Estimate: N/A. Currently OSW does not collect data on estimated error rates.

New/Improved Data or Systems: EPA has successfully implemented new tools in RCRAInfo for managing environmental information to support Federal and state programs, particularly for permit renewals. RCRAInfo allows for tracking of information on the regulated universe of RCRA hazardous waste handlers, such as facility status, regulated activities, and compliance

history. The system also captures detailed data on the generation of hazardous waste by large quantity generators and on waste management practices from treatment, storage, and disposal facilities. RCRAInfo is web accessible, providing a convenient user interface for Federal, state and local managers, encouraging development of in-house expertise for controlled cost, and using commercial off-the-shelf software to develop reports from database tables.

References: RCRAInfo documentation and data (<http://www.epa.gov/rcrainfo/>). The 1995 GAO report *Hazardous Waste: Benefits of EPA's Information System Are Limited* (AIMD-95-167, August 22, 1995, <http://www.gao.gov/archive/1995/ai95167.pdf>).

per capita municipal solid waste generation are based on a series of models, assumptions, and extrapolations and, as such, are not an empirical accounting of municipal solid waste generated or recycled.

FY 2008 Performance Measures:

- **No more than 10,000 confirmed releases per year**
- **Increase the rate of significant operational compliance by 1% over the previous year's rate (target)**

Performance Database: The Office of Underground Storage Tanks (OUST) does not maintain a national database. States individually maintain records for reporting state program accomplishments.

Data Source: Designated State agencies submit semi-annual progress reports to the EPA regional offices.

Methods, Assumptions and Suitability: N/A

QA/QC Procedures: EPA's regional offices verify and then forward the data in an Excel spreadsheet to OUST. OUST staff examine the data and resolve any discrepancies with the regional offices. The data are displayed in an Excel spreadsheet on a region-by-region basis, which is a way regional staff can check their data.

Data Quality Review: None.

Data Limitations: Percentages reported are sometimes based on estimates and extrapolations from sample data. Data quality depends on the accuracy and completeness of state records.

Error Estimate: N/A

New/Improved Data or Systems: None.

References: FY 2006 Mid-Year Activity Report, June 20, 2006 (updated semiannually);

FY 2006 End-of-Year Activity Report, from Cliff Rothenstein, Director, Office of Underground Storage Tanks to UST/LUST Regional Division Directors, Regions 1-10, dated November 14, 2006, http://www.epa.gov/swrust1/cat/ca_06_34.pdf

FY 2008 Performance Measure:

- **Percentage of Construction and Demolition debris that is reused or recycled**

Performance Database: EPA does not maintain a database for this information.

Data Sources: The baseline numbers for construction and demolition (C&D) debris generation and recycling in the United States rely on data from two recent draft EPA studies characterizing generation and management of building-related and road-related C&D debris: (1) “Characterization of Building-Related Construction and Demolition Debris in the United States,” and (2) “Characterization of Road and Bridge-Related Construction and Demolition Debris in the United States.” The building-related report is an update of EPA’s 1998 report by the same name. It includes additional sampling data published after 1998 to strengthen the source category database. The purpose of the reports is to characterize the various components of the C&D waste stream and estimate the total amount of debris generated and recycled nationally. It is important to note that the data and information provided in these reports are preliminary and are currently undergoing review.

Methods, Assumptions and Suitability: *Building-Related C&D:* The methodology used to estimate the amount of building-related C&D debris generated nationally combines national Census Bureau data on construction industry activities (e.g., construction permits and the value of new private and public residential construction from the Department of Commerce Current Construction Reports) with point source waste assessment data (i.e., waste sampling and weighing at a variety of construction and demolition sites). Recycling estimates are based on data from national industry surveys and local communities.

Road- and Bridge-Related C&D: A model is used to estimate the amount of road-related C&D generation. The model is a series of steps applied to road statistics published by the Federal Highway Administration to determine, in 12-foot lane widths, the number of lane-miles in the U.S. This area measurement is then combined with assumptions on pavement type, maintenance time frames, reconstruction and resurfacing depths, and weight factors to estimate road C&D generation on a tons per year basis. Assumptions pertaining to asphalt and cement concrete debris generation include: “Asphalt roads are reconstructed on the average every 30 years,” and “the cement concrete layer on reconstructed roads averages eight inches.” Recycling estimates are based on limited data obtained from state highway departments as well as industry surveys.

To support attainment of the 65% C&D recycling goal, EPA is currently developing program objectives and strategic tasks focused on increasing the recycling rate of five materials that comprise the majority of the C&D waste stream: concrete pavement, asphalt pavement, gypsum wallboard, wood, and asphalt shingles.

QA/QC Procedures: Quality Assurance and Quality Control are provided by internal procedures and systems of the Department of Commerce and the Federal Highway Administration, the sources of data on which the EPA reports are based. The reports prepared by the Agency are reviewed by industry experts for accuracy and soundness.

Data Quality Review: The 1998 edition of the building-related report underwent extensive review. Due to the general acceptance of this methodology and data sources by the reviewers, the 2005 report follows the original study to the extent possible. However, comments received on the latest revision raised concerns about the validity of the data and repeatability of the methodology. EPA is interacting with reviewers to address their concerns.

Data Limitations: The limited point source waste assessment data used in the building-related C&D analysis is a source of uncertainty. Additional limitations stem from the fact that in both studies, the baseline statistics and annual rates of C&D debris generation and recycling are based on a series of assumptions and extrapolations and, as such, are not an empirical accounting of national C&D debris generated or recycled.

Error Estimate: N/A. Currently, the Office of Solid Waste does not collect data on estimated error rates.

New/Improved Data or Systems: The need for further efforts to improve the data and the methodology has been expressed by peer reviewers. The agency is undertaking action to secure additional sources of information to bolster the data and fill identified data gaps, including trade associations from specific industry sectors and additional governmental entities.

References: *Characterization of Building-Related Construction and Demolition Debris in the United States*, EPA, June 1998 (EPA530-R-98-010), <http://www.epa.gov/epaoswer/hazwaste/sqg/c&d-rpt.pdf>

Characterization of Building-Related Construction and Demolition Debris in the United States, Franklin Associates, draft dated December 2005.

Characterization of Road and Bridge-Related Construction and Demolition Debris in the United States, EPA, draft dated December 2005.

FY 2008 Performance Measure:

- **Percentage of coal combustion product ash that is used rather than disposed**

Performance Database: Data to support this measure are provided by the Department of Energy and American Coal Ash Association (ACAA). EPA collects data on generation of materials (Toxic Release Inventory), but it does not maintain a database for utilization.

Data Source: The baseline numbers for coal combustion product (CCP) generation are tracked by the DOE Energy Information Agency. Limited beneficial use numbers are reported on EIA Form 767 (which is planned to be discontinued in 2007) and through TRI reporting. The ACAA conducts a voluntary survey on coal ash generation and recycling practices of its membership, which comprises approximately 35% of the electricity generating capacity of the United States. The ACAA survey information is compared to the other sources of utilization data, including data from EIA, the Portland Cement Association and other publicly available trade association data.

Methods, Assumptions and Suitability: The CCP recycling rate is defined as the tonnage of coal ash recycled divided by the tonnage of coal ash generated nationally by coal-fired electric

utilities. Data on domestic production of materials and products are compiled using published data series. U.S. Department of Energy sources are used, where available; but for specific utilization data more detailed information on the production of CCPs is available from trade associations. The goal is to obtain a consistent historical data series for products and materials. Data on average production as compared to utilization may provide estimates as to the effectiveness of beneficial use outreach.

QA/QC Procedures: Quality assurance and quality control for production numbers reported on EIA 767 are provided by the Department of Energy's internal procedures and systems. Data on utilization are reviewed by CCP industry experts for accuracy.

Data Quality Review: The reporting of utilization data is voluntary and requires extrapolation and integration with several sources of data. TRI data does not track end-use and does not require reporting of materials by their utilization

Data Limitations: Data limitations stem from the fact that the baseline statistics and annual rates of utilization are collected from different sources and are not mandated by statute or regulation. New data sources may be compared to historic data to determine if trends are reasonable and expected.

Error Estimate: N/A. Currently, the Office of Solid Waste (OSW) does not collect data on estimated error rates.

New/Improved Data or Systems: Because the survey on production data conducted by EIA is going to be discontinued effective 2007, other measurement techniques will be required to accurately track production and utilization.

References: The American Coal Ash Annual Survey is located at <http://www.aaaa-usa.org/>.

FY 2008 Performance Measure:

- **Tons of MSW recycled over total net costs of recovery [PART efficiency-under development]**

Performance Database: Data are provided by the Department of Commerce and Waste News Survey. EPA does not maintain a database for this information.

Data Source: The baseline numbers for municipal solid waste (MSW) recycling are developed using a materials flow methodology employing data largely from the Department of Commerce and described in the EPA report titled "Characterization of Municipal Solid Waste in the United States." The Department of Commerce collects materials production and consumption data from various industries.

In addition, data on the costs of MSW recycling are reported in the Waste News "Municipal Recycling Survey." The data is based on an annual survey of 30 most populous cities and reports budgets for MSW recycling and disposal, not actual expenditures. Waste News provides the

only study of recycling and disposal costs that is annually updated and includes a range of cities (based on largest cities by population). The costs also reflect a range of recycling programs (i.e., curbside, drop-off, etc.). The cost data will be supplemented by a survey of up to nine cities for disposal and recycling cost information.

Methods, Assumptions and Suitability: Data on domestic production of materials and products are compiled using published data series. U.S. Department of Commerce sources are used, where available; but in several instances more detailed information on production of goods by end-use is available from trade associations. The goal is to obtain a consistent historical data series for each product and/or material. Data on average product lifetimes are used to adjust the data series. These estimates and calculations result in material-by-material and product-by-product estimates of MSW generation, recovery, and discards.

The total *net* cost of MSW recycling is calculated by multiplying the net cost of recycling per ton by the total tons of MSW recycled in a given year. The net cost of recycling per ton is estimated by subtracting the total cost per ton for solid waste disposal from the total cost per ton for recycling, based on the Waste News survey. Several sources, including Waste News, indicate that the cost of recycling is *less* expensive than solid waste disposal. Therefore, net costs reflect cost savings associated with recycling. Other sources, such as EPA's *Cutting the Waste Stream in Half: Community Record Setter Show How* (EPA-530-R-99-013), EPA's *Evaluation of Diversion and Costs for Selected Drop-Off Recycling Programs* (EPA-600-R-95-109), and Carnegie Mellon University's *Evaluating the Environmental Effectiveness of Recycling in Pittsburgh* all show similar results.

Recycling costs per ton are based on the median cost per ton reported in the Waste News Survey. The survey reports the total tonnage recycled and the total recycling budget for each city. Therefore, to estimate the unit recycling costs, the total recycling budget for each city is divided by the total tons recycled for each city.

Total disposal costs per ton are based on the median cost per ton as reported in the Waste News survey. The disposal cost per ton for each city is estimated by dividing the total disposal cost by the total tonnage of solid waste disposed. The disposal costs are obtained by subtracting the total MSW budget from the recycling budget. The total tonnage of solid waste disposed by each city is estimated by subtracting the recycling tonnage from the quotient of recycling tonnage divided by recycling rate.

There are various assumptions factored into the analysis to develop estimates of MSW generation, recovery and discards. Example assumptions (from pages 141-142 of year 2000 "Characterization Report") include: Textiles used as rags are assumed to enter the waste stream the same year the textiles are discarded. Some products (e.g., newspapers and packaging) normally have short lifetimes and products are assumed to be discarded in the year they are produced.

In addition, Waste News reports municipal budget data, not realized costs. Ideally, realized costs would be used for the performance measure. Furthermore, Waste News' method of selecting cities, based on largest total population, means that the sample changes from year to year in a

non-random pattern. For example, growing cities which enter the top 30 will be added to the survey, while those dropping off the top 30 list will be removed from the survey. The frequency of these changes depends on how often the U.S. Census updates city population figures and rates of change in these cities. Accordingly, a survey of up to nine cities for recycling and disposal cost data will be useful in supplementing the Waste News data.

QA/QC Procedures: Quality assurance and quality control are provided by the Department of Commerce's internal procedures and systems. The report prepared by the Agency, "Characterization of Municipal Solid Waste in the United States," is reviewed by a number of experts for accuracy and soundness. In addition, Waste News is a widely recognized source for MSW recycling and disposal costs for the 30 most populous cities. The survey of up to nine additional cities for recycling and disposal cost data will also help to provide support for the Waste News data or highlight potential limitations.

Data Quality Review: The report, including the baseline numbers and annual rates of recycling and per capita municipal solid waste generation, is widely accepted among experts. Waste News is also widely recognized among the MSW industry.

Data Limitations: Data limitations stem from the fact that the baseline statistics and annual rates of recycling and per capita municipal solid waste generation are based on a series of models, assumptions, and extrapolations and, as such, are not an empirical accounting of municipal solid waste generated or recycled.

In addition, Waste News reports municipal budget data, not realized costs. Ideally, realized costs would be used for the performance measure. Furthermore, Waste News' method of selecting cities, based on largest total population, means that the sample changes from year to year in a non-random pattern. For example, growing cities which enter the top 30 will be added to the survey, while those dropping off the top 30 list will be removed from the survey. The frequency of these changes depends on how often the U.S. Census updates city population figures and rates of change in these cities. Accordingly, a survey of up to nine cities for recycling and disposal cost data will be useful in supplementing the Waste News data.

Error Estimate: N/A. Currently, the Office of Solid Waste (OSW) does not collect data on estimated error rates.

New/Improved Data or Systems: Because the statistics on MSW generation and recycling are widely reported and accepted by experts, no new efforts to improve the data or the methodology have been identified or are necessary.

References:

Municipal Solid Waste in the United States: 2003 Facts and Figures, EPA, April 2005 (EPA530-F-05-003), <http://www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm>.

Waste News, "Municipal Recycling Survey," (available annually).

Cutting the Waste Stream in Half: Community Record-Setters Show How, EPA-530-R-99-013

June 1999.

Evaluation of Diversion and Costs for Select Drop-Off Recycling Programs, EPA-600-R-95-109, June 1995.

Evaluating the Environmental Effectiveness of Recycling in Pittsburgh, Carnegie Mellon University, May 2002.

FY 2008 Performance Measure:

- **Facilities under control per dollar of program cost (program cost=permit Costs + base Program Appropriations) [PART efficiency-under development]**

Database: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database which supports EPA's RCRA program and provides information on facilities under control.

Costs by the permittee are estimated through the annual cost estimates contained in the Information Collection Requests (ICR) supporting statements relevant to the RCRA Base Program. ICRs are contained in the Federal Docket Management System. Base program appropriation information is maintained in the Budget Automation System (BAS).

Data Source: The Office of Solid Waste develops ICRs and ensures they have active ICRs approved by the OMB for all of their RCRA permitting and base program information collection activities. The Budget Automation System (BAS) automates EPA's budget processes, including planning, budgeting, execution, and reporting. Budget data is entered at a general level by offices and regions or by the Office of the Chief Financial Officer (OCFO).

Methods, Assumptions and Suitability:

Numerator – Facilities under control is an outcome based measure as permits or similar mechanisms are not issued until facilities have met standards or permit conditions that are based on human health or environmental standards. Under the corresponding performance measure, 95% of facilities are to be under control by 2008.

Denominator – The denominator is the sum of two costs. The first is permitting costs based on Information Collection Requests for the base RCRA program. The costs will take into account recent rulemakings, including the Burden Reduction Rulemaking (published April 2006), which will impact program expenditures. The costs will also take into account one time costs associated with first year implementation.

The second program cost in the denominator is the input of a three year rolling average appropriation for Environmental Programs and Management (EPM) and State Tribal and Grant (STAG) program. Corrective action programs costs will not be included but will be addressed in a separate efficiency measure. A rolling average of appropriations is more appropriate since

some of the facility controls depend upon past resources. Issuance time for a permit, for example, can exceed one year with public hearings and appeals. The cumulative number of facilities with controls in place is appropriate (rather than a single year's increment) because the appropriations are used to maintain facilities that already have controls in place (e.g. inspections and permit renewals) as well as to extend the number of facilities with controls.

QA/QC Procedures: QA/QC of the ICR costs is based on internal and external review of the data. BAS data undergoes quality assurance and data quality review through the Chief Financial Officer.

Data Quality Review: None.

Data Limitations: The data sources for the program costs identified in the denominator of the measure include all of the RCRA base program appropriations (e.g. RCRA Subtitle D program implementation) and not just costs for permitting. Accordingly, the measure cannot be compared with other similar government programs. After the 2008 facilities under control goal is attained, EPA will recalculate the efficiency measure taking into account the new long-term 2011 goal which includes both new permits and permit renewals.

Error Estimate: N/A. Currently OSW does not collect data on estimated error rates.

New/Improved Data or Systems: As the measure is short term and likely to be applied only for the next two years, no new efforts to improve the data or methodology have been identified.

References: Federal Document Management System www.regulations.gov; Budget Automation Management System

FY 2008 Performance Measures:

- **Number of tribes covered by an adequate and recently-approved integrated solid waste management plan**
- **Number of closed, cleaned-up or upgraded open dumps in Indian Country and on other Tribal lands**

Performance Database: The Indian Health Service, in partnership with EPA's regional offices and the Office of Solid Waste, reports the annual data to support these measures.

Data Source: OSW and the Indian Health Service are co-sponsors of the Tribal Solid Waste Interagency Workgroup. The formation of this workgroup resulted from the 1998 *Report to Congress* on open dumps on Indian Lands. The Indian Health Service was tasked to identify the high threat sites in need of upgrade or closure, and report the information to the WSTARS Database. The member tribal data are extrapolated to generate a national statistic.

Methods, Assumptions and Suitability: The Tribal Solid Waste Interagency Workgroup's Tribal Solid Waste Management Assistance Project is a national program that began in 1999 to

increase the number of tribes covered by an adequate and recently-approved integrated waste management plan, and to close, clean -up, or upgrade open dumps in Indian country and on other tribal lands.

The latest EPA and IHS annual data show that an annual, incremental rate will allow the tribes to reach the goals established by 2011.

QA/QC Procedures: The IHS WSTARS data are reported voluntarily by federally recognized tribal members. Quality assurance and quality control are provided by internal procedures of the IHS WSTARS reporting process.

Data Quality Review: The data are reviewed by the EPA and IHS for data quality. The data are considered to be accurate on a national scale.

Data Limitations: The WSTARS contains data pertaining to the open dumps and solid waste management plans of the federal recognized tribal members. The WSTARS membership comprises all of the 562 federally recognized tribes of the United States. Because the data may be limited in certain regions of the country, extrapolations to a national statistic may be inaccurate.

Error Estimate: N/A. Currently, the Office of Solid Waste (OSW) does not collect data on estimated error rates.

New/Improved Data or Systems: No new efforts to gather different or additional data are contemplated at this time.

References: The IHS, WSTARS data are available from the HIS website at www.ihs.gov.

GOAL 3 OBJECTIVE 2

FY 2008 Performance Measures:

- **Number of inspections and exercises conducted at oil storage facilities required to have Facility Response Plans**
- **Gallons of oil spilled to navigable waters per million program dollars spent annually on prevention and preparedness at FRP facilities [PART efficiency]**
- **Percentage of inspected facilities subject to SPCC regulations found to be in compliance. [PART performance]**
- **Percentage of inspected facilities subject to FRP regulations found to be in compliance. [PART performance]**

Performance Database: The EPA Annual Commitment System (ACS) in BAS is the database for the number of inspections/exercises at SPCC and FRP facilities. Using data submitted directly by Regional staff as well as data in ACS, Office of Emergency Management (OEM) tracks in a spreadsheet national information about Regional activities at FRP facilities. Data

about gallons of oil spilled are maintained in a National Response Center (NRC) database that reflects information reported to the NRC by those responsible for individual oil spills.

Data Source: Data concerning inspections/exercises at FRP and SPCC facilities are provided by Regional staff. Data concerning gallons of oil spilled to navigable waters are gathered from the publicly available National Response Center database. Data about program expenditures are provided by EPA HQ and Regional staff.

Methods, Assumptions and Suitability: The spill/exercise data are entered by Regional staff experienced in data entry. In every case, direct data (rather than surrogates open to interpretation) are entered.

QA/QC Procedures: Data are regularly compared to similar data from the past to identify potential errors.

Data Quality Reviews: EPA regularly reviews recent data, comparing them to data gathered in the past at similar times of year and in the same Regions. Any questionable data are verified by direct contact with the Regional staff responsible for providing the data.

Data Limitations: The NRC data will reflect the extent to which those responsible for oil spills accurately report them to the NRC.

Error Estimate: Data reported by the Regions should be relatively free of error. There may be some error in the NRC data, due to the fact that some spills might not be reported and/or some spills might be reported by more than one person. NRC and EPA procedures should identify multiple reports of the same spill, but it is not usually possible to identify an unreported spill.

New/Improved Data or Systems: There are no current plans to develop a dedicated system, to manage the various data.

References: For additional information on the Oil program, see www.epa.gov/oilspill

FY 2008 Performance Measure:

- **Average state of emergency response readiness as determined by readiness criteria**

Performance Database: No specific database has been developed. Data from evaluations from each of the 10 Regions are tabulated and stored using standard software (WordPerfect, spreadsheets, etc.).

Data Source: Data are collected through detailed surveys of all Regional programs, and interviews with personnel and managers in each program office. The score represents a composite based upon data from each unique Regional and headquarters organization. Annual increments represent annual improvements. The survey instrument was developed based upon Core Emergency Response (ER) elements, and has been approved by EPA Headquarters and Regional managers. Core ER elements cover all aspects of the Core ER program, including

Regional Response Centers, transportation, coordination with backup Regions, health and safety, delegation and warrant authorities, response readiness, response equipment, identification clothing, training and exercises, and outreach.

While EPA is currently prepared to respond to chemical, biological, and radiological incidents, improvement in the emergency response and homeland security readiness measure will demonstrate an increased ability to respond quickly and effectively to national-scale events. The FY 2008 Core ER target is to improve emergency response and homeland security readiness by 10 points from the FY 2007 baseline performance.

Methods, Assumptions and Suitability: The Core ER elements were developed over the last several years by the EPA Removal Program to identify and clarify what is needed to ensure an excellent emergency response program. The elements, definitions, and rationales were developed by staff and managers and have been presented to the Administrator and other high level Agency managers. Based on the Core ER standards, evaluation forms and criteria were established for EPA's Regional programs, the Environmental Response Team (ERT), and Headquarters. These evaluation criteria identify what data need to be collected, and how that data translate into an appropriate score for each Core ER element. The elements and evaluation criteria will be reviewed each year for relevance to ensure that the programs have the highest standards of excellence and that the measurement clearly reflects the level of readiness. The data are collected from each Regional office, ERT, and Headquarters using a systematic, objective process. Each evaluation team consists of managers and staff, from Headquarters and possibly from another EPA Regional office, with some portion of the team involved in all reviews for consistency and some portion varying to ensure independence and objectivity. For instance, a team evaluating Region A might include some or all of the following: a staff person from Headquarters who is participating in all reviews, a staff person from Headquarters who is very familiar with Region A activities, a manager from Headquarters, and a staff person and/or manager from Region B. One staff or group will be responsible for gathering and analyzing all the data to determine the overall score for each Regional office, ERT, and Headquarters, and for determining an overall National score.

QA/QC Procedures: See "Methods, Assumptions and Suitability".

Data Quality Review: The evaluation team will review the data (see Methods, Assumptions and Suitability) during the data collection and analysis process. Additional data review will be conducted after the data have been analyzed to ensure that the scores are consistent with the data and program information. There currently is no specific database that has been developed to collect, store, and manage the data.

Data Limitations: One key limitation of the data is the lack of a dedicated database system to collect and manage the data. Standard software packages (word processing, spreadsheets) are used to develop the evaluation criteria, collect the data, and develop the accompanying readiness scores. There is also the possibility of subjective interpretation of data.

Error Estimate: It is likely that the error estimate for this measure will be small for the following reasons: the standards and evaluation criteria have been developed and reviewed

extensively by Headquarters and EPA's Regional managers and staff; the data will be collected by a combination of managers and staff to provide consistency across all reviews plus an important element of objectivity in each review; the scores will be developed by a team looking across all ten Regions, ERT, and Headquarters; and only twelve sets of data will be collected, allowing for easier cross-checking and ensuring better consistency of data analysis and identification of data quality gaps.

New/Improved Data or Systems: There are no current plans to develop a dedicated system to manage the data.

References: FY 2004/2005 Superfund Program Implementation Manual (SPIM), <http://www.epa.gov/superfund/action/process/pdfs/appdxb3p1.pdf>.

FY 2008 Performance Measures:

- **Number of final Superfund site assessment decisions [PART performance]**
- **Superfund sites with human health protection achieved [PART performance]**
- **Superfund sites with contaminated groundwater migration under control [PART performance]**
- **Annual number of Superfund sites with remedy construction completed [PART performance]**
- **Number of Superfund sites that are site wide ready for reuse**
- **Human exposures under control per million dollars obligated [PART efficiency]**
- **Superfund Federal Facilities Response dollars obligated annually per operable units completing construction [PART efficiency]**
- **Voluntary removal actions overseen by EPA and completed annually [PART performance]**
- **Superfund-lead removal actions completed annually [PART performance]**
- **Superfund-lead removal actions completed annually per million dollars [PART efficiency]**
- **Number of Federal Facility Superfund sites where all remedies have completed construction [PART]**
- **Number of Federal Facility Superfund sites where the final remedial decision for contaminants at the site has been determined [PART]**
- **Program dollars expended annually per operable unit completing clean-up activities [PART efficiency]**

Performance Database: The Comprehensive Environmental Response, Compensation, and Liability System (CERCLIS) is the database used by the Agency to track, store, and report Superfund site information.

Data Source: CERCLIS is an automated EPA system; headquarters and EPA's Regional offices enter data into CERCLIS on a rolling basis. The Integrated Financial Management System (IFMS) is EPA's financial management system and the official system of record for budget and financial data.

Methods, Assumptions and Suitability: Each performance measure is a specific variable within CERCLIS, except for the financial information.

IFMS contains records of all financial transactions (e.g., personnel, contracts, grants, other) of Superfund appropriation resources, as distinguished by U.S. Treasury schedule codes. Procurement data are entered manually into IFMS by Funds Control Officers throughout the Agency. Site-specific obligations are distinguished through the Site/Project field of the IFMS account number that is assigned to every financial transaction.

Total annual obligations include current and prior year appropriated resources, excluding Office of Inspector General (OIG) and Science and Technology transfers. Obligation data are generated using the OCFO Reporting and Business Intelligence Tool (ORBIT), the Agency's system for evaluating IFMS data. Site-specific obligation data are derived using query logic that evaluates the Site/Project field of the IFMS account number. For a given fiscal year, the percentage of appropriated resources that is obligated site-specifically is the result of dividing site-specific annual obligations by total annual obligations.

QA/QC Procedures: To ensure data accuracy and control, the following administrative controls are in place: 1) Superfund Program Implementation Manual (SPIM), the program management manual that details what data must be reported; 2) Report Specifications, which are published for each report detailing how reported data are calculated; 3) Coding Guide, which contains technical instructions to such data users as Regional Information Management Coordinators (IMCs), program personnel, report owners, and data input personnel; 4) Quick Reference Guides (QRG), which are available in the CERCLIS Documents Database and provide detailed instructions on data entry for nearly every module in CERCLIS; 5) Superfund Comprehensive Accomplishment (SCAP) Reports within CERCLIS, which serve as a means to track, budget, plan, and evaluate progress towards meeting Superfund targets and measures; (6) a historical lockout feature in CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a Change Log report. Specific direction for these controls is contained in the Superfund Program Implementation Manual (SPIM) Fiscal Year 2006/2007 (<http://www.epa.gov/superfund/action/process/spim06.htm>).

CERCLIS operation and further development is taking place under the following administrative control quality assurance procedures: 1) Office of Environmental Information Interim Agency Life Cycle Management Policy Agency Directive 2100.4 (<http://cfintl.rtpnc.epa.gov/ntsdweb/otop/policies/infoman.cfm>); 2) the Office of Superfund Remediation and Technology Innovation Quality Management Plan (http://www.epa.gov/swerffrt/pdf/oswer_qmp.pdf) 3) Agency platform, software and hardware standards (<http://basin.rtpnc.epa.gov/ntsd/itroadmap.nsf>); 4) Quality Assurance Requirements in all contract vehicles under which CERCLIS is being developed and maintained (<http://www.epa.gov/quality/informationguidelines>); and 5) Agency security procedures (<http://basin.rtpnc.epa.gov/ntsd/ITRoadMap.nsf/Security?OpenView>). In addition, specific controls are in place for system design, data conversion and data capture, and CERCLIS outputs.

The financial data are compliant with the Federal Managers Financial Integrity Act (FMFIA) of 1982 and received FY 2005 FMFIA certification

Data Quality Reviews: Two audits, one by the Office Inspector General (OIG) and the other by Government Accountability Office (GAO), were conducted to assess the validity of the data in CERCLIS. The OIG audit report, *Superfund Construction Completion Reporting* (No. E1SGF7_05_0102_8100030), dated December 30, 1997, was prepared to verify the accuracy of the information that the Agency was providing to Congress and the public. The OIG report concluded that the Agency “has good management controls to ensure accuracy of the information that is reported,” and “Congress and the public can rely upon the information EPA provides regarding construction completions.” Further information on this report is available at <http://www.epa.gov/oigearth/eroom.htm>. The GAO’s report, *Superfund: Information on the Status of Sites* (GAO/RCED-98-241), dated August 28, 1998, was prepared to verify the accuracy of the information in CERCLIS on sites’ cleanup progress. The report estimates that the cleanup status of National Priority List (NPL) sites reported by CERCLIS as of September 30, 1997, is accurate for 95 percent of the sites. Additional information on the *Status of Sites* may be obtained at <http://www.gao.gov/archive/1998/rc98241.pdf>. Another OIG audit, *Information Technology - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Data Quality* (Report No. 2002-P-00016), dated September 30, 2002, evaluated the accuracy, completeness, timeliness, and consistency of the data entered into CERCLIS. The report provided 11 recommendations to improve controls for CERCLIS data quality. EPA concurred with the recommendations contained in the audit, and many of the identified problems have been corrected or long-term actions that would address these recommendations continue to be underway. Additional information about this report is available at <http://www.epa.gov/oigearth/eroom.htm>.

The IG reviews annually the end-of-year Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) data, in an informal process, to verify the data supporting the performance measures. Typically, there are no published results.

The Quality Management Plan (QMP) for the Office of Solid Waste and Emergency Response (OSWER) was signed in August 2003 (http://www.epa.gov/swerffrr/pdf/oswer_qmp.pdf).

EPA received an unqualified audit opinion by the OIG for the annual financial statements, and the auditor recommended several corrective actions. All recommendations have been implemented by Office of the Chief Financial Officer in IFMS.

Data Limitations: Weaknesses were identified in the OIG audit, *Information Technology Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Data Quality* (Report No. 2002-P-00016), dated September 30, 2002. The Agency disagreed with the study design and report conclusions; however, the report provided 11 recommendations with which EPA concurred and either implemented or continues to implement. These include: 1) FY 02/03 SPIM Chapter 2 update was improved to define the Headquarters’ and Regional roles and responsibilities for maintaining planning and accomplishment data in ERCLIS; 2) language was added to the FY 04/05 SPIM Appendix A, Section A.A.5 ‘Site Status Indicators’ to clarify the use of the non-NPL status code of “SX”; 3) a data quality section was

added to the FY 04/05 SPIM Appendix A, Section A.A.6 ‘Data Quality’; 4) FY 04/05 SPIM Appendix E, Section E.A.5 ‘Data Owners/Sponsorship’ was revised to reflect what data quality checks (focus data studies) will be done by designated Regional and headquarters staff; 5) a data quality objectives supplement for GPRA measures was added in Change 6 to this SPIM. For changes implemented due to this OIG audit, see the Change Log for this SPIM at <http://www.epa.gov/superfund/action/process/pdfs/changelog6.pdf>; The development and implementation of a quality assurance process for CERCLIS data continues. This process includes delineating data quality objectives for GPRA targets, program measures, and regional data. The Agency has begun reporting compliance with the current data quality objectives.

Error Estimate: The GAO’s report, *Superfund: Information on the Status of Sites* (GAO/RECD-98-241), dated August 28, 1998, estimates that the cleanup status of National Priority List sites reported by CERCLIS is accurate for 95 percent of the sites. The OIG report, *Information Technology - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Data Quality* (Report No. 2002-P-00016), dated September 30, 2002, states that over 40 percent of CERCLIS data on site actions reviewed was inaccurate or not adequately supported. Although the 11 recommendations were helpful and improved some controls over CERCLIS data, the Agency disagreed and strongly objected to the study design and report conclusions.

New/Improved Data or Systems: A CERCLIS modernization effort, initiated in 2002, is complete. As a result of the modernization effort, CERCLIS has standards for data quality and each EPA Region’s CERCLIS Data Entry Control Plan, which identifies policies and procedures for data entry, is reviewed annually. Data quality audit fields have been added to CERCLIS. EPA Headquarters has developed data quality audit reports and provided these reports to the Regions. These reports document data quality for timeliness, completeness, and accuracy as determined by the Superfund data sponsors to encourage and ensure high quality. The modernization effort has increased the availability of CERCLIS data via Superfund eFacts, a Superfund data mart which serves program managers in Headquarters and the Regions. In FY 2008, the program will continue its effort to improve its management of the program through the increased availability of timely and accurate technical information to Superfund’s managers. In 2008, the Agency will work to increase utilization of CERCLIS data by incorporating additional remedy selection, risk, removal response, and community involvement data into CERCLIS.

The Business Process Reevaluation task in the modernization project has provided CERCLIS managers with a first step in an implementation evaluation. The document, which resulted from the evaluation, is being used as a valuable resource for scoping the future redesign of CERCLIS as well as the realignment of the database that will remove unnecessary data and add the new data fields that are necessary to manage the Superfund program today. The redesign is mandated to bring CERCLIS into the Agency’s Enterprise Architecture. As part of OSRTI’s effort to bring CERCLIS into the Agency’s Enterprise Architecture all Regional databases have been moved to the National Computing Center in RTP. This is the first step in folding the Headquarters and Regional databases into one database. This move of the databases to RTP is being done without changing the application, by using a commercial off the shelf (COTS) software program to enable the Regional data entry staff to input data over the Agency’s Wide Area Network. The initial step of moving the databases to RTP and moving all users to the COTS software has been

completed. The move to a single database will be completed during FY 2006 and implemented in FY 2007. The Superfund Document Management System (SDMS) will be linked to CERCLIS. This linkage will enable users to easily transition between programmatic accomplishments reporting and the actual document that defines and describes the accomplishment reported in CERCLIS. The effort to link SDMS and CERCLIS and to consolidate the systems will lead to common reporting (same events and data) in CERCLIS and SDMS. This will be done by electronically extracting data from the documents in SDMS to fill the data fields in CERCLIS - eliminating the manual data entry/human error impacts.

In an effort to better facilitate and capture important Superfund data, a new Five-Year Review Module was released in CERCLIS in June 2006. In addition, a new Reuse/Acreage Module is currently planned on being released in CERCLIS in June of 2007.

EPA plans to replace IFMS with a new system in FY 2008.

References: OIG audit *Superfund Construction Completion Reporting*, (No. E1SGF7_05_0102_8100030) and *Information Technology - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Data Quality*, (No. 2002-P-00016, <http://www.epa.gov/oigearth/erom.htm>); and the GAO report, *Superfund Information on the Status of Sites* (GAO/RCED-98-241, <http://www.gao.gov/archive/1998/rc98241.pdf>). The Superfund Program Implementation Manuals for the fiscal years 1987 to the current manual (<http://www.epa.gov/superfund/action/guidance/index.htm>). The Quality Management Plan (QMP) for the Office of Solid Waste and Emergency Response (August 2003, http://www.epa.gov/swerffrr/pdf/oswer_qmp.pdf). Office of Environmental Information Interim Agency Life Cycle Management Policy Agency Directive 2100.4 (<http://cfint1.rtpnc.epa.gov/ntsdweb/otop/policies/infoman.cfm>). The Office of Superfund Remediation and Technology Innovation Quality Management Plan (http://www.epa.gov/swerffrr/pdf/oswer_qmp.pdf). EPA platform, software and hardware standards (<http://basin.rtpnc.epa.gov/ntsd/itroadmap.nsf>). Quality Assurance Requirements in all contract vehicles under which CERCLIS are being developed and maintained (<http://www.epa.gov/quality/informationguidelines>). EPA security procedures (<http://basin.rtpnc.epa.gov/ntsd/ITRoadMap.nsf/Security?OpenView>).

FY 2005 FMFIA Certification

2004 Audited Financial Statements, see <http://www.epa.gov/oig/reports/financial.htm>

OIG Audit "EPA Needs to Improve Change Controls for Integrated Financial Management System" dated August 24, 2004 (2004-P-00026)

FY 2008 Performance Measures:

- **Percentage of RCRA CA facilities with current human exposures under control [PART performance]**
- **Percentage of RCRA CA facilities with migration of contaminated groundwater under control [PART performance]**
- **Percentage of RCRA construction completions**

- **Percent increase of final remedy components constructed at RCRA CA facilities per federal, state, and private sector dollars per year [PART efficiency]**

Performance Database: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database that supports EPA’s RCRA program.

Data Source: The states and Regions enter data. A “High”, “Medium”, or “Low” entry is made in the database with respect to final assessment decision. A “yes” or “no” entry is made in the database with respect to meeting the human exposures to toxins controlled and releases to groundwater controlled indicators. An entry will be made in the database to indicate the date when a remedy is selected and the complete construction of a remedy is made. Supporting documentation and reference materials are maintained in the Regional and state files. EPA’s Regional offices and authorized states enter data on a continual basis. For the efficiency measure, federal and state cost data are assembled from their respective budgets. Private sector costs are derived from data published in the Environmental Business Journal.

Methods, Assumptions and Suitability: RCRAInfo contains information on entities (generically referred to as “handlers”) engaged in hazardous waste (HW) generation and management activities regulated under the portion of RCRA that provides for regulation of hazardous waste. Within RCRAInfo, the Corrective Action Module tracks the status of facilities that require, or may require, corrective actions, including information related to the four measures outlined above. Performance measures are used to summarize and report on the facility-wide environmental conditions at the RCRA Corrective Action Program’s highest-priority facilities. The environmental indicators are used to track the RCRA Corrective Action Program’s progress in getting highest-priority contaminated facilities under control. Known and suspected facility-wide conditions are evaluated using a series of simple questions and flow-chart logic to arrive at a reasonable, defensible determination. These questions were issued as a memorandum titled: *Interim Final Guidance for RCRA Corrective Action Environmental Indicators*, Office of Solid Waste, February 5, 1999). Lead regulators for the facility (authorized state or EPA) make the environmental indicator determination, but facilities or their consultants may assist EPA in the evaluation by providing information on the current environmental conditions. The complete constructions of remedies measure is used to track the RCRA program’s progress in getting its highest-priority contaminated facilities moving towards final cleanup. Like with the environmental indicators determination, the lead regulators for the facility select the remedy and determine when the facility has completed construction of that remedy. Construction completions are collected on both an area-wide and site-wide basis for sake of the efficiency measure.

QA/QC Procedures: States and Regions generate the data and manage data quality related to timeliness and accuracy (i.e., the environmental conditions and determinations are correctly reflected by the data). Within RCRAInfo, the application software enforces structural controls that ensure that high-priority national components of the data are properly entered. RCRAInfo documentation, which is available to all users on-line, provides guidance to facilitate the generation and interpretation of data. Training on use of RCRAInfo is provided on a regular basis, usually annually, depending on the nature of systems changes and user needs.

Note: Access to RCRAInfo is open only to EPA Headquarters, Regional, and authorized state personnel. It is not available to the general public because the system contains enforcement sensitive data. The general public is referred to EPA's Envirofacts Data Warehouse to obtain filtered information on RCRA-regulated hazardous waste facilities.

Data Quality Review: GAO's 1995 Report on EPA's Hazardous Waste Information System (http://www.access.gpo.gov/su_docs/fdlp/pubs/study/studyhtm.html) reviewed whether national RCRA information systems support EPA and the states in managing their hazardous waste programs. Recommendations coincide with ongoing internal efforts (WIN/Informed) to improve the definitions of data collected, ensure that data collected provide critical information and minimize the burden on states. EPA's Quality Staff of the Office of Environmental Information conducted a quality systems audit in December 2003. The audit found the corrective action program satisfactory.

Data Limitations: No data limitations have been identified for the performance measures. As discussed above, the performance measure determinations are made by the authorized states and EPA Regions based on a series of standard questions and entered directly into RCRAInfo. EPA has provided guidance and training to states and Regions to help ensure consistency in those determinations. High priority facilities are monitored on a facility-by-facility basis and the QA/QC procedures identified above are in place to help ensure data validity. For the efficiency measure, private sector costs are not publicly available. Estimates of these costs are derived from Environmental Business Journal data.

Error Estimate: N/A. Currently, the Office of Solid Waste does not collect data on estimated error rates.

New/Improved Data or Systems: EPA has successfully implemented new tools for managing environmental information to support federal and state programs, replacing the old data systems (the Resource Conservation and Recovery Information System and the Biennial Reporting System) with RCRAInfo. RCRAInfo allows for tracking of information on the regulated universe of RCRA hazardous waste handlers, such as facility status, regulated activities, and compliance history. The system also captures detailed data on the generation of hazardous waste from large quantity generators and on the waste management practices of treatment, storage, and disposal facilities. RCRAInfo is web-accessible, providing a convenient user interface for federal, state and local managers, encouraging development of in-house expertise for controlled cost, and using commercial off-the-shelf software to develop reports from database tables.

References: GAO's 1995 Report on EPA's Hazardous Waste Information System reviewed whether national RCRA information systems support EPA and the states in managing their hazardous waste programs. This historical document is available on the Government Printing Office Website (http://www.access.gpo.gov/su_docs/fdlp/pubs/study/studyhtm.html).

FY 2008 Performance Measures:

- **Number of cleanups that meet state risk-based standards for human exposure and groundwater migration. (Tracked as: Number of leaking underground storage tank cleanups completed.) [PART performance]**
- **Number of cleanups that meet risk-based standards for human exposure and groundwater migration in Indian country. (Tracked as: Number of leaking underground storage tank cleanups completed in Indian Country.) [PART performance]**
- **Cleanups complete (3-year rolling average) per total cleanup dollars. (from public and private sector) [PART efficiency-under development]**

Performance Database: The Office of Underground Storage Tanks (OUST) does not maintain a national database. States individually maintain records for reporting state program accomplishments.

Data Source: Designated State agencies submit semi-annual progress reports to the EPA regional offices. The Agency is working to evaluate and update its current LUST efficiency measure with its state partners.

Methods, Assumptions and Suitability: The cumulative number of confirmed releases where cleanup has been initiated and where the state has determined that no further actions are currently necessary to protect human health and the environment, includes sites where post-closure monitoring is not necessary as long as site specific (e.g., risk based) cleanup goals have been met. Site characterization, monitoring plans and site-specific cleanup goals must be established and cleanup goals must be attained for sites being remediated by natural attenuation to be counted in this category. (See <http://www.epa.gov/OUST/cat/pm032603.pdf>.)

QA/QC Procedures: EPA's regional offices verify and then forward the data in an Excel spreadsheet to OUST. OUST staff examine the data and resolve any discrepancies with the regional offices. The data are displayed in an Excel spreadsheet on a region-by-region basis, which is a way regional staff can check their data.

Data Quality Review: None.

Data Limitations: Data quality depends on the accuracy and completeness of state records.

Error Estimate: N/A

New/Improved Data or Systems: None

References: FY 2006 Mid-Year Activity Report, June 20, 2006 (updated semiannually); *FY 2006 End-of-Year Activity Report*, from Cliff Rothenstein, Director, Office of Underground Storage Tanks to UST/LUST Regional Division Directors, Regions 1-10, dated November 14, 2006, http://www.epa.gov/swerust1/cat/ca_06_34.pdf

GOAL 3 OBJECTIVE 3

FY 2008 Performance Measures:

- **Refer to DOJ, settle, or writeoff 100% of Statute of Limitations (SOLs) cases for Superfund sites with total unaddressed past costs equal to or greater than \$200,000 and report value of costs recovered**
- **Percentage of Superfund sites at which settlement or enforcement action taken before the start of a remedial action (RA)**

Performance Database: The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database contains information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation. The database includes sites that are on the National Priorities List (NPL) or being considered for the NPL.

Data Source: Automated EPA system; Headquarters and EPA's Regional Offices enter data into CERCLIS

Methods, Assumptions and Suitability: There are no analytical or statistical methods used to collect the information. The performance data collected on a fiscal year basis only. Enforcement reports are run at the end of the fiscal year, and the data that support this measure are extracted from the report.

QA/QC Procedures: To ensure data accuracy and control, the following administrative controls are in place: 1) Superfund Program Implementation Manual (SPIM), the program management manual that details what data must be reported; 2) Report Specifications, which are published for each report detailing how reported data are calculated; 3) Coding Guide, which contains technical instructions to such data users as Regional Information Management Coordinators (IMCs), program personnel, report owners, and data input personnel; 4) Quick Reference Guides (QRG), which are available in the CERCLIS Documents Database and provide detailed instructions on data entry for nearly every module in CERCLIS; 5) Superfund Comprehensive Accomplishment (SCAP) Reports within CERCLIS, which serve as a means to track, budget, plan, and evaluate progress towards meeting Superfund targets and measures; (6) a historical lockout feature in CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a Change Log report. Specific direction for these controls is contained in the Superfund Program Implementation Manual (SPIM) Fiscal Year 2006/2007 (<http://www.epa.gov/superfund/action/process/spim06.htm>).

CERCLIS operation and further development is taking place under the following administrative control quality assurance procedures: 1) Office of Environmental Information Interim Agency Life Cycle Management Policy Agency Directive 2100.4 (<http://cfint1.rtpnc.epa.gov/ntsdweb/otop/policies/infoman.cfm>); 2) the Office of Superfund Remediation and Technology Innovation Quality Management Plan (http://www.epa.gov/swerffrr/pdf/oswer_qmp.pdf) 3) Agency platform, software and hardware standards (<http://basin.rtpnc.epa.gov/ntsd/itroadmap.nsf>); 4) Quality Assurance Requirements in all contract vehicles under which CERCLIS is being developed and maintained (<http://www.epa.gov/quality/informationguidelines>); and 5) Agency security procedures (<http://basin.rtpnc.epa.gov/ntsd/ITRoadMap.nsf/Security?OpenView>). In addition, specific

controls are in place for system design, data conversion and data capture, and CERCLIS outputs.

Data Quality Review: The IG annually reviews the end-of-year CERCLIS data, in an informal process, to verify the data supporting the performance measure. Typically, there are no published results.

Data Limitations: None

Error Estimate: NA

New/Improved Data or Systems: None

References: Office of Site Remediation Enforcement (OSRE) Quality Management Plan, approved April 11, 2001. [Revised QMP submitted in August 2006, but not yet approved.]

FY 2008 Performance Measures:

- **Percentage of planned outputs delivered in support of the manage material streams, conserve resources and appropriately manage waste long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support of the mitigation, management and long-term stewardship of contaminated sites long-term goal (PART Measure)**

Performance Database: Integrated Resources Management System (internal database).

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: To provide an indication of progress towards achievement of the Land Preservation and Restoration Research Program's long-term goals, the Land program annually develops a list of key research outputs scheduled for completion by the end of each fiscal year. This list is finalized by the start of the fiscal year, and no changes are made after this point. The program then tracks quarterly the progress towards completion of these key outputs against pre-determined schedules and milestones. The final score is the percent of key outputs from the original list that are successfully completed on-time.

QA/QC Procedures: Procedures are now in place to require that all annual outputs be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Contaminated Sites Multi-Year Plan, available at: <http://www.epa.gov/osp/myp/csites.pdf> (last accessed on January 3, 2007)

Resource Conservation and Recovery Act (RCRA) Multi-Year Plan, available at: <http://www.epa.gov/osp/myp/rcra.pdf> (last accessed on January 3, 2007)

FY 2008 Performance Measure:

- **Average time (in days) for technical support centers to process and respond to requests for technical document review, statistical analysis and evaluation of characterization and treatability study plans. (Efficiency Measure)**

Performance Database: No internal tracking system.

Data Source: Data are generated based on self-assessments of progress in meeting customer needs.

Methods, Assumptions and Suitability: The dates of requests, due dates, response time, and customer outcome feedback will be tabulated for the Engineering, Ground Water, and Site Characterization Technical Support Centers.

QA/QC Procedures: N/A

Data Quality Reviews: N/A

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: N/A

GOAL 4 OBJECTIVE 1

FY 2008 Performance Measure:

- **Cumulative number of assays that have been validated. (PART Measure)**

Performance Database: Performance is measured by the cumulative number of assays validated. The completion of the validation process for an assay can take several years. Excel spreadsheets are used to capture and track various steps within the validation process in order to better show progress. As a result, in the FY 2006 PART review of EPA's Endocrine Disruptor Program, these steps within the validation process became individual PART measures: Detailed Review Papers Completed, Prevalidation Studies Completed, Validation by Multiple Labs Completed, Peer Reviews, Assays Ready for Use.

Data Source: Data are generated to support all stages of validation of endocrine test methods through contracts, grants and interagency agreements, and the cooperative support of the Organization of Economic Cooperation and Development (OECD), and EPA's Office of Research and Development (ORD). The scope of the effort includes the conduct of laboratory studies and associated analyses to validate the assays proposed for the Endocrine Disruptor Screening Program (EDSP).

Methods, Assumptions and Suitability: The measures are program outputs which when finalized, help to ensure that EPA meets The Food Quality Protection Act of 1996 (FQPA) requirement that EPA validate assays to screen chemicals for their potential to affect the endocrine system.

QA/QC Procedures: EDSP's contractors operate independent quality assurance units (QAUs) to ensure that all studies are conducted under appropriate QA/QC programs. Two levels of QA/QC are employed. First, the contractors operate under a Quality Management Plan designed to ensure overall quality of performance under the contracts. Second, prevalidation and validation studies are conducted under a project-specific Quality Assurance Project Plans (QAPPs) developed by the contractor and approved by EPA. These QAPPs are specific to the study being conducted. Most validation studies are conducted according to Good Laboratory Practices (GLPs). In addition, EPA or its agent conducts an independent lab/QA audit of facilities participating in the validation program.

Data Quality Review: All of the documentation and data generated by the contractor, OECD and ORD, as it pertains to the EDSP, are reviewed for quality and scientific applicability. The contractor maintains a Data Coordination Center which manages information/data generated under EDSP. The contractor also conducts statistical analyses related to lab studies, chemical repository, and quality control studies.

Data Limitations: There is a data lag of approximately 9-24 months due to the variation in length and complexity of the lab studies, and for time required for review, analysis and reporting of data.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: EPA Website; EPA Annual Report; Endocrine Disruptor Screening Program Proposed Statement of Policy, Dec. 28, 1998; Endocrine Disruptor Screening and Testing Advisory Committee (EDSTAC) Final Report (EPA/743/R-98/003); EPA Contract # 68-W-01-023.

FY 2008 Performance Measure:

- **Million of dollars in termite structural damage avoided annually by ensuring safe and effective pesticides are registered/reregistered and available for termite treatment (PART measure)**

Performance Database: Baseline data on the number of owner-occupied structures is available from US Census Housing data. Estimates of the extent of termiticide use and termite-related damage are available from several industry and academic sources.

Data Source: Baseline data are derived from several sources, including U.S. Census data, surveys conducted by the pest control industry, and academic publications.

Methods, Assumptions and Suitability: This measure is representative of the explicit statutory mandate of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to ensure the availability of pesticides to permit their societal benefits. An important role of the National Pesticide Program is to prevent harm and preserve a level of public protection.

Pesticides are the primary means to treat or prevent termite infestation. These pesticides are not available for use to treat or prevent this problem unless the National Pesticide Program evaluates their safety and allows them into the marketplace through the Registration or Registration Review programs. Timely and effective licensing actions are required for homeowners to have access to the benefits of these pesticides and avoid the significant economic loss from termite structural damage.

Termites are one of the most economically important insect pests in the United States. More than 600,000 U.S. homes suffer termite damage every year. Homeowners insurance can help recover losses from fires, storms, and earthquakes, but it is almost impossible to carry insurance against termite infestation and damage. This measure will utilize data that estimate the number of homes that suffer termite-related damage on an annual basis, the value of this damage, the number and frequency of termiticide treatments, and an estimate of the number of treated homes that would have received termite damage absent the use of pesticide control measures.

Through this measure, the Agency will evaluate the extent of termiticide use to protect owner-occupied housing units, average termite damage on a per housing unit basis, and an estimate of the termite structural damage avoided as a result of having safe and effective termite control products available for use.

QA/QC Procedures: EPA adheres to its approved Quality Management Plan in ensuring the quality of the data used in this measure. Academic research undergoes strict peer-review prior to

publication. The Agency will work with non-governmental providers of data to ensure that quality data are used in developing this measure.

Data Quality Reviews: Staff and management of the Office of Pesticide Programs will perform the data quality reviews under the leadership of our QA/QC officers.

Data Limitations: This measure continues to be refined. Currently available data were not collected for performance accountability purposes and may lack precision. Non-pesticide treatment actions may account for some structural damage avoided.

Error Estimate: Error estimates for established surveys are documented by these organizations in their survey reports.

New/Improved Data or Systems: This measure will utilize existing data as well as new data developed from industry and academic research.

References: U.S. Census Bureau data (www.census.gov/compendia/statab/files/house.html); Univ. of GA Entomology Dept, (www.ent.uga.edu/IPM/s100/household.htm); Natl. Pest Management Association. (www.pestworld.org/Database/Article.asp?ArticleID=34&UserType=]; “Arizona Termites of Economic Importance”, *Better Pest Control*, p.11, June 2005, University of Arizona, College of Agriculture and Life Sciences; “Termites: Are They Chewing Up Your Home?”, National Pest Management Association; Ipsos-Insight 2005 Survey for Dow Agro (www.dowagro.com/sentricon/termite-risk/facts.htm).

FY 2008 Performance Measure:

- **Billions of dollars in crop loss avoided by ensuring that effective pesticides are available to address pest infestations. (PART measure)**

Performance Database: To determine the value of potential crop loss avoided from the use of pesticides, baseline and future data are collected on crop market prices, crop production, total acres grown, acres treated with pesticides, and the percentage of crop yield loss avoided as a result of the use of pesticides.

Data Source: Baseline data on crop market prices, crop production, and total acres grown are from United States Department of Agriculture (USDA) databases, while the percentage of potential yield loss without pesticides is estimated by Biological and Economic Analysis Division (BEAD) scientists based on published and unpublished studies. The number of acres treated with the pesticides are based on data submitted by State Departments of Agriculture.

Methods, Assumptions and Suitability: The Agency will provide an estimate of the value of the potential crop loss avoided by growers from the use of registered pesticides. The method for estimating this value involves calculating the potential crop loss avoided based on the acres treated with the pesticides, per acre crop production and prices received, and potential yield without the pesticides. In an attempt to measure the magnitude of this potential crop loss

avoided, the value is measured as a percent of state production in value and national production in value.

The pesticides selected for this measure will be the registered Section 3 pesticides which were previously Section 18 emergency use registrations. The data used in the analysis of the number of acres treated with the pesticides will be based on USDA databases and data submitted by the State Agricultural Departments. The percentage of potential yield loss without the pesticides will be based on the review of published and unpublished efficacy studies by BEAD scientists.

The United States (U.S.) has a large cropland, productive soils, and a variety of favorable agricultural climates. These factors contribute to and enable the U.S. to be a uniquely large and productive agricultural producer. The value of agricultural crop production in the U.S. totaled \$200 billion¹⁵ in 2003. Major field crops in value are corn (\$21 billion), soybeans (\$15 billion), wheat (\$6 billion), and cotton (\$3.6 billion), while tomatoes (\$1.9 billion), apples (\$1.6 billion), and strawberries (\$1.2 billion) are major fruit/vegetable crops in value.

American agricultural production far outweighs domestic consumption and the U.S. is one of the World's largest agricultural exporters, worth approximately \$50 billion annually (one quarter of total U.S. agricultural crop production). In order to be competitive in the world market and to provide sufficient market supply for American consumers, U.S. farmers need to be able to use pesticides for pest control as long as they do not present significant risks to human health or the environment (USDA/ERS, 2004).

The goal for this measure is to develop long-term consistent and comparable information on the benefits of pesticide usage.

QA/QC Procedures: EPA adheres to its approved Quality Management Plan in ensuring the quality of the data derived from States, and USDA. The data used for the outcome measure is based on well-established QA/QC procedures found in [*Data Quality Assessment: A Reviewer's Guide*](#)² (QA/G-9R)² (PDF 61pp, 225K), <http://www.epa.gov/quality/dqa.html>, which provides guidance on assessing data quality criteria and performance specifications.

Data Quality Review: The measure will utilize USDA/NASS methods of collecting and analyzing data.

Data Limitations: This measure is under development. Data limitations will be characterized during developmental stages of the measure and a complete evaluation will be provided in the Agency's annual Performance and Accountability Report.

Error Estimate: USDA provides discussion of analytical methods and associated variability estimates in its chemical use publications. For example, see the Agricultural Chemical Distribution Tables section, Survey and Estimation Procedure section and Reliability section of the USDA publication Agricultural Chemical Usage 2005 Field Crops Summary

¹⁵ The value received by farmers was \$200 billion.

(<http://usda.mannlib.cornell.edu/usda/nass/AgriChemUsFC//2000s/2006/AgriChemUsFC-05-17-2006.pdf>).

New/Improved Data or Systems: This measure will utilize existing data and data systems.

References:

USDA data sources include:

United States Department of Agriculture (USDA), National Agricultural Statistics Service (NASS). Agricultural Chemical Usage.

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1001>

United States Department of Agriculture (USDA), National Agricultural Statistics Service (NASS). Agricultural Statistics. <http://www.usda.gov/nass/pubs/agstats.htm>

FY 2008 Performance Measure:

- **Percent of urban watersheds that exceeds the National Pesticide Program aquatic life benchmarks for 3 pesticides of concern. (PART measure)**

Performance Database: Baseline data are obtained from the United States Geological Survey (USGS) National Water-Quality Assessment (NAWQA) program's 2006 report: Pesticides in the Nation's Streams and Ground Water, 1992-2001 (<http://ca.water.usgs.gov/pnsp/>). Future data will be compiled from future reports.

Data Source: Baseline data are derived from the USGS National Water-Quality Assessment (NAWQA) program's 2006 report: Pesticides in the Nation's Streams and Ground Water, 1992-2001. USGS is currently developing sampling plans for 2008 – 2017. Future data will be available from USGS as it is made available on public websites.

Methods, Assumptions and Suitability: Water quality is a critical endpoint for measuring exposure and risk to the environment. It is a high-level measure of our ability to reduce exposure from key pesticides of concern. This measure evaluates the reduction in water concentrations of pesticides as a means to protect aquatic life. Reduced water column concentration is a major indicator of the efficacy of risk assessment, risk management, risk mitigation and risk communication actions. It will illuminate program progress in meeting the Agency's strategic pesticide and water quality goals.

The goal is to develop long-term consistent and comparable information on the amount of pesticides in streams, ground water, and aquatic ecosystems to support sound management and policy decisions. USGS-NAWQA data can help inform EPA of the long-term results of its risk management decisions based on trends in pesticide concentrations. Recent USGS information indicates exceedences of aquatic life benchmarks in 18 to 40% of the urban and agricultural watersheds sampled. USGS is currently developing sampling plans for 2008 – 2017. Draft plans call for yearly monitoring in 8 agricultural watersheds; bi-yearly sampling in 3 agricultural dominated watersheds; and sampling every four years in a second set of 25 agricultural watersheds. The sampling frequency for these 36 agricultural sites will range from approximately 15 to 35 sites samples per year based on the watershed landuse class. The USGS

has no plans in this time period for similar sampling in urban watersheds. Intermediate (2008 – 2010) goals will be refined when the USGS plan is finalized in late FY07.

QA/QC Procedures: EPA adheres to its approved Quality Management Plan in ensuring the quality of the data obtained from USGS. The data that will be used for the outcome measure is based on well-established QA-QC procedures in the USGS-NAWQA program (<http://ca.water.usgs.gov/pnsp/rep/qcsummary/> and <http://water.usgs.gov/owq/FieldManual/index.html>).

Data Quality Review: The measure will utilize USGS NAWQA data. USGS is preeminent in the field of water quality sampling. Since 1991, the USGS NAWQA program has been collecting and analyzing data and information in major river basins and aquifers across the Nation. The program has undergone periodic external peer-review (<http://dels.nas.edu/water/monitoring.php>).

Data Limitations: This measure is under development. Data limitations will be characterized during developmental stages of the measure and a complete evaluation will be provided in the NAWQA 2011 “Cycle II” Study Report. EPA will request that USGS add additional insecticides to their sampling protocols to establish base line information for newer products that have been replacing the organophosphates (e.g., the synthetic pyrethroids).

Error Estimate: The USGS database provides estimates of analytical methods and associated variability estimates (<http://ga.water.usgs.gov/nawqa/data.qa.html>).

New/Improved Data or Systems: This measure will utilize existing data and data systems.

References: USGS National Water-Quality Assessment (NAWQA) program’s 2006 report: Pesticides in the Nation’s Streams and Ground Water, 1992-2001.

The NAWQA 2011 “Cycle II” Study Report does not exist at this time – the sampling is in progress, thus there is no citation at this time. USGS has not published their sampling plan. There will be a USGS report in the 2011 timeframe.

FY 2008 Performance Measure:

- **Percent reduction in moderate to severe incidents for six acutely toxic agricultural pesticides with the highest incident rate (PART measure)**

Performance Database: Most of the nation’s Poison Control Centers (PCCs) participate in a national data collection system known as the Toxic Exposure Surveillance System (TESS). Among the types of exposures reported are pesticide related exposures. The data collected include date of call, age, gender, location of exposure, route of exposure, substance exposed to, route of exposure, initial symptom assessment, treatment received and an evaluation of the medical outcome. Symptoms are categorized as minor, moderate, or major with criteria for each category.

Data Source: PCCs provide telephone consultation to individuals and health care providers. Most PPCs are operated by a hospital or university and in aggregate serve 70-80% of the U.S. population. Each case is a separate file that needs to be manually loaded into an EPA database prior to performing statistical analysis. Trend analysis of the reported incidents could reveal problem chemicals and the effects of previous actions taken.

Methods, Assumptions and Suitability: We assume resources will continue to be available for the Agency to purchase the data and that adequate resources will be available at the local level to continue to fund the centers. The reduction in poisoning incidents is expected to result from mitigation measures made during the reregistration, from greater availability of lower risk alternative products resulting from the Agency's reduce risk registration process, from the continued implementation of worker protection enforcement and training.

QA/QC Procedures: PCCs must be certified by the American Association of Poison Control Centers (AAPCC). To be certified a PPC must have a board certified physician on call at all times, have AAPCC certified specialists available to handle all calls, have a comprehensive file of toxicology information readily available, maintain Standard Operating Procedures (SOPs), keep records on all cases and have an ongoing quality assurance program. In addition, EPA staff screen each case before analyzing the data set.

Data Quality Review: EPA conducts regular case reviews and audits to assure quality assurance of data collected. Also, as mentioned above, EPA staff reviews each case before entering into its database.

Data Limitations: Because PCC participation is voluntary and the available resources vary from year to year, the data contains uncertainty.

Error Estimate: Because the incidents are self-reported, there is a potential bias in the data. However, there is no reason to believe that the bias will change from year to year

New/Improved Data or Systems: Not known at this time.

References: Poison Control Centers TESS (Toxic Exposure Surveillance System)
<http://www.aapcc.org/poison1.htm>

FY 2008 Performance Measure:

- **Incidents per 100,000 potential risk events in population occupationally exposed to pesticides (PART measure)**

Performance Database: Most of the nation's Poison Control Centers (PCCs) participate in a national data collection system known as the Toxic Exposure Surveillance System (TESS). Among the types of exposures reported are pesticide related exposures in both residential and occupational settings. The data collected include date of call, age, gender, location of exposure, route of exposure, substance exposed to, initial symptom assessment, treatment received and an

evaluation of the medical outcome. Symptoms are categorized as minor, moderate, or major with standard criteria for each category.

Data Sources:

Health Incident Data:

Poison Control Centers' Toxic Exposure Surveillance System (PCC/TESS)

The Association of American Poison Control Centers (AAPCC) began collecting data for the purpose of identifying the leading hazards to humans from poisoning and to provide resources for the management of these exposures. Currently, the PCCs service approximately 98% of the nation.

Poison Control Centers are usually run by a hospital or university. Approximately 99% of the nation's Poison Control Centers (PCCs) send incident data to the Toxic Exposure Surveillance System (TESS). The national data collection system started in 1983. Each PCC receives a minimum of 10,000 calls annually. About 13% of calls are from health care providers treating patients and 87% of calls are from individuals who need assistance in managing an exposure to poison. From 1993-1996, 92% of reported exposures occurred in a residential setting. PCC collects data on exposures to any substance and pesticide poisonings make up about 3% of all cases. PCCs submit data to TESS 2 to 4 times per year.

Data from the PCC/TESS database will be used for the numerator.

The denominator number is calculated from several sources: Department of Labor's Bureau of Labor Statistics, which captures employment characteristics for the national workforce. The estimate of agricultural field workers is from the Department of Labor's National Agricultural Workers Survey; The denominator also uses EPA/OPP's annual report of Certified Applicators, and an estimate for the number of field entries by farmworkers from the 1992 Regulatory Impact Analysis for the Agricultural Worker Protection Standard.

Methods, Assumptions and Suitability: Trend analysis of the reported incidents could reveal problem chemicals and the effects of previous actions taken.

Calculation Description:

For the Numerator :

Universe of Occupationally Exposed Individuals:

- | | |
|--|------------|
| 1. Certified Applicators = | 1,100,000 |
| 2. "Under the Supervision" Applicators (Assume 4 X CA) = | 4,000,000 |
| 3. Other Occupational Pesticide Users = | 2,500,000* |

* = Bureau of Labor Statistics calculates there are 50,000,000 employees in non-agricultural fields that we believe utilize pesticides as part of their business (e.g., healthcare support; food preparation; building & grounds cleaning &

maintenance; production; etc.). We assume that 5% of those employees apply pesticides.

4. Agricultural Farmworkers = 1,800,000

Potential Pesticide Risk Events:

For occupational users (Groups #1 - 3 above), we assume every pesticide application has the potential to create a pesticide incident with adverse health effects. We conservatively estimate each individual in those groups makes 4 pesticide applications per year. Therefore,

7,600,000 occupational users X 4 applications/year = 30,400,000 Potential Pesticide Risk Events/Year

Agricultural Farmworkers spend an average of 105 days/year in the field (1992 Regulatory Impact Analysis for the Agricultural Worker Protection Standard). We assume that 5% of field entries present potential risk from pesticide exposure. Therefore,

105 days per/year X 5% = 5.25 Potential Pesticide Risk Events/Year/Farmworker
5.25 X 1,800,000 Ag Farmworkers = 9,450,000 Potential Pesticide Risk Events/Year

30,400,000 + 9,450,000 = 39,850,000 Total Potential Pesticide Risk Events/Year

Occupational Pesticide Incidents:

The Poison Control Centers' Toxic Exposure Surveillance System recorded there were an average of 1388 occupational pesticide incidents with adverse health impacts in 2001 – 2003, the most recent data available.

RATE OF INCIDENTS PER POTENTIAL PESTICIDE RISK EVENTS PER YEAR

$\frac{1388 \text{ occupational pesticide incidents per year}}{39,850,000 \text{ potential pesticide risk events/year}}$	=	$\frac{3.5 \text{ incidents per 100,000 potential pesticide risk events/year}}$
--	---	---

QA/QC Procedures: PCCs must be certified by the American Association of Poison Control Centers (AAPCC). To be certified a PPC must have a board certified physician on call at all times, have AAPCC certified specialists available to handle all calls, have a comprehensive file of toxicology information readily available, maintain SOPs, keep records on all cases and have an ongoing quality assurance program.

Data Quality Review: For the incident data, regular case reviews and audits are scheduled to assure quality assurance of data collected by the Poison Centers. All data in the TESS system is subject to quality assurance requirements, including occupational incidents.

Data Limitations: The data in PCC/TESS originates from the public or health-care providers voluntary communications to the PCCs. Some number of pesticide-induced illnesses go unreported due to difficulty in diagnosis, symptoms that are non-specific to pesticides, and the fact that the public may not report. The under-reporting is considered a self-reporting bias.

The denominator data for non-agricultural workers is from 2004; more recent BLS data are not available.

Error Estimate: The number of potential risk events/year is most likely underestimated, because we used conservative estimates in estimating the potential number of events. For example, we estimated only 4 applications per year per individual which is likely to be a very low estimate.

New/Improved Data or Systems: Not known at this time.

References:

American Association of Poison Control centers: <http://www.aapcc.org/poison1.htm>
Department of Labor's National Agricultural Workers Survey:
<http://www.dol.gov/asp/programs/agworker/naws.htm>
Department of Labor's Bureau of Labor Statistics: Occupational Employment and Wages,
November 2004: http://www.bls.gov/news.release/archives/ocwage_11092005.pdf
EPA/OPP's annual report of Certified Applicators:
<http://www.epa.gov/oppfead1/safety/applicators/data.htm>
1992 Regulatory Impact Analysis for the Agricultural Worker Protection Standard

FY 2008 Performance Measure:

- **Reduced cost per pesticide occupational incident avoided (PART efficiency)**

Performance Database:

Health Incident Data

Poison Control Centers' Toxic Exposure Surveillance System (PCC/TESS)

The Association of American Poison Control Centers (AAPCC) began collecting data for the purpose of identifying the leading hazards to humans from poisoning and to provide resources for the management of these exposures.

Poison Control Centers are usually run by a hospital or university. Approximately 99% of the nation's Poison Control Centers (PCCs) send incident data to the Toxic Exposure Surveillance System (TESS), the national data collection system started in 1983. Each PCC receives a minimum of 10,000 calls annually. About 13% of calls are from health care providers treating patients and 87% of calls are from individuals who need assistance in managing an exposure to poison. From 1993-1996, 92% of reported exposures occurred in a residential setting. PCC

collects data on exposures to any substance and pesticide poisonings make up about 3% of all cases. PCCs submit data to TESS 2 to 4 times per year.

Cost Data

Cost estimates are based on the President's budget and State and Regional Assistance Grants funding documents.

Data Source:

Health Incident Data

Poison Control Centers' Toxic Exposure Surveillance System (PCC/TESS)

Most cases in TESS are submitted by certified PCCs through their staff, and are received from the public.

Methods, Assumptions and Suitability: This efficiency measure is based on the annual number of occupational pesticide incidents. A critical assumption is that EPA's pesticide program's efforts have a direct impact on the decline of pesticide incidents and that additional external factors have no effect on the number of pesticide incidents (e.g., all influences on occupational incidents arise from the program's efforts). From recent assessments, we do believe that occupational poisonings are declining and that OPP's action contribute significantly to the reduction.

Calculation:

$$\frac{\text{Worker Safety Resources (\$)}}{\text{Pesticide Occupational Incidents Avoided}} = \text{Cost /Pesticide Occupational Incident Avoided}$$

Worker Safety Resources = Value of extramural and Full Time Employee (FTE) Resources from the President's Budget request identified as supporting EPA Headquarters worker protection activities; and State and Regional Assistance Grants (STAG) monies. Does not include headquarters resources for worker protection in the Registration/Re-Registration/Registration Review programs, because would result in double-counting. Regional resources for field programs are in the form of FTEs, which are parsed differently into worker protection, water quality, and strategic agricultural initiatives by the Regions depending on their priority objectives. These data are not currently available. An additional complication is the fact that states provide substantial funding for these programs as well, and their contribution is not included here.

For recent years, annual STAG funds for worker safety (C&T and WP) total \$6.6M. The President's Budget has remained relatively constant at \$2.7M for Agricultural Worker Protection and \$2.7M for Pesticide Applicator per year, for an average of \$12M as the numerator in the baseline calculation.

Pesticide Occupational Incidents Avoided = Using pesticide incident data from Poison Control Centers' Toxic Exposure Surveillance System, OPP established a baseline for

average incidents per year. Use of an average of three years is appropriate to account for inconsequential fluctuations in the counts.

This measure will be tracked as follows: we will review annual occupational incident data and compare it with the rolling average for the baseline. If the average number of incidents from the most recent three years is below the baseline, the difference will be the incidents avoided for use in the calculation.

QA/QC Procedures: Most cases in TESS are submitted by certified PCC. Certification of the PCC requires that there be board certified physicians with expertise in toxicology on-call at all times, poison information specialists available to handle calls, access to a major medical library, guidelines for follow-up of each case to determine the patient's final disposition or medical outcome. Taken together these criteria help to assure the quality of the data.

Each Poison Control Center uses standard format for data collection. Standard data elements include location of victim at the time of exposure, substance exposed to, route of exposure, initial symptom assessment, and evaluation of medical outcome after case follow up. Cases with symptoms are categorized by severity as minor, moderate, or major.

Data Quality Review: Trained PCC specialists review the case data and, based on the information provided and their knowledge of toxicology, doses, and timing of exposure, ascertain whether the incident was caused by pesticides.

Data Limitations: Experts believe pesticide poisonings are under-reported to surveillance sources, for reasons, including the symptoms of pesticide poisoning generally are difficult to identify; there are few biomarkers for pesticides; and because the exposed individual may not seek medical care or report their illness. Additionally, not all states require mandatory physician reporting, and those that do may have difficulty enforcing that requirement.

Error Estimate: As mentioned above, under-reporting is believed to be a problem in all pesticide incident data sets. There are a number of widely-ranging estimates for the amount of under-reporting, ranging from 25% to as much as a factor of a thousand.

New/Improved Data or Systems: OPP collects pesticide incident data under FIFRA section 6(a)2. FIFRA is the Federal Insecticide, Fungicide and Rodenticide Act; the statute which governs the program functions. Section 6(a)2 is mandatory reporting required of the registrants (registrants are those who have or seek registration of their pesticide products). However, details important to this measure are not routinely captured in this data set. We hope to improve the internal data systems that capture incidents reported by the regulated community. Currently, data are difficult to use and may not have needed detail. If these data were available, they could potentially be used to complement or replace the PCC/TESS data, depending on their quality.

References: none

FY 2008 Performance Measure:

- **Percent reduction in concentrations of pesticides detected in general population (PART measure)**

Performance Database: The Agency will use the Centers for Disease Control's (CDC's) National Health and Nutrition Examination Survey (NHANES) data from 1999-2002 as the baseline. For this measure, the Agency intends to report on the changes in levels of organophosphate pesticides at the 50th percentile (or median.) This group of chemicals was selected for a number of reasons. A large proportion of data collected from the general population are detectable residues (or their metabolites) for the organophosphate pesticides. In addition, the metabolites for which the analyses are performed are derived exclusively from the OP pesticides. The Agency selected a measure based on central tendency because it provides an overall picture of trends and is not distorted by anomalies in the data. However, the Agency intends to follow a range of metrics to more fully understand trends in the data. The annual targets will change every two years because each survey is performed over a two year period.

Data Sources: NHANES (see above)

Methods, Assumptions and Suitability: The NHANES data were selected because the surveys provide a statistically representative data set for the entire U.S. population. It is an ongoing program, with funding from numerous cooperating Federal agencies. The data are based on measurement of chemical levels in blood and urine.

QA/QC Procedures: This large scale survey is performed in strict compliance with CDC QA/QC procedures.

Data Quality Review: The measure will utilize NHANES data. NHANES is a major program of the National Center for Health Statistics (NCHS). NCHS is part of the Centers for Disease Control and Prevention (CDC), U.S. Public Health Service, and has the responsibility for producing vital and health statistics for the Nation. The National Center for Health Statistics (NCHS) is one of the Federal statistical agencies belonging to the Interagency Council on Statistical Policy (ICSP). The ICSP, which is led by the Office of Management and Budget (OMB), is composed of the heads of the Nation's 10 principal statistical agencies plus the heads of the statistical units of 4 nonstatistical agencies. The ICSP coordinates statistical work across organizations, enabling the exchange of information about organization programs and activities, and provides advice and counsel to OMB on statistical activities. The statistical activities of these agencies are predominantly the collection, compilation, processing or analysis of information for statistical purposes. Within this framework, NCHS functions as the Federal agency responsible for the collection and dissemination of the Nation's vital and health statistics. Its mission is to provide statistical information that will guide actions and policies to improve the health of the American people.

To carry out its mission, NCHS conducts a wide range of annual, periodic, and longitudinal sample surveys and administers the national vital statistics systems.

As the Nation's principal health statistics agency, NCHS leads the way with accurate, relevant, and timely data. To assure the accuracy, relevance, and timeliness of its statistical products,

NCHS assumes responsibility for determining sources of data, measurement methods, methods of data collection and processing while minimizing respondent burden; employing appropriate methods of analysis, and ensuring the public availability of the data and documentation of the methods used to obtain the data. Within the constraints of resource availability, NCHS continually works to improve its data systems to provide information necessary for the formulation of sound public policy. As appropriate, NCHS seeks advice on its statistical program as a whole, including the setting of statistical priorities and on the statistical methodologies it uses. NCHS strives to meet the needs for access to its data while maintaining appropriate safeguards for the confidentiality of individual responses.

Three web links to background on data quality are below:

<http://www.cdc.gov/nchs/about/quality.htm>

http://www.cdc.gov/nchs/data/nhanes/nhanes_01_02/lab_b_generaldoc.pdf#search=%22quality%20control%20NHANES%22

http://www.cdc.gov/nchs/data/nhanes/nhanes_03_04/lab_c_generaldoc.pdf#search=%22quality%20NHANES%22

Data Limitations: Some limitations include that not all pesticides are included, it is a measure of exposure instead of risk, and there is a time-lag between EPA actions and the CDC's analysis of the data.

Error Estimate: There is the potential of identifying metabolites that comes from both a pesticide and another source.

New/Improved Data or Systems: Not known at this time.

References: Third National Report on Human Exposure to Environmental Chemicals 2005, CDC/National Center for Environmental Health/Environmental Health Laboratory
<http://www.cdc.gov/nchs/about/nhanes>

FY 2008 Performance Measure:

- **Average cost and average time to produce or update an Endangered Species Bulletin (PART efficiency)**

Performance Database: The Bulletins Live! application is enabled by a multi-user relational database system that maintains a permanent archive with dates of the draft and final content for each endangered species protection Bulletin that is created or updated in the system. When the Bulletins Live! application is made available to the public, EPA will take over the complete Bulletin production process, which is currently carried out by the United States Geological Survey (USGS) staff through an Interagency Agreement (see below). Additionally, tracking and summary reporting of all endangered species mitigation actions including the time between which a decision is made to issue a Bulletin and its availability to the public will be made available as a part of the OPP "PRISM" information system that is planned for development in FY 2007. This system will track the staff working on mitigation development and bulletin

production, and the time spent on these activities, allowing for a calculation of the cost per bulletin issued with Bulletins Live!

Data Source: The data necessary to track progress towards the targets for this measure are currently being collected by EPA. The Bulletins are being developed for EPA by the U.S. Geological Survey (USGS) Cartography and Publishing Program under an Interagency Agreement (IAG) with OPP. The data will be collected annually through the end-of-year report under the Interagency Agreement (IAG). The baseline year will be 2004 cost and time averages (\$4000.00 and 100 hours per Endangered Species Bulletin production or update).

Methods, Assumptions and Suitability: These Bulletins are a critical mechanism for ensuring protection of endangered and threatened species from pesticide applications. Bulletins are legally enforceable extensions to pesticide labels that include geographically specific use limitations for the protection of endangered species. The faster the Bulletins can be developed, the earlier the protections are available to endangered and threatened species. Similarly, the less it costs to produce the Bulletins, the more Bulletins can be produced within available budget and the greater the impact on saving endangered and threatened species.

This measure is calculated as follows:

$$100 - \left[\frac{\text{Sum of the costs to produce or update Endangered Species Bulletins in current 12 month period}}{\text{Sum of the costs to produce or update Endangered Species Bulletins in previous 12 month period}} \times 100 \right]$$
 This is intended to be a measure that captures improvements in current year cost per bulletin vs. previous year cost per bulletin.

$$100 - \left[\frac{\text{Sum of the time in hours to produce or update Endangered Species Bulletins in current 12 month period}}{\text{Sum of the time in hours to produce or update Endangered Species Bulletins in previous 12 month period}} \times 100 \right]$$

QA/QC Procedures: EPA adheres to its approved Quality Management Plan to ensure the overall quality of data in the Bulletins Live! system. Bulletins pass through a multi-level quality control and review process before being released to the public. After the initial Bulletin is created by trained staff in the Endangered Species Protection Program, the draft is automatically routed in the system to a senior staff member who reviews the information in the Bulletin as a quality control check. After this Agency review, Bulletins are then subject to review and comment by Regional and State regulatory partners responsible for different aspects of the field implementation program and Bulletin enforcement.

Data Quality Reviews: Data quality reviews for the Bulletins themselves are ongoing through the QA/QC methodology described above. Data quality reviews for components of the measure (time per bulletin and cost per bulletin) will be carried out by the Project Officers who manage the Bulletins Live! and PRISM systems.

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: The web-based Bulletins Live! system will facilitate the expedited production and delivery of endangered species protection Bulletins as compared to the 2004 baseline.

References:

Endangered Species Protection Program website and Bulletins Live!: <http://www.epa.gov/espp>;
QMP: Quality Management Plan for the Office of Pesticides Program, February 2006;
Endangered Species Act.

FY 2008 Performance Measure:

- **Cost per acre using reduced risk pest management practices compared to the grant and/or contract funds expended on environmental stewardship (PART efficiency)**

Performance Database: Strategic Agricultural Initiative (SAI) database contains the SAI grants funds and acreage data. We are going to track the number of acres, by particular crop, under reduced risk pest management that were part of a grant and/or contract. This database is currently on the web site of our cooperator, the American Farmland Trust. We are working to migrate this database to the EPA web site and then add the Pesticide Environmental Stewardship Program (PESP) data. The PESP data are those reported to EPA in grant reports. We look at the adoption rate of reduced risk pesticides and compare it to the cost of the grant. The data then are the acres impacted by the grant verses the amount of money spent.

Data Source: Reports from grantees and contractors will be used as well as available databases to track the adoption of safer pest management practices. Such data sources include the USDA National Agricultural Statistics Service's surveys, Doane Marketing Research data, and pesticide usage records provided by user groups. Agricultural pesticide user groups who are members of PESP frequently report their use of safer pest management practices as part of their annual reports

Methods, Assumptions and Suitability: Each grantee or contractor is required to provide reports on their project including the success of adoption of safer pest management practices. For SAI grants, the SAI Coordinator in each of the 10 EPA Regional Offices enters the results from the SAI grants into the SAI database. The SAI Coordinator at EPA Headquarters encourages the Regional Coordinators to do this in a timely fashion. EPA Headquarters' Project Officer of the PESP grant serves the same function, making sure interim and final reports are provided to EPA without delay. EPA will track the adoption of new practices using publicly and commercially available databases, such as those described above. At times, data also are available on the adoption of a particular biopesticide or other reduced risk pesticide from the registrant of that product or from a user group that is adopting the new technology. This data can be very useful in tracking adoption in the early stages or in cases where little data is available, such as for minor crops. Data supplied by registrants can be compared to information supplied to

EPA under Section 7 of FIFRA to identify major errors, but it would be hard to identify minor errors or flaws in the data.

QA/QC Procedures: EPA QA/QC procedures are followed for each grant and/or contract where environmental data is being collected. Part of the Agency's Quality Management Plan requires that grantees and/or contractors have a QA/QC program in place before the grant/contract is awarded. A staff member, typically the project officer for the grant or contract, typically often conducts onsite visits every year to ensure QA/QC procedures is being followed. Typically, field trials and demonstrations are visited by the Regional SAI Coordinators or the EPA grantee for PESP work. Data from other internal and external sources, where available, will be used to determine the validity of the information provided by registrants and grower groups.

Data Quality Reviews: Staff and management of the Environmental Stewardship Branch and the Regional SAI Coordinators will perform data quality reviews under the leadership of program QA/QC officers.

Data Limitations: Major pesticide usage surveys will miss minor usages. Voluntary reporting by grantees and grower groups on the use of their reduced risk pest management practices introduces more error/bias than if a statistically valid sample were taken. However, there aren't funds for this kind of sample survey.

Error Estimate: Error estimates for established databases such as Doane and NASS surveys are documented by these organizations in their survey reports. Audits of grants is intended to reduce errors, but best estimates may be relied upon when statistically valid samples are not available.

New/Improved Data or Systems: EPA will improve the existing SAI database by including PESP data or will create a comparable database to track the PESP data.

References: <http://www.epa.gov/oppbppd1/PESP/> and <http://www.aftresearch.org/sai/collaborations>

FY 2008 Performance Measures:

- **Register reduced risk pesticides including biopesticides (annual measure)**
- **Number of new (active ingredients) conventional pesticides registered (New Chemicals)(annual measure)**
- **Number of conventional new uses registered (New Uses)(annual measure)**
- **Percent reduction in review time for registration of conventional pesticides (PART efficiency measure)**
- **Maintain timeliness of Section 18 Emergency Exemption Decisions**
- **Reduce registration decision times for reduced risk chemicals**

Performance Database: The OPPIN (Office of Pesticide Programs Information Network) consolidates various pesticides program databases. It is maintained by the EPA and tracks regulatory data submissions and studies, organized by scientific discipline, which are submitted

by the registrant in support of a pesticide's registration. In addition to tracking decisions in OPPIN, manual counts are also maintained by the office on the registrations of reduced risk pesticides. Results for reduced risk pesticides, new active conventional ingredients, and new uses have been reported since 1996. The results are calculated on a fiscal year (FY) basis. For antimicrobial new uses, results have been reported since FY 2004 on a FY basis. Both S18 timeliness and reduced risk decision times were reported on a FY basis for the first time in FY 2005.

Data Source: Pesticide program reviewers update the status of the submissions and studies as they are received and as work is completed by the reviewers. The status indicates whether the application is ready for review, the application is in the process of review, or the review has been completed.

Methods, Assumptions and Suitability: The measures are program outputs which when finalized, represent the program's statutory requirements to ensure that pesticides entering the marketplace are safe for human health and the environment, and when used in accordance with the packaging label present a reasonable certainty of no harm. While program outputs are not the best measures of risk reduction, registration outputs do provide a means for reducing risk by ensuring that pesticides entering the marketplace meet the latest health standards, and as long as used according to the label are safe.

QA/QC Procedures: A reduced risk pesticide must meet the criteria set forth in Pesticide Registration Notice 97-3, September 4, 1997. Reduced risk pesticides include those which reduce the risks to human health; reduce the risks to non-target organisms; reduce the potential for contamination of groundwater, surface water or other valued environmental resources; and/or broaden the adoption of integrated pest management strategies, or make such strategies more available or more effective. In addition, biopesticides are generally considered safer (and thus reduced risk). All registration actions must employ sound science and meet the Food Quality Protection Act (FQPA) new safety standards. All risk assessments are subject to public and scientific peer review. The office adheres to its Quality Management Plan (May 2000) in ensuring data quality and that procedures are properly applied.

Data Quality Review: These are program outputs. EPA staff and management review the program outputs in accordance with established policy for the registration of reduced-risk pesticides as set forth in Pesticide Regulation Notice 97-3, September 4, 1997.

Data Limitations: None. All required data must be submitted for the risk assessments before the pesticide is registered. If data are not submitted, the pesticide is not registered. As stated above, a reduced risk pesticide must meet the criteria set forth in PRN 97-3 and all registrations must meet FQPA safety requirements. If a pesticide does not meet these criteria, it is not registered. If an application for a reduced risk pesticide does not meet the reduced risk criteria, it is reviewed as a conventional active ingredient.

Error Estimate: N/A

New/Improved Data or Systems: The OPPIN (Office of Pesticide Programs Information

Network), which consolidates various pesticides program databases, will reduce the processing time for registration actions.

References: FIFRA Sec 3(c)(5); FFDCA Sec 408(a)(2); EPA Pesticide Registration Notice 97-3, September 4, 1997; Food Quality Protection Act (FQPA) 1996; OPP Quality Management Plan, May 2000); Endangered Species Act.

FY 2008 Performance Measures:

- **Cumulative percent of Reregistration Eligibility Decisions (REDs) completed (PART measure)**
- **Number of Product Reregistration decisions issued (annual measure)**
- **Reduction in time required to issue Reregistration Eligibility Decisions (PART efficiency measure)**

Performance Database: The OPPIN (Office of Pesticide Programs Information Network) consolidates various EPA program databases. It is maintained by the EPA and tracks regulatory data submissions and studies, organized by scientific discipline, which are submitted by the registrant in support of a pesticide's reregistration. In addition to tracking decisions in OPPIN, manual counts are also maintained by the office on the reregistrations decisions. Decisions are logged in as the action is completed, both for final decisions and interim decisions. REDs and product reregistration decisions have been reported on a FY basis since FY 1996. Reduction in decision times for REDs will be reported on an FY basis in FY 2005. Reduction in cost per RED will be reported in FY 2008.

For this measure, the number of FTEs is the surrogate for cost. The baseline is 11.5 FTEs per reregistration decision completed. The measure is derived by taking the total FTE devoted to reregistration activities, as reported in OPP's Time Accounting Information System (TAIS), divided by the number of reregistration decisions completed.

Data Source: EPA's Pesticides Program staff and managers.

Methods, Assumptions and Suitability: The measures are program outputs which represent the program's statutory requirements to ensure that pesticides entering the marketplace are safe for human health and the environment and when used in accordance with the packaging label present a reasonable certainty of no harm. While program outputs are not the best measures of risk reduction, they do provide a means for reducing risk in that the program's safety review prevents dangerous pesticides from entering the marketplace.

QA/QC Procedures: All registration actions must employ sound science and meet the Food Quality Protection Act (FQPA) new safety standards. All risk assessments are subject to public and scientific peer review. The office adheres to the procedures for quality management of data as outlined in its QMP approved May 2000.

Data Quality Review: Management reviews the program counts and signs off on the decision document.

Data Limitations: None known.

Error Estimate: N/A. There are no errors associated with count data.

New/Improved Data or Systems: The OPPIN, which consolidates various pesticides program databases, will contribute to reducing the processing time for reregistration actions.

References: EPA Website <http://www.epa.gov/pesticides> EPA Annual Report 2002 EPA Number 735-R-03-001; 2003 Annual Performance Plan OPP Quality Management Plan, May 2000; Endangered Species Act.

FY 2008 Performance Measure:

- **Percentage of Acre Treatments with Reduced Risk Pesticides (PART measure)**

Performance Database: EPA uses an external database, Doane Marketing Research data, for this measure. The data have been reported for trend data since FY 2001 on an FY basis.

Data Source: Primary source is Doane Marketing Research, Inc. (a private sector research database). The database contains pesticide usage information by pesticide, year, crop use, acreage and sector.

Methods, Assumptions and Suitability: A reduced-risk pesticide must meet the criteria set forth in Pesticide Registration Notice 97-3, September 4, 1997. Reduced-risk pesticides include those which reduce the risks to human health; reduce the risks to non-target organisms; reduce the potential for contamination of groundwater, surface water, or other valued environmental resources; and/or broaden the adoption of integrated pest management strategies or make such strategies more available or more effective. In addition, biopesticides are generally considered safer (and thus reduced-risk). EPA's statistical and economics staff review data from Doane. Information is also compared to prior years for variations and trends as well as to determine the reasons for the variability.

Doane sampling plans and QA/QC procedures are available to the public at their website. More specific information about the data is proprietary and a subscription fee is required. Data are weighted and a multiple regression procedure is used to adjust for known disproportionalities (known disproportionality refers to a non proportional sample, which means individual respondents have different weights) and ensure consistency with USDA and state acreage estimates.

QA/QC Procedures: All registration actions must employ sound science and meet the Food Quality Protection Act (FQPA) new safety standard. All risk assessments are subject to public and scientific peer review. Doane data are subject to extensive QA/QC procedures, documented

at their websites. In ensuring the quality of the data, EPA's pesticide program adheres to its Quality Management Plan (QMP), approved May 2000.

The main customers for Doane pesticide usage data are the pesticide registrants. Since those registrants know about sales of their own products, they have an easy way to judge the quality of Doane provided data. If they considered the quality of the data to be poor, they would not continue to purchase the data.

Data Quality Review: Doane data are subject to extensive internal quality review, documented at the website. EPA's statistical and economics staff review data from Doane. Information is also compared to prior years for variations and trends as well as to determine the reasons for the variability. For some crops and states, comparisons are also made with a more limited pesticide usage database from the National Agricultural Statistics of USDA.

Data Limitations: Doane data are proprietary; thus in order to release any detailed information, the Agency must obtain approval. There is a data lag of approximately 12-18 months, due to the collection of data on a calendar year (CY) basis, time required for Doane to process data, lead time for EPA to purchase and obtain data, plus the time it takes to review and analyze the data within the office's workload.

Error Estimate: Error estimates differ according to the data/database and year of sampling. This measure is compiled by aggregating information for many crops and pesticides. While considerable uncertainty may exist for a single pesticide on a single crop, pesticide use data at such a highly aggregated level are considered quite accurate. Doane sampling plans and QA/QC procedures are available to the public at their website. More specific information about the data is proprietary and a subscription fee is required. Data are weighted and multiple regression procedure is used to adjust for known disproportionalities and ensure consistency with USDA and state acreage estimates

New/Improved Data or Systems: These are not EPA databases; thus improvements are not known in any detail at this time.

References: EPA Website; EPA Annual Report; Annual Performance Plan and Annual Performance Report, <http://www.ams.usda.gov/science/pdp/download.htm>; Doane Marketing Research, Inc.: <http://www.doanemr.com>; <http://www.usda.gov/nass/pubs> and <http://www.usda.nass/nass/nassinfo>; FFDCA Sec 408(a)(2); EPA Pesticide Registration Notice 97-3, September 4, 1997; Endangered Species Act.

FY 2008 Performance Measure:

- **Cumulative number of chemicals with proposed, interim and/or final values for Acute Exposure Guideline Levels (AEGLs). (PART measure)**

Performance Database: There is no database. Performance is measured by the cumulative number of chemicals with "Proposed", "Interim", and/or "Final" AEGL values as published by the National Academy of Sciences (NAS). The results are calculated on a fiscal year basis.

Data Source: EPA manages a Federal Advisory Committee Act (FACA) committee that reviews short term exposure values for extremely hazardous chemicals. The supporting data, from both published and unpublished sources and from which the AEGL values are derived, are collected, evaluated, and summarized by FACA Chemical Managers and Oak Ridge National Laboratory's scientists. Proposed AEGL values are published for public comment in the Federal Register. After reviewing public comment, interim values are presented to the AEGL Subcommittee of the National Academy of Sciences (NAS) for review and comment. After review and comment resolution, the National Research Council under the auspices of the National Academy of Sciences (NAS) publishes the values as final.

Methods, Assumptions, and Suitability: The work of the National Advisory Committee's Acute Exposure Guideline Levels (NAC/AEGL, formally chartered under the Federal Advisory Committee Act) adheres to the 1993 U.S. National Research Council/National Academies of Sciences (NRC/NAS) publication *Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances*. NAC/AEGL, in cooperation with the National Academy of Sciences' Subcommittee on AEGLs, have developed standard operating procedures (SOPs), which are followed by the program. These have been published by the National Academy Press and are referenced below. The cumulative number of AEGL values approved as "proposed" and "interim" by the NAC/AEGL FACA Committee and "final" by the National Academy of Sciences represents the measure of performance. The work is assumed to be completed at the time of final approval of the AEGL values by the NAS. AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposures ranging from 10 min to 8 h. Three levels—AEGL_1, AEGL_2, and AEGL_3—are developed for each of five exposure periods (10 min, 30 min, 1 h, 4 h, and 8 h) and are distinguished by varying degrees of severity of toxic effects (detection, disability, and death respectively). They provide a high degree of flexibility for their use in chemical emergency response, planning, and prevention for accidental or terrorist releases of chemicals. The AEGL Program pools the resources of US and international stakeholders with needs for this information in a cost effective program which develops one set of numbers for use by all stakeholders (DOD, DOT, DOE, States, The Netherlands and others in the international community).

QA/QC Procedures: QA/QC procedures include public comment via the Federal Register process; review and approval by the FACA committee; and review and approval by the NAS/AEGL committee and their external reviewers.

Data Quality Review: N/A

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: This is the first time acute exposure values for extremely hazardous chemicals have been established according to a standardized process and put through such a rigorous review.

References: Standing Operating Procedures for Developing Acute Exposure Guideline Levels for Hazardous Chemicals, National Academy Press, Washington, DC 2001 (<http://www.nap.edu/books/030907553X/html/>). NRC (National Research Council). 1993. Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances. Washington, DC: National Academy Press.
AEGL Program website at <http://www.epa.gov/oppt/aegl>

FY 2008 Performance Measure:

- **Percent reduction from prior year in total EPA cost per chemical for which Proposed AEGL value sets are developed (annual measure)**

Performance Database: Complete budgetary information at the program and project level is maintained in EPA's Finance Central database. This database and other financial records are consulted each time the program reports performance results. In addition to Finance Central, OPPT maintains records on AEGL program income, expenditures and carry over from one year to the next; and on the number of FTE's allocated to the program. Information from these records is aggregated to determine total EPA cost per chemical for which a proposed AEGL data set is developed. The denominator of this ratio – number of proposed AEGL data sets – is tracked in separate records maintained by the program. Specifically, there is an Access database containing the approval dates for proposed AEGL values and a Wordperfect file, organized by fiscal year, that is used to record events in the AEGL process as they occur.

Data Source: EPA manages a Federal Advisory Committee Act (FACA) committee that reviews short term exposure values for extremely hazardous chemicals. The supporting data, from both published and unpublished sources and from which the AEGL values are derived, are collected, evaluated, and summarized by FACA Chemical Managers and Oak Ridge National Laboratory's scientists. Proposed AEGL values are published for public comment in the Federal Register and then referred to the National Academies of Science (NAS) for further review and action. Although proposed AEGLs are not considered final until so designated by the NAS, the proposed values are suitable for many purposes. This performance measure is tied to proposed values rather than to final ones because actions through the proposal stage of the AEGL process are largely under EPA's control whereas subsequent action to finalize the AEGL values is largely a matter within NAS jurisdiction.

Methods, Assumptions, and Suitability: The methods involved in developing and reporting on this performance measure largely consist of simple computational steps performed on data relating to AEGL cost and accomplishment. For example, it is necessary to track the number of FTE's assigned to the AEGL program and then find the associated labor cost by multiplying by standard cost-of-living factors. Likewise, the extramural cost associated with managing the program is determined by pulling cost and budgetary data from the relevant databases as described above, multiplying by 70% as an estimate of the proportion of staff and contractor resources devoted to proposed AEGL development, summing as needed, and adjusting for inflation. One assumption underlying these computations is that 70% is a reasonable estimate of the proposal stage's share of total cost devoted to AEGLs. The methods, simple as they are, seem highly suitable for the kinds of measurement to be performed.

QA/QC Procedures: QA/QC procedures for AEGL development include public comment via the Federal Register process; review and approval by the FACA committee; and review and approval by the NAS/AEGL committee and their external reviewers. AEGL documents are formally reviewed for QC purposes by designated contractors and EPA staff at critical junctures utilizing detailed checklists. Cost information from available records is also subjected to appropriate QA/QC controls.

Data Quality Review: This is a new performance measure and, therefore, there is no developed track record of review and correction. However, appropriate oversight of the measurement process will be provided. Information developed in the course of measurement will be presented to senior management within OPPT to address potential concerns related to technical outcomes and to provide quality oversight.

Data Limitations: No specific data limitations have been identified with respect to the information relied upon in developing or reporting this measure.

Error Estimate: Not applicable. This measure does not require inferences from statistical samples and therefore there is no estimate of statistical error.

New/Improved Data or Systems: Access databases, spreadsheets and other files are maintained and improved on an ongoing basis. A new database is being developed to document rationales used to develop AEGL values. This new database should enhance the efficiency of AEGL development.

References: Please see www.epa.gov/oppt/aegl

FY 2008 Performance Measures:

- **Number of cases of children aged 1-5 years with elevated blood lead levels (> or = 10 ug/dL) (PART measure)**
- **Percentage difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old. (PART measure)**

Performance Database: Data from the Centers for Disease Control and Prevention's (CDC) National Health and Nutrition Examination Survey (NHANES) is recognized as the primary database in the United States for national blood lead statistics. NHANES is a probability sample of the non-institutionalized population of the United States. Data are collected on a calendar year basis, and is currently released to the public in two year sets. The most current release is the data set for 2003-2004, released in June 2006. Blood lead levels are measured for participants who are at least one year old. The survey collects information on the age of the participant at the time of the survey.

Data Source: The National Health and Nutrition Examination Survey is a survey designed to assess the health and nutritional status of adults and children in the U.S. The survey program

began in the early 1960s as a periodic study, and continues as an annual survey. The survey examines a nationally representative sample of approximately 5,000 men, women, and children each year located across the U.S. CDC's National Center for Health Statistics (NCHS) is responsible for the conduct of the survey and the release of the data to the public. NCHS and other CDC centers publish results from the survey, generally in CDC's Morbidity and Mortality Weekly Report (MMWR), but also in scientific journals. In recent years, CDC has published a National Exposure report based on the data from the NHANES. The most current National Exposure report was released June 2006, and is available at the web site <http://www.cdc.gov/exposurereport/>. The next National Exposure report is expected in mid 2007.

Methods, Assumptions, and Suitability: Detailed interview questions cover areas related to demographic, socio-economic, dietary, and health-related questions. The survey also includes an extensive medical and dental examination of participants, physiological measurements, and laboratory tests. Specific laboratory measurements of environmental interest include: metals (e.g. lead, cadmium, and mercury), VOCs, phthalates, organophosphates (OPs), pesticides and their metabolites, dioxins/furans, and polyaromatic hydrocarbons (PAHs). NHANES is unique in that it links laboratory-derived biological markers (e.g. blood, urine etc.) to questionnaire responses and results of physical exams. For this performance measure, NHANES has been recognized as the definitive source. Estimates of the number of children 1-5 years with an elevated blood lead level based on NHANES have been published by CDC, most recently in May 2005. (See <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5420a5.htm>). Analytical guidelines issued by NCHS provide guidance on how many years of data should be combined for an analysis.

QA/QC Procedures: Background documentation is available at the NHANES web site at <http://www.cdc.gov/nchs/nhanes.htm>. The analytical guidelines are available at the web site http://www.cdc.gov/nchs/about/major/nhanes/nhanes2003-2004/analytical_guidelines.htm.

Data Quality Reviews: CDC follows standardized survey instrument procedures to collect data to promote data quality, and data are subjected to rigorous QA/QC review. Additional information on the interview and examination process can be found at the NHANES web site at <http://www.cdc.gov/nchs/nhanes.htm>.

Data Limitations: NHANES is a voluntary survey and selected persons may refuse to participate. In addition, the NHANES survey uses two steps, a questionnaire and a physical exam. There are sometimes different numbers of subjects in the interview and examinations because some participants only complete one step of the survey. Participants may answer the questionnaire but not provide the more invasive blood sample. Special weighting techniques are used to adjust for non-response. Seasonal changes in blood lead levels cannot be assessed under the current NHANES design. Because NHANES is a sample survey, there may be no children with elevated blood lead levels in the sample, but still some children with elevated blood lead levels in the population.

Error Estimate: Because NHANES is based on a complex multi-stage sample design, appropriate sampling weights should be used in analyses to produce estimates and associated measures of variation. Recommended methodologies and appropriate approaches are addressed

in the analytical guidelines provided at the NHANES web site http://www.cdc.gov/nchs/about/major/nhanes/nhanes2003-2004/analytical_guidelines.htm.

New/Improved Data or Systems: NHANES has moved to a continuous sampling schedule, scheduled release of data, and scheduled release of National Exposure reports by CDC.

References: 1) the NHANES web site, <http://www.cdc.gov/nchs/nhanes.htm>; 2) the National Exposure report web site, <http://www.cdc.gov/exposurereport/>; 3) MMWR article with the most recent estimate of the number of children with elevated blood lead levels, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5420a5.htm>; 4) NHANES Analytical Guidelines, http://www.cdc.gov/nchs/about/major/nhanes/nhanes2003-2004/analytical_guidelines.htm.

FY 2008 Performance Measure:

- **Annual percentage of lead-based paint certification and refund applications that require less than 40 days of EPA effort to process (PART efficiency measure)**

Performance Database: The National Program Chemicals Division (NPCD) in the Office of Pollution Prevention and Toxics (OPPT) maintains the Federal Lead-Based Paint Program (FLPP) database, an electronic database of applications for certification by individuals and firms and applications for accreditation by training providers in states and tribal lands administered by a Federal lead program. The database provides a record of all applications for certification or accreditation for Federally-managed lead programs and the actions on those applications. The database is augmented by hard copy records of the original applications.

Data Source: The FLPP database is available internally to EPA Headquarters and Regional lead program staff who process the applications or oversee the processing. The database is maintained on an EPA Research Triangle Park (RTP), North Carolina server. Access to the database is granted by the Lead, Heavy Metals, and Inorganics Branch (LHMIB) in NPCD. Overall maintenance of the database and periodic improvements are handled by a contractor, currently ICF Consulting, located in Fairfax, Virginia. Data entry of application data is conducted by a second contractor, currently Optimus Corporation, located in Silver Spring, Maryland. Optimus Corporation maintains the file of the original applications. Each EPA Regional office maintains a file of copies of the original applications for that region.

Methods, Assumptions and Suitability: The number of applications for certification in Federally-managed states and tribal lands is approximately 3000 per year. Each of these applications is processed. Certification is issued if all criteria are met. Some applications may be returned to the applicant or withdrawn by the applicant. For the applications that are fully processed, the length of time for EPA processing can be determined from date fields in the FLPP database. Accordingly, a census of all the fully processed applications for certification can be conducted, and the percentage of applications that took more than the prescribed number of days (e.g., 40) of EPA effort to process can be computed based on this census. The census is conducted every six months, and the annual percentage calculated appropriately from the six month percentages.

QA/QC Procedures: NPCD has an approved Quality Management Plan in place, dated January 2005. Applications and instructions for applying for certification and accreditation are documented and available at the web site <http://www.epa.gov/lead/pubs/traincert.htm>. Documentation for the FLPP database is maintained internally at EPA and is available upon request.

Data Quality Reviews: The FLPP database is an internal EPA database, maintained for the purpose of processing and tracking applications. The database is interactive, and operational usage in processing applications by Headquarters and the Regional offices provides ongoing quality reviews.

Data Limitations: Applications that were returned to the applicant or withdrawn by the applicant are out of scope for this performance measure.

Error Estimate: There is no sampling error in this performance measure, because it is based on a census of all applicable records.

New/Improved Data or Systems: The FLPP database is scheduled to undergo improvements in the next few years. The performance measurement system will help determine if there is a change in timeliness after the improvements are implemented.

References: 1) Quality Management Plan for National Program Chemicals Division, January 2005; 2) FLPP database documentation; 3) URL for Applications and Instructions, <http://www.epa.gov/lead/pubs/traincert.htm>.

FY 2008 Performance Measure:

- **Reduction in the current year production-adjusted risk-based score of releases and transfers of toxic chemicals (PART measure)**

Performance Database: The Risk Screening Environmental Indicators (RSEI) Model uses annual reporting from individual industrial facilities along with a variety of other information to evaluate chemical emissions and other waste management activities. RSEI incorporates detailed data from EPA's Toxics Release Inventory (TRI) and Integrated Risk Information System, the U.S. Census, and many other sources. Due to a two year TRI data lag, performance data will be unavailable for the FY 2006 Annual Performance Report. The data are based on calendar year.

Data Source: The RSEI model incorporates data on chemical emissions and transfers and facility locations from EPA's Toxics Release Inventory; chemical toxicity data from EPA's Integrated Risk Information System; stack data from EPA's AIRS Facility Subsystem and National Emissions Trends Database and the Electric Power Research Institute; meteorological data from the National Climatic Data Center; stream reach data from EPA's Reach File 1 Database; data on drinking water systems from EPA's Safe Drinking Water Information System; fishing activity data from U.S. Fish and Wildlife; exposure factors from EPA's Exposure Factor Handbook; and population data from the U.S. Census Bureau.

Methods, Assumptions and Suitability: The RSEI Model generates unique numerical values known as “Indicator Elements” using the factors pertaining to surrogate dose, toxicity and exposed population. Indicator Elements are unitless (like an index number, they can be compared to one-another but do not reflect *actual* risk), but proportional to the modeled relative risk of each release (incrementally higher numbers reflect greater estimated risk). Indicator Elements are risk-related measures generated for every possible combination of reporting facility, chemical, release medium, and exposure pathway (inhalation or ingestion). Each Indicator Element represents a unique release-exposure event and together these form the building blocks to describe exposure scenarios of interest. These Indicator Elements are summed in various ways to represent the risk-related results for releases users are interested in assessing. RSEI results are for comparative purposes and only meaningful when compared to other scores produced by RSEI. The measure is appropriate for year-to-year comparisons of performance. Depending on how the user wishes to aggregate, RSEI can address trends nationally, regionally, by state or smaller geographic areas.

QA/QC Procedures: TRI facilities self-report release data and occasionally make errors. TRI has QC functions and an error-correction mechanism for reporting such mistakes. EPA updates off-site facility locations on an annual basis using geocoding techniques.

Data Quality Reviews: RSEI depends upon a broad array of data resources, each of which has gone through a quality review process tailored to the specific data and managed by the providers of the data sources. RSEI includes data from the Toxics Release Inventory (TRI), Integrated Risk Information System (IRIS), U.S. Census, etc. All were collected for regulatory or programmatic purposes and are of sufficient quality to be used by EPA, other Federal agencies, and state regulatory agencies. Over the course of its development, RSEI has been the subject of three reviews by EPA’s Science Advisory Board. The RSEI model has undergone continuous upgrading since the 1997 SAB Review. Toxicity weighting methodology was completely revised and subject to a second positive review by SAB (in collaboration with EPA’s Civil Rights program); air methodology was revised and groundtruthed using New York data to demonstrate high confidence; water methodology has been revised in collaboration with EPA’s Water program. When the land methodology has been reviewed and revised, EPA will have completed its formal, written response to the 1997 SAB Review.

Data Limitations: RSEI relies on data from a variety of EPA and other sources. TRI data may have errors that are not corrected in the standard TRI QC process. In the past, RSEI has identified some of these errors and corrections have been made by reporting companies. Drinking water intake locations are not available for all intakes nationwide.

In coastal areas, Publicly Owned Treatment Works (POTW) water releases may go directly to the ocean, rather than nearby streams. EPA is in the process of systematically correcting potential errors regarding POTW water releases. These examples are illustrative of the data quality checks and methodological improvements that are part of the RSEI development effort. RSEI values are recalculated on an annual basis, and, resources permitting, all data sources are updated annually.

Error Estimate: In developing the RSEI methodology, both sensitivity analyses and

groundtruthing studies have been used to address model accuracy (www.epa.gov/opptintr/rsei/). For example, groundtruthing of the air modeling performed by RSEI compared to site-specific regulatory modeling done by the state of New York showed virtually identical results in both rank order and magnitude. However, the complexity of modeling performed in RSEI, coupled with un-quantified data limitations, limits a precise estimation of errors that may either over- or under-estimate risk-related results.

New/Improved Data or Systems: The program regularly tracks improvements in other Agency databases (e.g., SDWIS and Reach File databases) and incorporates newer data into the RSEI databases. Such improvements can also lead to methodological modifications in the model. Corrections in TRI reporting data for all previous years are captured by the annual updates of the RSEI model.

References: The methodologies used in RSEI were first documented for the 1997 review by the EPA Science Advisory Board. The Agency has provided this and other updated technical documentation on the RSEI Home Page.

U.S. EPA Office of Pollution Prevention and Toxics, Risk Screening Environmental Indicators Model (RSEI) Home Page. Internet: <http://www.epa.gov/opptintr/rsei/>

U.S. EPA Office of Pollution Prevention and Toxics, Risk Screening Environmental Indicators Model, Peer Reviews. Internet: <http://www.epa.gov/oppt/rsei/pubs/faqs.html>

U.S. EPA Office of Pollution Prevention and Toxics, RSEI Methodology Document. Internet: <http://www.epa.gov/opptintr/rsei/pubs/method2004.pdf>

U.S. EPA Office of Pollution Prevention and Toxics, RSEI User's Manual. Internet: http://www.epa.gov/opptintr/rsei/pubs/users_manual.pdf

U.S. EPA Office of Pollution Prevention and Toxics, RSEI Fact Sheet,. Internet: http://www.epa.gov/opptintr/rsei/pubs/factsheet_v2-1.pdf

FY 2008 Performance Measure:

- **Percent of chemicals or organisms introduced into commerce that do not pose unreasonable risks to workers, consumers or environment (annual measure)**

Performance Database: Implementation of this measure will require the use of several EPA databases: Confidential Business Information Tracking System (CBITS), pre-manufacture notice (PMN) CBI Local Area Network (LAN), 8(e) database (ISIS), and the Focus database. The following information from these databases will be used collectively in applying this measure:

- CBITS: Tracking information on Pre-Manufacture Notices (PMNs) received;
- PMN CBI LAN: Records documenting PMN review and decision, assessment reports on chemicals submitted for review. In addition, the information developed for each PMN is kept in hard copy in the Confidential Business Information Center (CBIC);

- **ISIS:** Data submitted by industry under the Toxic Substances Control Act (TSCA) Section 8(e). TSCA 8(e) requires that chemical manufacturers, processors, and distributors notify EPA immediately of new (e.g. not already reported), unpublished chemical information that reasonably supports a conclusion of substantial risk. TSCA 8(e) substantial risk information notices most often contain toxicity data but may also contain information on exposure, environmental persistence, or actions being taken to reduce human health and environmental risks. It is an important information-gathering tool that serves as an early warning mechanism;
- **Focus:** Rationale for decisions emerging from Focus meeting, including decisions on whether or not to drop chemicals from further review.

Measurement results are calculated on a fiscal-year basis and draw on relevant information received over the 12-month fiscal year.

Data Source: The Office of Pollution Prevention and Toxics (OPPT), the office responsible for the implementation of the TSCA, will compare data submitted under TSCA Section 8(e) with previously-submitted new chemical review data (submitted under TSCA Section 5 and contained in the PMN) to determine the number of instances in which EPA’s current PMN review practices would have failed to prevent the introduction of new chemicals or microorganisms into commerce which pose an unreasonable risk to workers, consumers or the environment. Inconsistencies between the 8(e) and previously-submitted new chemical review data will be evaluated by applying the methods and steps outlined below to determine whether the inconsistencies signify an “unreasonable risk.”

Methods, Assumptions, and Suitability: EPA’s methods for implementing this measure involve determining whether EPA’s current PMN review practices would have failed to prevent the introduction of chemicals or microorganisms into commerce that pose an unreasonable risk to workers, consumers or the environment, based on comparisons of 8(e) and previously-submitted new chemical review data. The “unreasonable risk” determination is based on consideration of (1) the magnitude of risks identified by EPA, (2) limitations on risk that result from specific safeguards applied, and (3) the benefits to industry and the public expected to be provided by the new chemical substance. In considering risk, EPA looks at anticipated environmental effects, distribution and fate of the chemical substance in the environment, patterns of use, expected degree of exposure, the use of protective equipment and engineering controls, and other factors that affect or mitigate risk. These are the steps OPPT will follow in comparing the 8(e) data with the previously-submitted new chemical review data.

1. Match all 8(e) submissions in the 8(e) database with associated TSCA Section 5 notices. TSCA Section 5 requires manufacturers to give EPA a 90-day advance notice (via a pre-manufacture notice or PMN) of their intent to manufacture and/or import a new chemical. The PMN includes information such as specific chemistry identity, use, anticipated production volume, exposure and release information, and existing available test data. The information is reviewed through the New Chemicals Program to determine whether action is needed to prohibit or limit manufacturing, processing, or use of a chemical.
2. Characterize the resulting 8(e) submissions by the PMN review phase. For example, whether the 8(e) submissions were received: a) before the PMN notice was received by EPA, b) during the PMN review process, or c) after the PMN review was completed.
3. Review of 8(e) data will focus on 8(e)s received after the PMN review period was completed.

4. Comparison of hazard evaluation developed during PMN review with associated 8(e) submission.
5. Report on the accuracy of the initial hazard determination
6. Revised risk assessment developed to determine if there was an unreasonable risk based on established risk assessment and risk management guidelines and whether current PMN Review practices would have detected and prevented that risk.

The databases used and the information retrieved are directly applicable to this measurement and therefore suitable for measurement purposes.

QA/QC Procedures: OPPT has in place a signed Quality Management Plan (“Quality Management Plan for the Office of Pollution Prevention and Toxics; Office of Prevention, Pesticides and Toxic Substances;” June 2003) and will ensure that those standards and procedures are applied to this effort.

Data Quality Reviews: This is a new performance measure and, therefore, there is no developed track record of review and correction. However, appropriate oversight of the measurement process will be provided. Information developed in the course of measurement will be presented to senior management within OPPT to address potential concerns related to technical outcomes and to provide quality oversight. In addition, the National Pollution Prevention and Toxics Advisory Council (NPPTAC), which consists of external experts providing independent review and direction to OPPT, has provided comment on this measure.

Data Limitations: There are some limitations of EPA’s review which result from differences in the quality and completeness of 8(e) data provided by industry; for example, OPPT cannot evaluate submissions that do not contain adequate information on chemical identity. The review is also affected in some cases by a lack of available electronic information. In particular the pre-1996 PMN cases are only retrievable in hard copy and may have to be requested from the Federal Document Storage Center. This may introduce some delays to the review process.

Error Estimate: Not applicable. This measure does not require inferences from statistical samples and therefore there is no estimate of statistical error. OPPT will review all 8(e) submissions received in the year with corresponding previously-submitted new chemical review data, and not a sample of such submissions.

New/Improved Data or Systems: OPPT is currently developing an integrated, electronic system that will provide real time access to prospective PMN review.

References: OPPT New Chemicals Program

<http://www.epa.gov/opptintr/newchems/>, TSCA Section 8(e) – Substantial Risk

“Quality Management Plan for the Office of Pollution Prevention and Toxics; Office of Prevention, Pesticides and Toxic Substances;” June 2003.

FY 2008 Performance Measure:

- **Percent change from prior year in cost savings due to new chemical pre-screening (annual measure)**

Performance Database: Implementation of this measure will require the use of several EPA databases, all of which play a role in tracking Premanufacture Notices (PMNs) and the action EPA decides to take on such notices. The principal databases involved in PMN tracking, with separate identification of prescreened chemicals, are:

- Chemical Control Division tracking database: Records basic identifying and status information on each PMN submitted to EPA, including name of submitter, identity of technical contact at company, actions taken by EPA. Enables chemicals to be tracked quickly and easily through the PMN review process.
- Management Information Tracking System (MITS): Contains non-CBI data on all PMNs, including chemical identification and actions taken by EPA.
- New Chemicals Focus Meeting database: Contains information on the decisions reached at Focus meetings, including whether to drop chemical from further review, to pursue regulation under the Toxic Substances Control Act (TSCA) Section 5(e) to prohibit or limit activities associated with the new chemical or to pursue regulation under a non-5(e) Significant New Use Rule (SNUR) to require manufacturers, importers and processors to notify EPA at least 90 days before beginning any activity that EPA has designated as a “significant new use,” or, alternatively, to refer the chemical for full-scale standard review. It is critical to know the number and percentage of PMNs going to these outcomes in order to perform base year cost savings calculations in support of the cost savings measure.
- Sustainable Futures prescreening tracking databases: Contain information on PMNs which display evidence of chemical prescreening using OPPT screening methods, including data on the types of assessments and model evaluations performed by the submitter, and contact information on Sustainable Futures participants including date(s) attended EPA training.
- Measurement results are calculated on a fiscal year basis and draw upon relevant information collected over the 12-month fiscal year.

Data Source: The major data sources involved in this measurement are fully described under “Performance Database,” above. No external data sources play a significant role in the calculation of measurement results.

Methods, Assumptions and Suitability: EPA measures percent change in cost savings as a result of chemical prescreening relative to a base year by: 1) determining the base year pre-screening rate and base year cost savings; 2) calculating the current year prescreening rate (prescreened PMNs as a percentage of total PMNs); and 3) determining the actual percent change in cost savings resulting from prescreening by multiplying the base year cost savings by

the ratio of the current year prescreening rate to the base year prescreening rate. Finally, the actual percent change in cost savings relative to the base year can be compared to the target percent change of 6.67%. This procedure assumes, quite reasonably, that cost savings from prescreening will generally change in rough proportion to the change in the prescreening rate.

The methods used in calculating base year information are as follows:

- Determine base year prescreening rate by checking the data systems described above to obtain the number of new prescreened chemicals going through the PMN review process and the total number of chemicals undergoing such review. The prescreening rate is simply the ratio of prescreened chemicals to total chemicals undergoing PMN review.

Determine base year cost savings by:

- Checking the relevant databases to determine the number and percentage of base year PMNs that are (a) prescreened PMNs and (b) non-prescreened PMNs
- Estimating the number of prescreened PMNs that would have gone to regulation or standard review if there were no prescreening program (this is done by multiplying the number of prescreened PMNs by the percentage of non-prescreened PMNs that go to one of the “post-Focus meeting outcomes” of standard review, regulation under TSCA Section 5(e), or issuance of a non-5(e) SNUR
- Subtracting the number of actual prescreened PMNs going to one of the post-Focus meeting outcomes from the projected number derived in the previous step, is the estimated number of PMNs avoiding a post-Focus meeting outcome. The rationale is that some pre-screened PMNs still end up requiring post-Focus action, but at a lower rate than for PMNs which are not pre-screened. The hypothetical number estimated in this step, the difference between the projected and actual numbers of pre-screened PMNs requiring a post-Focus meeting outcome, represents the number of cases to have avoided post-Focus action as a result of prescreening.
- Multiplying the number of cases estimated to have avoided post-Focus action as a result of pre-screening by unit cost factors to obtain estimates of the cost savings realized by avoidance of post-Focus meeting outcomes resulting from prescreening (unit cost factors are generated separately from information/estimates maintained by EPA on the labor hours (Agency and contractor) associated with each post-Focus meeting outcome and the EPA cost per labor hour)
- Summing the cost savings realized by avoidance of specified post-Focus meeting outcomes to arrive at total cost savings for the base year.

QA/QC Procedures: OPPT has in place a signed Quality Management Plan (“Quality Management Plan for the Office of Pollution Prevention and Toxics; Office of Prevention, Pesticides and Toxic Substances,” June 2003) and will ensure that those standards and procedures are applied to this effort.

Data Quality Reviews: This is a new performance measure and, therefore, there is no developed record of review and correction. However, appropriate oversight of the measurement process will be provided. Information developed in the course of measurement will be presented to senior management within OPPT to address potential concerns related to technical outcomes and to provide quality oversight.

Data Limitations: No specific data limitations have been identified with respect to the measure presented here, except to the extent that the measure requires certain assumptions, discussed above, in addition to inputs of hard data.

Error Estimate: Not applicable. This measure does not require inferences from statistical samples and therefore there is no estimate of statistical error.

New/Improved Data or Systems: OPPT is currently developing an integrated electronic system that will provide real time access to prospective PMN review.

References: Additional information on EPA’s New Chemicals program for TSCA Section 5 can be found at <http://www.epa.gov/oppt/newchems/index.htm>. Information on the Sustainable Futures Initiative is available at <http://www.epa.gov/opptintr/newchems/pubs/sustainablefutures.htm>.

FY 2008 Performance Measure:

- **Percentage of High Production Volume (HPV) chemicals identified as priority concerns through assessment of Screening Information Data Set (SIDS) and other information with risks eliminated or effectively managed (annual measure)**

Performance Database: EPA will track the number of agency actions (e.g., regulatory, voluntary), targeting risk elimination or management of high production volume chemicals, using internal program databases or the Agency’s Regulation and Policy Information Data System (RAPIDS). Many types of Agency actions qualify as risk management or elimination actions. Issuance of a Significant New Use Rule (SNUR) under TSCA is an example of regulatory action that can be tracked by the RAPIDS Promulgation Data field. An example of a non-regulatory risk management/elimination action is a written communication from EPA to chemical manufacturers/users indicating the Agency’s concerns and suggesting but not requiring actions to address chemical risks (chemical substitution, handling protections, etc.). These actions would be tracked by monitoring internal communications files. The results are calculated on a calendar-year basis.

Data Source: RAPIDS stores official Agency data on progress of rule-making and other policy program development efforts. Data are supplied by EPA programs managing these efforts. For

voluntary actions not tracked in RAPIDS, performance data are tracked internally by program managers.

Methods, Assumptions and Suitability: As EPA identifies HPV chemicals that are priorities for risk management action, following protocols currently under development, the Agency will commence regulatory or non-regulatory actions to address identified risks. All such actions will be recorded for the HPV chemical(s) subject to those actions, enabling EPA to report on progress in responding to the risks on a chemical- or chemical-category-specific basis. This annual performance measures (APM) commits the Agency to eliminate or effectively manage all such risks. Using data contained in RAPIDS, in the case of regulatory risk management action, EPA's progress towards meeting this APM will be documented by the sequence of formal regulatory development steps documented in that system. Where risk management action takes nonregulatory form, such as issuance of advisory communications to chemical manufacturers or users, progress toward meeting this APM will be tracked by internal files documenting such actions. The definition of risk is being addressed in the development of the protocols used in the HPV screening/prioritization process.

QA/QC Procedures: RAPIDS entries are quality assured by senior Agency managers.

Data Quality Reviews: RAPIDS entries are reviewed by EPA's Regulatory Management Staff.

Data Limitations: N/A

Error Estimate: N/A

New/Improved Performance Data or Systems: N/A

References: None

FY 2008 Performance Measure:

- **The cumulative number of chemicals for which VCCEP data needs documents are issued by EPA in response to industry-sponsored Tier I risk assessments. (annual measure)**

Performance Database: Internal VCCEP program activity tracking database. Data needs documents are issued by EPA to conclude work on all Tier I submissions. Documents may indicate data are sufficient to reasonably demonstrate that children are not subject to significant risks. Documents also may indicate that additional assessment and associated data development are required, commencing Tier 2 work. The results are calculated on a calendar-year basis.

Data Source: Formal EPA files of VCCEP Tier I data needs communications. Data needs are also subject to peer review, results of which are posted and made public on the Toxicology Excellence for Risk Assessment website found at <http://www.tera.org/peer/MeetingReports.html>

Methods, Assumptions and Suitability: Information is tracked directly through internal record-keeping systems. No models or assumptions or statistical methods are employed.

QA/QC Procedures: The VCCEP program operates under Information Quality Guidelines as found at <http://www.epa.gov/quality/informationguidelines/>

Data Quality Reviews: The VCCEP program operates under Information Quality Guidelines as found at <http://www.epa.gov/quality/informationguidelines/>

Data Limitations: None known

Error Estimate: N/A

New/Improved Performance Data or Systems: None

References: <http://www.epa.gov/chemrtk/vccep/index.htm>

FY 2008 Performance Measure:

- **Number of risk management plan audits completed**

Performance Database: There is no database for this measure.

Data Source: OSWER's Office of Emergency Management implements the Risk Management Program under Clean Air Act section 112(r). Facilities are required to prepare Risk Management Plans (RMPs) and submit them to EPA. In turn, HQ provides appropriate data to each Region and delegated State so that they have the RMP data for their geographical area. The Regions and delegated States conduct audits. About ten States have received delegation to operate the RMP program. These delegated States report audit numbers to the appropriate EPA Regional office so it can maintain composite information on RMP audits.

Methods, Assumptions and Suitability: Data are collected and analyzed by surveying EPA's Regional offices to determine how many audits of facilities' risk management plans (RMPs) have been completed.

QA/QC Procedures: Data are collected from states by EPA's Regional offices, with review at the Regional and Headquarters' levels.

Data Quality Review: Data quality is evaluated by both Regional and Headquarters' personnel.

Data Limitations: Data quality is dependent on completeness and accuracy of the data provided by state programs.

Error Estimate: Not calculated.

New/Improved Data or Systems: N/A

Reference: N/A

FY 2008 Performance Measure:

- **Number of countries completing phase out of leaded gasoline**
- **Number of countries introducing low sulfur in fuels**

Performance Database: UNEP Partnership Clearinghouse; This performance measure tracks the number of countries that have phased out lead in gasoline. EPA works with the United Nations Environment Programme (UNEP) and other partners in the global Partnership for Clean Fuels and Vehicles to document the phase out of leaded gasoline and the reduction of sulfur levels in fuels worldwide. UNEP manages the Partnership Clearinghouse, which tracks the status of lead phase-out efforts and the status of sulfur reduction efforts in each country. The Partnership Clearinghouse also documents and verifies each country's implementation of lead phase out and sulfur reduction programs. The Partnership's data on lead phase-out can be found on the Partnership website at: <http://www.unep.org/PCFV/Data/data.htm#leaded>. The Partnership's data on sulfur levels in fuels, by country, can be found on the Partnership website at: <http://www.unep.org/PCFV/Data/data.htm#sulphur>

Data Source: The United Nations Environment Programme serves as the Clearinghouse for the Partnership for Clean Fuels and Vehicles and maintains a database of the status of country lead-phase out. Information from the database is posted on the Partnership website and updated periodically by UNEP -- at least every 6 months. UNEP collects the data from public and private sector partners and contacts government and industry experts in each country for verification before the data are posted. This data collection and cross-checking provide the best currently available information on country lead phase-out status and levels of sulfur.

Methods, Assumptions and Suitability: There is currently no available database on international leaded gasoline sales data or market penetration of alternative fuels, nor is there any international database on sulfur levels in fuels. Because of this gap, the Partnership made the decision to track the number of countries that have phased out lead and reduced sulfur because the data are more easily verifiable.

QA/QC Procedures: Experts at the Partnership for Clean Fuels and Vehicles verify the information in the Partnership Clearinghouse by contacting key people from industry and government within each country.

Data Quality Reviews: N/A

Data Limitations: There currently is no available database on leaded gasoline sales data or market penetration of alternative fuels. The Partnership made the decision to track the number of countries that have phased out lead and reduced sulfur in fuels, because the data are more easily verifiable. Fuel changes and lead phase-out are implemented in different ways in different countries, mostly by legislation. But having the legislation in place does not mean that lead has been eliminated from gasoline. Many countries have set dates for lead phase-out and sulfur

reduction; however the Partnership tracks actual progress toward implementation.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: For additional information on the Partnership for Clean Fuels and Vehicles, see the Partnership website at <http://www.unep.org/PCFV>

For more information concerning the database for phase-out of leaded gasoline, see <http://www.unep.org/PCFV/Data/data.htm#leaded>

For additional information on sulfur levels, see <http://www.unep.org/PCFV/Data/data.htm#sulphur>

GOAL 4 OBJECTIVE 2

FY 2008 Performance Measures:

- **Number of Brownfields properties assessed [PART performance]**
- **Number of jobs leveraged from Brownfields activities**
- **Amount of cleanup and redevelopment funds leveraged at Brownfields properties. [PART performance]**
- **Acres of Brownfields properties made ready for reuse [PART performance]**

Performance Database: The Assessment Cleanup and Redevelopment Exchange System (ACRES) tracks the performance information for the above measures.

Key fields related to performance measures include, but are not limited to:

Property Acreage
Assessment Completion Date
Cleanup Required
Cleanup Completion Date
Funding Leveraged
Jobs Leveraged
Number of Participants Completing Training
Number of Participants Obtaining Employment

Performance measure data is tracked by fiscal year and will not be available for the FY 08 PAR; data will be available for the FY 09 PAR.

Data Source: Data are extracted from quarterly reports and property profile forms (<http://www.epa.gov/brownfields/pubs/rptforms.htm>) prepared by assessment, cleanup, revolving loan fund (RLF), job training, and State and Tribal 128 Voluntary Response Program

cooperative agreement award recipients. Information on Targeted Brownfields Assessments is collected from EPA Regions.

Methods, Assumptions and Sustainability: Cooperative agreement recipients report performance data in quarterly reports and property profile forms. Data are reviewed by Regional EPA grant managers to verify activities and accomplishments. Given the reporting cycle and the data entry/QA period, there is typically a six month data lag for ACRES data.

Note that accomplishments reported by Brownfields Assessment Grantees, Brownfields Cleanup Grantees, Brownfields Revolving Loan Fund Grantees, Brownfields Job Training Grantees, Regional Targeted Brownfields Assessments, and State and Tribal 128 Voluntary Response Program Grantees all contribute towards these performance measures. "Number of Brownfields properties assessed" is an aggregate of assessments completed with Assessment Grant funding, Regional Targeted Brownfields Assessment funding, and State and Tribal 128 Voluntary Response Program funding. "Number of Brownfields properties cleaned up" is an aggregate of properties cleaned up by RLF Grantees, Cleanup Grantees, and State and Tribal 128 Voluntary Response Program Grantees. "Number of Acres Made Ready for Reuse" is an aggregate of acreage assessed that does not require cleanup and acreage cleaned up as reported by Assessment Grantees, Regional Targeted Brownfields Assessments, Cleanup Grantees, RLF Grantees, and State and Tribal 128 Voluntary Response Program Grantees. "Number of cleanup and redevelopment jobs leveraged" is the aggregate of jobs leveraged by Assessment, Cleanup and RLF Grantees. "Amount of cleanup and redevelopment funds leveraged at Brownfields properties" is the aggregate of funds leveraged by Assessment, Cleanup and RLF Grantees. "Percentage of Brownfields job training trainees placed" is based on the "Number of Participants Completing Training" and the "Number of Participants Obtaining Employment" reported by Job Training Grantees.

QA/QC Procedures: Data reported by cooperative award agreement recipients are reviewed by EPA Regional grant managers for accuracy and to ensure appropriate interpretation of performance measure definitions. Reports are produced monthly with detailed data trends analysis.

Data Quality Reviews: No external reviews.

Data Limitations: All data provided voluntarily by grantees.

Error Estimate: NA

New/Improved Data or Systems: The Brownfields Program updated the Property Profile Form in FY 2006 to improve data collection and to expand the community of grantees completing the form. The Program anticipates launching an online reporting form in FY 2007; this system will be phased in over the next several years.

References: For more information on the Brownfields program, see *Reusing Land and Restoring Hope: A Report to Stakeholders from the US EPA Brownfields Program* (http://www.epa.gov/brownfields/news/stake_report.htm); assessment demonstration pilots and

grants (http://www.epa.gov/brownfields/assessment_grants.htm); cleanup and revolving loan fund pilots and grants (<http://www.epa.gov/brownfields/rlflst.htm>); job training pilots and grants (<http://www.epa.gov/brownfields/job.htm>); and cleanup grants (http://www.epa.gov/brownfields/cleanup_grants.htm).

FY 2008 Performance Measure:

- **Cumulative number of communities with potential environmental justice concerns that achieve significant measurable environmental and/or public health improvement through collaborative problem-solving strategies.**

Performance Database: The Office of Environmental Justice is developing a database to collect the data for this measure.

Data Source: Semi-annual reports provided by recipients of EPA cooperative agreements in the amount of \$100,000 over a three year project period. These reports are collected and analyzed by the individual technical advisors of each of the projects. The data reported will be analyzed by EPA to determine measurable improvements which result from the projects. These projects vary from reductions in solid waste to reductions in exposure to lead paint. In addition to the semi-annual reporting requirements for the individual projects, the office will also conduct annual evaluations of each of the projects to validate results in the semi-annual reports.

Methods, Assumptions and Suitability: The method to be used to analyze and review the information will depend on the type of project but usually the baseline measures available at the time the project begins will be the starting point; changes to the baseline will be the measures of improvement in environmental and/or public health. The communities with environmental justice issues are defined as those impacted disproportionately by high and adverse exposure to environmental hazards.

QA/QC Procedures: Office of Environmental Justice Quality Management Plan, approved August 5, 2002. To ensure data accuracy and control, the following administrative controls are in place: (1) Report specifications for each project detailing how reported data are collected and calculated, and (2) Quality Assurance Project Plans (QAPP) for projects involving the collection of primary or secondary environmental data. Not all projects involve the collection of primary or secondary environmental data, however, and do not require a QAPP. In those cases, EPA relies fully on the project's reporting requirements and evaluation studies to construct the baselines and trends.

Data Quality Review: The Office of Environmental Justice performs an annual review of each project to verify the data supporting the performance measure. Typically, there are no published results.

Data Limitations: None

Error Estimate: NA

New/Improved Data or Systems: None

References: Office of Environmental Justice Quality Management Plan, approved August 5, 2002.

FY 2008 Performance Measures:

- **Additional people served per million dollars (US and Mexico federal expenditures)**
- **Number of additional homes provided adequate safe drinking water in the Mexican border area that lacked access to wastewater sanitation in 2003**
- **Number of additional homes provided adequate wastewater sanitation in the Mexican border area that lacked access to wastewater sanitation in 2003**

Performance Database: No formal EPA database. Performance is tracked and reported quarterly by the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADBank). Data fields are population served by and homes connected to potable water and wastewater collection and treatment systems.

Data Source: Data sources include U.S. population figures from the 2000 U.S. Census, data on U.S. and Mexican populations served and homes connected by "certified" water/wastewater treatment improvements from the BECC and data on projects funded from the NADBank.

Methods, Assumptions and Suitability: Summation of population from BECC and NADBank.

QA/QC Procedures: EPA Headquarters is responsible for evaluation of reports from BECC and NADBank on drinking water and wastewater sanitation projects. Regional representatives attend meetings of the certifying and financing entities for border projects (BECC and NADBank) and conduct site visits of projects underway to ensure the accuracy of information reported.

Data Quality Reviews: Regional representatives attend meetings of the certifying and financing entities for border projects (BECC and NADBank) and conduct site visits of projects underway to ensure the accuracy of information reported.

Data Limitations: None.

Error Estimate: The error estimate is the same rate accepted by the U.S. Census.

New/Improved Data or Systems: None.

References:

U.S. Department of Commerce, Bureau of the Census, (Washington, DC: U.S. Department of Commerce, 1990). *Instituto Nacional de Estadística, Geografía y Informática, Aguascalientes*, Total Population by State (1990).

Border Environment Cooperation Commission (BECC), Cd Juarez, Chih, and North American Development Bank (NADBank), (San Antonio, TX, 2002).

FY 2008 Performance Measure:

- **Clean-up five waste sites (two abandoned scrap tire sites and three abandoned hazardous waste sites) in the United-States-Mexico border region.**

Performance Database: The measure tracks the number of scrap tire piles and hazardous waste sites cleaned up in the U.S.-Mexico border region. To accomplish this, the EPA works in collaboration with the Mexican federal and state governments, border States, border tribes, local communities, NGOs, the private sector and others.

In the U.S., the EPA Office of International Affairs (OIA) coordinates the Border 2012 program and manages the Border 2012 Project Database, which contains information/data related to project implementation and progress made as submitted by project officers. Data include the name and location of hazardous waste sites, tire piles, plans and timelines for clean up, number of waste tires in the piles, number of tires removed/cleaned up, and dates for project start and end.

Indicator: Estimated Abandoned Waste Tire Piles in the Border Region

Outcome*:	<u>Site</u>	<u>Percent Removed</u>	<u>Original Number of Tires</u>
	El Centinella	77%	1,200,000
	Ciudad Juarez	20%	1,000,000

*As of December 2005

Data Source: The data on hazardous sites and scrap tire clean up comes from local government and contractors hired to conduct the clean up as submitted to SEMARNAT (Mexico), and EPA and as reported on the Indicators Report 2005.

Methods, Assumptions and Suitability: In cooperation with the various entities operating under the Border 2012 program, the Border Indicators Task Force (BITF) selects and develops environmental and performance indicators to communicate important information about the border region and to evaluate progress towards meeting Program goals and objectives. Each of the indicators presented in the 2005 report is classified according to the Driving Forces-Pressures-State-Impact-Response (DPSIR) Framework. DPSIR is based on the idea that Driving Forces such as socio-economic factors lead to natural or human-induced Pressures, which lead to a State, which generates Impacts (sub-divided into Exposure and Effect) that evoke Responses. The Response compartment feeds back into every other compartment, showing that interventions can occur at each point along the causal spectrum. For more information see the *Strategy for Indicator Development* (EPA 600/R-06/015 April 2006).

QA/QC Procedures:

Once the EPA receives information on the status of projects in a border community, EPA's subject and program experts contact key sources in the border area to verify data.

Data Quality Reviews: N/A

Data Limitations: Potential data limitations are: 1) Inconsistencies in methods of data collection, processing, etc., arising from work being done in a foreign location; 2) inaccuracies due to imprecise measurement and recording stemming from tire size and state (whole or in crumbs); and, 3) lags between data collection, reporting, and updating.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: Border 2012 Project Database: EPA-OIA-U.S.-Mexico Team
Program Framework: Border 2012: U.S.-Mexico Environmental Program – EPA-160-R-03-001
State of the Border Region. Indicators Report 2005 – EPA-160-R-06-001
Border 2012 Program Website: <http://www.epa.gov/border2012/>

FY 2008 Performance Measure:

- **Reduce the mean maternal blood levels of polychlorinated biphenyls (PCBs) and chlordane in indigenous populations in the Arctic.**

Performance Database: Two databases provide the baseline data in support of this performance measure, which tracks the response of human Arctic populations to programmatic efforts to reduce their exposure to priority Persistent Organic Pollutants (POPs) contamination in their environment. Between 1998 and 2002 the Arctic Monitoring and Assessment Program (AMAP) of the Arctic Council, with the participation of all eight Arctic nations, collected data on persistent organic pollutants and human health impacts in the Arctic Rim Region, including spatial and temporal trends of maternal blood concentrations of PCBs and chlordane in indigenous peoples.

Also between 1998 and 2002, an additional study was carried out on “Persistent Toxic Substances, Food Security and Indigenous Peoples of the Russian North”, which assisted AMAP to eliminate data gaps with respect to geographical scope. This study, issued in 2004, was a combined effort of the Global Environment Facility, UNEP, AMAP, and the Russian Association of the Indigenous Peoples of the North, Siberia and Far East.

Both studies documented the fact that Persistent Toxic Substances (PTS) such as PCBs and chlordane are transported to, and accumulate in, the Arctic Region. Data continue to be collected under the AMAP Program and evaluated for health impacts by the AMAP Human Health Experts Group consisting of representatives from all eight Arctic countries.

Both databases are maintained by the AMAP Secretariat in Oslo, Norway.

AMAP Assessment Reports are available at: www.amap.no
Persistent Toxic Substances, Food Security and Indigenous Peoples of the Russian North Report

is available at: www.amap.no/Resources/PTS_project.htm

Data Source: The Arctic Council, consisting of eight Arctic nations and Permanent Participants of Indigenous Peoples, participate in the collection, analysis, evaluation and reporting of results on priority pollutants such as PCBs and chlordanes. The data reports are posted on the Arctic Council website and shared with the Barents Euro-Arctic Council, the Nordic Council of Ministers, the United Nations Environment Program and others. EPA and other U.S. Federal Agencies such as NOAA and NIH participate in the collection and interpretation of the data.

Methods, Assumptions and Suitability: Analytical and statistical methods applied to the analysis and interpretation of data, were those methods approved by the European Union and the methods developed by the NIH, CDC and EPA. A standard analytical method used in these studies is high pressure liquid chromatography with electron capture. Statistical methods include regression analysis to look for association of health outcomes between the baby and the mothers and individual contaminants and mixtures of contaminants.

Maternal blood serum concentrations of PCBs and chlordanes in indigenous peoples of the Arctic were chosen because, in general, the most devastating impacts of exposure to these POPs are seen in infants exposed to them in utero or via their mother's milk. Additionally, there are no local manufacturing facilities or large point sources of these toxics; indigenous peoples have a limited subsistence diet of fish and mammals that bioaccumulate PCBs and chlordanes through transboundary transfer; and human health impacts can be directly correlated to the presence of these toxic compounds. Maternal blood serum was selected as the reference material since it is sensitive to changes in environmental concentrations, has a residence time of many years, and is transported through the umbilical cord blood from mother to fetus, providing clear relationship between contaminant levels and their impact on human health.

QA/QC Procedures: In the PTS study, a Regional Monitoring Center was selected by the project Steering Committee to perform analyses using international methodologies and strict QA/QC procedures. The AMAP study used recognized Data Centers such as the University of Alaska-Fairbanks, and the International Council for the Exploration of the Sea. These Data Centers were already operating using internationally-accepted QA/QC practices.

Data Quality Reviews: In the Arctic Environmental Assessment Reports of AMAP and PTS, over 140 contributing experts and 14 international organizations participated in a series of expert groups to review analytical data, data collection techniques, interpretation of results and health impacts. These expert groups were instrumental in identifying data gaps and weaknesses in the original AMAP assessments that were concurrently addressed by the PTS study. Such gaps included indigenous populations in remote regions of Russia, high Arctic Russian cities which originally did not participate in the AMAP studies, and military populations.

Data Limitations: The remote locations and limited populations of women of child-bearing age are a primary challenge. This is being addressed by a new Arctic Council Arctic Contaminants Action Program called the "Indigenous Peoples Community Action Initiative". Under this initiative, local sources of contamination, such as small amounts of improperly stored obsolete pesticides and PCBs, are identified and removed from the community. Environmental

educational programs are also implemented, particularly for women of child-bearing age and children, on how to identify and avoid these toxic contaminants. The time interval between data collection (blood serum) and posting on the AMAP database is approximately five months. There is very little variability in the sample collection techniques because the same doctors from the Northwest Public Health Research Center and Alaska Human Health Consortium are performing the data collection.

Error Estimate: Analytical procedures allow measurements in fractions of ug/l. The error bound for the performance estimate is +/- 5%.

New/Improved Data or Systems: Expanded database development is being performed under the new “Indigenous Peoples Community Action Initiative” (see “Data Limitations” above)

References:

AMAP, 2003. AMAP Assessment 2002: Human Health in the Arctic. Arctic Monitoring and Assessment Programme (AMAP), Oslo, Norway.
(<http://www.amap.no/Assessment/ScientificBackground.htm>)

Persistent Toxics Substances, Food Security and Indigenous Peoples of the Russian North: Final Report, Oslo 2004. (http://www.amap.no/Resources/PTS_project.htm)

Contaminants in Alaska - - Is America’s Arctic at Risk? Alaska Native Science Commission, Interagency Collaborative Paper, September 2000

Northern Contaminants Program-Canada ([http:// www.inac.gc.ca/ncp/abt/bro_e.html](http://www.inac.gc.ca/ncp/abt/bro_e.html))

Bertazzi, P.A., Industrial Disease Standards Panel Report, Ontario Canada, 1987

Dallaire et. Al., 2002. Environmental Health Perspectives Volume 110, Number 8, August 2002.

Stewart P, Darvill T, Lonky E, Reihman J, Pagano J, and Bush B. 1999. Assessment of prenatal exposure of PCBs from maternal consumption of Great Lakes fish: an analysis of PCB pattern and concentration. Environ Res 80(Suppl 2):87-96.

Yakushiji, T., Watanabe, I., Kuwabara, K., Tanaka, R., Kashimoto, T., Kunita, N., Hara, I. Rate of decrease and half-life of polychlorinated biphenyls (PCBs) in the blood of mothers and their children occupationally exposed to PCBs. Archives of Environmental Contamination and Toxicology (1984). vol.13. p.341-345.

GOAL 4 OBJECTIVE 3

FY 2008 Performance Measures:

- **Acres of habitat protected or restored in National Estuary Program (NEP) study areas [Ocean and Coastal PART measure]**

- Acres of coastal habitat, including tidal wetlands, dunes, riparian buffers, and freshwater wetlands restore or protected [Long Island Sound]
- Program dollars per acre of habitat protected or restored [Ocean and Coastal PART efficiency measure]

Performance Database: The Office of Wetlands Oceans and Watersheds has developed a standardized format for data reporting and compilation, defining habitat protection and restoration activities and specifying habitat categories. The key field used to calculate annual performance is habitat acreage. Annual results have been reported since 2000 for the NEP (results are calculated on a fiscal year basis).

Information regarding habitat protection is accessible on a web page that highlights habitat loss/alteration, as well as the number of acres protected and restored by habitat type <http://www.epa.gov/owow/estuaries/pivot/overview/intro.htm>. This allows EPA to provide a visual means of communicating NEP performance and habitat protection and restoration progress to a wide range of stakeholders and decision-makers.

Data Source: NEP documents such as annual work plans (which contain achievements made in the previous year), annual progress reports and other implementation tracking materials, are used to document the number of acres of habitat restored and protected. EPA aggregates the data provided by each NEP to arrive at a national total for the entire Program. EPA is confident that the data presented are as accurate as possible. Each NEP reviews the information prior to reporting to EPA. In addition, EPA conducts regular reviews of NEP implementation to help ensure that information provided in these documents is accurate, and progress reported is in fact being achieved.

Methods, Assumptions and Suitability: Measuring the number of acres of habitat restored and protected may not directly correlate to improvements in the health of the habitat reported, or of the estuary overall, but it is a suitable measure of on-the-ground progress. Habitat acreage does not necessarily correspond one-to-one with habitat quality, nor does habitat (quantity or quality) represent the only indicator of ecosystem health. Nevertheless, habitat acreage serves as an important surrogate and a measure of on-the-ground progress made toward EPA's annual performance goal of habitat protection and restoration in the NEP. EPA has defined and provided examples of A protection@ and A restoration@ activities for purposes of measure tracking and reporting (see citation for the PIVOT website in references below.) "Restored and protected" is a general term used to describe a range of activities. The term is interpreted broadly to include created areas, protected areas resulting from acquisition, conservation easement or deed restriction, submerged aquatic vegetation coverage increases, permanent shellfish bed openings, and anadromous fish habitat increases.

The NEP "Habitat Acres Protected or Restored" efficiency measure will be calculated by dividing the total ocean and coastal protection program dollars by the total NEP acres protected or restored. The measure is based on the habitat data collected by the NEPs, as described above and reported in the annual habitat measure, and the total program dollars, which is the sum of the NEP/Coastal budget (including the additional funds for Long Island Sound), the Marine Pollution budget, and the program match as reported by the NEPs.

QA/QC Procedures: Primary data are prepared by the staff of the NEP based on their own reports and from data supplied by other partnering agencies/organizations (that are responsible for implementing the action resulting in habitat protection and restoration). The NEP staff are requested to follow EPA guidance to prepare their reports, and to verify the numbers. EPA then confirms that the national total accurately reflects the information submitted by each program. EPA actions are consistent with data quality and management policies.

Data Quality Review: No audits or quality reviews conducted yet.

Data Limitations: Current data limitations include: information that may be reported inconsistently (based on different interpretations of the protection and restoration definitions), acreage that may be miscalculated or misreported, and acreage that may be double counted (same parcel may also be counted by partnering/implementing agency or need to be replanted multiple years). In addition, measuring the number of acres of habitat restored and protected may not directly correlate to improvements in the health of the habitat reported (particularly in the year of reporting), but is rather a measure of on-the-ground progress made by the NEPs.

Error Estimate: No error estimate is available for this data.

New/Improved Data or Systems: NEPs provide latitude and longitude data (where possible) for each project. These data are then mapped to highlight where these projects are located in each NEP study area. Not only does this assist both the individual NEP and EPA in obtaining a sense of geographic project coverage, but it provides a basis from which to begin exploring cases where acreage may be double-counted by different agencies. An on-line reporting system—NEPORT-- has been developed for the NEPs= use that will assist in tracking habitat projects. EPA has taken steps to align NEPORT data fields with those of the National Estuarine Restoration Inventory (NERI) and with the President's Wetlands Initiative, developed for interagency use.

References: Aggregate national and regional data for this measurement, as well as data submitted by the individual National Estuary Programs, is displayed numerically, graphically, and by habitat type in the Performance Indicators Visualization and Outreach Tool (PIVOT). PIVOT data are publicly available at <http://www.epa.gov/owow/estuaries/pivot/overview/intro.htm>. The Office of Water Quality Management Plan (July 2001) is available on the Intranet at <http://intranet.epa.gov/ow/infopolicy.html>.

FY 2008 Performance Measure:

- **By 2008, working with partners, achieve a net increase of 100,000 acres of wetlands per year with additional focus on biological and functional measures and assessment of wetland condition.**

Performance Database: The U.S. Fish and Wildlife Service produces information on the type and extent of the Nation's wetlands and deepwater habitats. The Emergency Wetland Resources Act of 1986 requires the Service to conduct status and trend studies of the Nation's wetlands, and

report the results to Congress each decade.. To date the Fish and Wildlife Service has produced four such documents. On Earth Day 2004, President Bush announced a wetlands initiative that established a federal policy beyond “no net loss” of wetlands. As part of that same Earth Day message, the President directed the Service to accelerate the completion of the status and trends and to undertake this study at more frequent intervals. This information is used by Federal, State, and local agencies, academic institutions, U.S. Congress, and the private sector.

The status and trends report is designed to provide recent and comprehensive estimates of the abundance of wetlands in the 48 conterminous States. This status and trends report indicates whether there is an actual increase in wetland acreage or if wetlands are continuing to decrease. Up-to-date status and trends information is needed to periodically evaluate the efficacy of existing Federal programs and policies, identify national or regional wetland issues, and increase public awareness of and appreciation for wetlands.

The last status and trends report¹⁶ provided the most recent and comprehensive estimates of the current gains and losses for different types of wetlands in the United States on public and private lands from calendar year 1998 to 2004. In calendar year 1997, there were an estimated 105.5 million acres of wetlands in the conterminous United States. In calendar year 2004 107.7 million acres of wetlands were estimated. Of this total, approximately 102.4 million acres (95 percent) are freshwater wetlands and 5.3 million acres (5 percent) are saltwater wetlands. Although the report shows that overall gains in wetland acres exceeded overall losses from 1998 through 2004 (approximately 32,000 acres/yr), this gain is primarily attributable to an increase in unvegetated freshwater ponds, some of which (such as aquaculture ponds) may not function as wetlands and others of which may have varying functional value. The Report also notes the following trends in other wetland categories: freshwater vegetated wetlands declined by 0.5%, a smaller rate of loss than in preceding years; and estuarine vegetated wetlands declined by 0.7%, an increased rate of loss from the preceding years. The Status and Trends Report does not assess the quality or condition of wetlands. EPA will continue working with FWS and other federal agencies to refine the methodology used in preparing future reports, to subdivide current wetland categories, to provide further clarity and information on the types of wetlands that are found on the landscape and to describe the functions and values they provide. In addition EPA is preparing to undertake a National wetland condition study that is scheduled for completion in 2013.

Data Source: The National Status and Trends Report is developed and published by the U.S. Fish and Wildlife Service. This is the only Federal study that provides statistically valid estimates with a published standard error for all wetlands in the conterminous United States. Aerial imagery is the primary data source, and it is used with reliable collateral data such as topographic maps, coastal navigation charts, published soil surveys, published wetland maps, and State, local or regional studies. A random number of sites are also field verified. All photography is cataloged, numbered, tagged, and traced in a database management system.

For each plot, aerial imagery is interpreted and annotated in accordance with procedures published by the Fish and Wildlife Service. The results are compared with previous era imagery,

¹⁶ Dahl, T.E. 2006. Status and trends of wetlands in the conterminous United States 1998 to 2004. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 112pp.

and any changes recorded. The differences between the data sets are analyzed and a statistical estimate of the change is produced.

The five major kinds of wetlands are: 1) freshwater (or palustrine), 2) saltwater (or estuarine), 3) riverine, 4) lacustrine (or lakes and other deepwater habitats), and 5) marine wetlands. For analysis and reporting purposes, these types of wetlands were further divided into subcategories such as freshwater forested wetland, freshwater emergent wetland, estuarine and marine intertidal wetlands.

Methods, Assumptions and Suitability: An interagency group of statisticians developed the design for the national status and trends study published in 2000. The study was based on a scientific probability sample of the surface area of the 48 coterminous States. The area sampled was about 1.93 billion acres and the sampling did not discriminate based on land ownership. The study used a stratified, simple random sampling design. About 754,000 possible sample plots comprised the total population. Geographic information system software was used to organize the information of about 4,682 random sample plots. The plots were examined with the use of remote sensed data in combination with field work. Estimates of change in wetlands were made over a specific time period.

QA/QC Procedures: The Service has developed and implemented quality assurance measures that provide appropriate methods to take field measurements, ensure sample integrity and provide oversight of analyses, which includes reporting of procedural and statistical confidence levels. The objective was to produce comprehensive, statistically valid acreage estimate of the Nation's wetlands. Because of the sample-based approach, various quality control and quality assurance measures were built into the data collection, review, analysis, and reporting stages. This includes field verification of the plots. Six Federal agencies assist with field verification work.

Data Quality Reviews: Not Applicable

Data Limitations: Certain habitats were excluded because of the limitations of aerial imagery as the primary data source to detect wetlands. This was consistent with previous wetland status and trends studies conducted by FWS.

Error Estimate: Estimated procedural error ranged from 4 to 6 percent of the true values when all quality assurance measures have been completed. Procedural error was related to the ability to accurately recognize and classify wetlands both from multiple sources of imagery and on the ground evaluations. Types of procedural errors were missed wetlands, inclusion of upland as wetland, misclassification of wetlands, or misinterpretation of data collection protocols. The amount of procedural error is usually a function of the quality of the data collection conventions; the number, variability, training and experience of data collection personnel; and the rigor of any quality control or quality assurance measures.

New/Improved Data or Systems: Advances in computerized cartography were used to improve data quality and geospatial integrity. Newer technology allowed the generation of existing digital plot files at any scale to overlay directly over an image base.

References:

<http://wetlands.fws.gov/index.html>

<http://wetlands.fws.gov/bha/SandT/SandTReport.html>

http://wetlands.fws.gov/Pubs_Reports/publi.htm

FY 2008 Performance Measure:

- **Annually, beginning in FY04 and in partnership with the Corps of Engineers and states, achieve no net loss of wetlands in the Clean Water Act Section 404 regulatory program**

Performance Database: Since 1989, the goal of the Clean Water Act Section 404 program has been no net loss of wetlands.

Historically, the Corps has collected limited data on wetlands losses and gains in its Regulatory Analysis and Management System (RAMS) permit tracking database. The Corps has compiled national Section 404 wetland permitting data for the last 10 years reflecting acres of wetland impacts avoided (through the permit process), acres permitted for impacts, and acres mitigated. However, limitations in methods used for data collection, reporting and analysis resulted in difficulties in drawing reliable conclusions regarding the effects of the Section 404 program.

Data Source: Data included in RAMS is generally collected by private consultants hired by permit applicants or Corps Regulatory Staff. Data input is generally done by Corps staff.

Methods, Assumptions and Suitability: RAMS was designed to be an administrative aid in tracking permits, thus it lacks many of the fields necessary to adequately track important information regarding wetland losses and gains. Also, the database was modified differently for each of the 38 Corps Districts making national summaries difficult. Furthermore, the database is also proprietary making it difficult to retrofit without utilizing its original developers.

QA/QC Procedures: Historically, there has not been a high level of QA/QC with regard to data input into RAMS. Its antiquated format and numerous administrative fields discourage use. Lack of standard terms and classification also make all aspects of data entry problematic.

Data Quality Reviews: Independent evaluations published in 2001 by the National Academy of Sciences (NAS) and the General Accounting Office (GAO) provided a critical evaluation of the effectiveness of wetlands compensatory mitigation (the restoration, creation, or enhancement of wetlands to compensate for permitted wetland losses) for authorized losses of wetlands and other waters under Section 404 of the Clean Water Act. The NAS determined that available data was insufficient to determine whether or not the Section 404 program was meeting its goal of no net loss of either wetland area or function. The NAS added that available data suggested that the program was not meeting its no net loss goal. Among its suite of recommendations, the NAS noted that wetland area and function lost and regained over time should be tracked in a national database and that the Corps should expand and improve quality assurance measures for data entry.

Data Limitations: As previously noted, RAMS currently provides the only national data on wetlands losses and gains in the Section 404 Program. Also, as previously noted, there are a number of concerns regarding the conclusions that can be drawn from these numbers. Data quality issues include:

1. Inability to separate restoration, creation, enhancement and preservation acreage from the aggregate "mitigation" acreage reported;
2. Lack of data regarding how much designated mitigation acreage was actually undertaken, and how much of that total was successful;
3. Lack of data regarding how much of the permitted impacts actually occurred; and
4. Limitations on identifying acres "avoided," because the figure is only based on the difference between original proposed impacts and impacts authorized. Often, permit applicants who are aware of the 404 program's requirements to avoid and minimize impacts to wetlands, make initial site selection and site design decisions that minimize wetland impacts prior to submitting a permit application. Such avoidance decisions benefit applicants, as their applications are more likely to be accepted and processed with minor changes. This behavioral influence that the program engenders is difficult to capture and quantify, but contributes considerable undocumented "avoided" impacts.

Error Estimate: Not applicable

New/Improved Data or Systems: The EPA and the Corps have acknowledged the need for improved 404 tracking. The Corps is currently piloting a new national permit tracking database called ORM (Operation and maintenance business information link, Regulatory Module) to replace its existing database (RAMS). The Corps is partnering with EPA to ensure that the version of ORM that is ultimately deployed will adequately track wetlands and other aquatic resource losses and mitigation. ORM 1.0 has already been deployed in approximately half of the Corps' 38 districts. The Corps expects to deploy ORM 1.0 in the remaining districts in Fall 2006. Also during Fall 2006, Corps plans to beta test ORM 2.0 in selected Districts before upgrading all Districts to ORM 2.0 by the first quarter of 2007. This should enable national reporting in early 2008. Unlike ORM 1.0, ORM 2.0 will have expanded GIS capabilities and additional mandatory data fields for impact and mitigation data. EPA, other federal and state agencies, as well as the public will also have expanded access to data in ORM 2.0 via a system of web-services and web-mapping tools.

ORM 2.0 is being designed to provide improved tracking regarding:

- Type of impacts (i.e., work type)
- Type, quantity and location of aquatic resources impacted (Using Cowardin classification system)
- Type, quantity and location of aquatic resource mitigation (Using Cowardin classification system)
- Type and quantity of mitigation by method (i.e., restoration, creation, enhancement, or preservation)
- Differentiating stream mitigation (in linear feet) from wetlands mitigation (in acres)
- Spatial tracking via GIS enhancements for both impact and mitigation sites (*planned*)

- Functional losses (debits) at the impact site and functional gains at the mitigation site (credits) if assessment tool is available and applied

FY 2008 Performance Measure:

- **Prevent water pollution and protect aquatic ecosystems so that overall ecosystem health of the Great Lakes is improved**

Performance Database: USEPA's Great Lakes National Program Office (GLNPO) will collect and track the eight (8) components of the index and publish the performance results as part of annual reporting under the Government Performance and Results Act (GPRA) and as online reporting of GLNPO's monitoring program, <http://epa.gov/glnpo/glindicators/index.html> . Extensive databases for the indicator components are maintained by GLNPO (phosphorus concentrations, contaminated sediments, benthic health, fish tissue contamination), by binational agreement with Environment Canada (air toxics deposition), and by local authorities who provide data to the USEPA (drinking water quality, beach closures). A binational team of scientists and natural resource managers is working to establish a long term monitoring program to determine extent and quality of coastal wetlands.

Data Source: Data for the index components are tracked internally and generally reported through the State of the Lakes Ecosystem Conference (SOLEC) process. The document, "State of the Great Lakes 2005 -A Technical Report," presents detailed indicator reports prepared by primary authors, including listings of data sources. Depending on the indicators, data sources may include U.S. and Canadian federal agencies, state and provincial agencies, municipalities, research reports and published scientific literature. Information from the following indicators is used to evaluate the Index components:

Coastal Wetlands group of indicators:

Coastal Wetland Invertebrate Community Health
Coastal Wetland Fish Community Health
Coastal Wetland Amphibian Diversity and Abundance
Coastal Wetland Area by Type
Coastal Wetland Plant Community Health
Effects of Water Levels Fluctuations

Phosphorus Concentrations and Loadings

Area of Concern Sediment Contamination (*This component is not included in SOLEC. Information from reports of contaminated sediment remediation is collected by USEPA-GLNPO and is used by GLNPO to evaluate the contaminated sediment index component of this Index.*)

Benthic Health group of indicators:

Hexagenia
Abundances of the Benthic Amphipod Diporeia spp.

Contaminants in Sport Fish

Beach Advisories, Postings and Closures

Drinking Water Quality

Atmospheric Deposition of Toxic Chemicals

Methods, Assumptions, and Suitability: The Index is based on a 40 point scale where the rating uses select Great Lakes State of the Lakes Ecosystem indicators (i.e., coastal wetlands, phosphorus concentrations, benthic health, fish tissue contamination, beach closures, drinking water quality, and air toxics deposition), and an indicator for Area of Concern (AOC) sediment contamination. Each component of the Index is based on a 1 to 5 rating system, where 1 is poor and 5 is good. Authors use best professional judgment to assess the overall status of the ecosystem component in relation to established endpoints or ecosystem objectives, when available. Each indicator is evaluated for Status (good, fair, poor, mixed) and Trend (improving, unchanging, deteriorating, undetermined). To calculate the Index, the data for each indicator are compared to the evaluation criteria for the numeric, 1 to 5, rating system. Each of the index components, other than the AOC sediment contamination component, is included in the broader suite of Great Lakes indicators, which was developed through an extensive multi-agency process to satisfy the overall criteria of necessary, sufficient and feasible. Information on the selection process is in the document, “Selection of Indicators for Great Lakes Basin Ecosystem Health, Version 4.”

QA/QC Procedures: GLNPO has an approved Quality Management System in place¹(see reference #1 below) that conforms to the USEPA Quality Management Order and is audited every 3 years in accordance with Federal policy for Quality Management.

The SOLEC process relies on secondary use of data, i.e., data for many of the indicators are collected, maintained and analyzed by agencies and organizations other than USEPA. Participating agencies and organizations follow their own QA/QC procedures to assure high quality data. A Quality Assurance Project Plan (QAPP) was developed to document procedures for data assessment and review for the indicators reports prepared for the State of the Great Lakes 2005 report. See “State of the Lakes Ecosystem Conference 2004 QAPP.” Contaminated sediment remediation information is collected in conformance with GLNPO’s Great Lakes Sediment Remediation Project Summary Support QAPP² (see reference #2 below).

Data Quality Review: GLNPO’s Quality Management System has been given “outstanding” evaluations in previous peer and management reviews² (see reference #2 below). GLNPO has implemented all recommendations from these external audits and complies with Agency Quality standards.

An external Peer Review of SOLEC processes and products was conducted in 2003 by an international panel of experts familiar with large-scale regional or national indicator and reporting systems. Panel findings were generally positive and several recommendations were made to consider for future SOLEC events and reports. Many of the recommendations have been implemented, and others are being considered for feasibility. The final report by the review panel is available online at <http://epa.gov/glnpo/solec/index.html>. See “State of the Lakes Ecosystem Conference Peer Review Report” in the SOLEC 2004 section.

A second review of the suite of Great Lakes indicators was conducted by Great Lakes stakeholders in 2004. As a direct result of the findings and recommendations from the participants, several indicators were revised, combined or dropped, and a few others were added. The indicators were also regrouped to allow the user to more easily identify the indicators

relevant to particular ecosystem components or environmental issues. The final report from the review is available online at <http://epa.gov/glnpo/solec/index.html>. See “State of the Lakes Ecosystem Conference Peer Review Report, Part 2: Stakeholder Review of the Great Lakes Indicators” in the SOLEC 2004 section.

Data Limitations: Data limitations vary among the indicator components of the Index. The data are especially good for phosphorus concentrations, fish tissue contamination, benthic health, and air toxics deposition. The data associated with other components of the index (coastal wetlands, AOC sediment contamination, beach closures, and drinking water quality) are more qualitative. Some data are distributed among several sources, and without an extensive trend line. Limitations for each of the index components are included in the formal indicator descriptions in the document, “Selection of Indicators for Great Lakes Basin Ecosystem Health, Version 4.” The data provided in the sediment tracking database should be used as a tool to track sediment remediation progress at sites across the Great Lakes. Many of the totals for sediment remediation are estimates provided by project managers. For specific data uses, individual project managers should be contacted to provide additional information.

Error Estimate: Error statistics for the Great Lakes Index have not been quantified. Each unit of the 40 point scale represents 2.5% of the total, so any unit change in the assessment of one of the component indicators would result in a change of the index of that magnitude. The degree of environmental change required to affect an indicator assessment, however, may be significantly large.

New/Improved Data or Systems: The data system specifically for this index is being developed. Data continue to be collected through the SOLEC process by various agencies, including GLNPO. Efforts are currently in progress to integrate various Great Lakes monitoring programs to better meet SOLEC objectives and to increase efficiencies in data collection and reporting. Documentation regarding SOLEC is available on the Internet and from GLNPO⁴ (see reference # 4 below).

References:

1. “Quality Management Plan for the Great Lakes National Program Office.” EPA905-R-02-009. October 2002, Approved April 2003.
2. “Great Lakes Sediment Remediation Project Summary Support QAPP.” March 2006. Unpublished – in USEPA GLNPO files.
3. “*GLNPO Management Systems Review of 1999.*” Unpublished - in USEPA Great Lakes National Program Office files.
4. a. “State of the Lakes Ecosystem Conference 2004 QAPP.” Unpublished. Prepared as part of Cooperative Agreement between USEPA and Environment Canada.

b. Canada and the United States. “State of the Great Lakes 2003.” ISBN 0-662-34798-6, Environment Canada, Burlington, Ontario, Cat. No. En40-11/35-2003E, and U.S.

c. Environmental Protection Agency, Chicago, EPA 905-R-03-004. 2003. Available on CD and online at <www.binational.net>.

d. Canada and the United States. "Implementing Indicators 2003 - A Technical Report." ISBN 0-662-34797-8 (CD-Rom), Environment Canada, Burlington, Ontario, Cat. No. En164-1/2003E-MRC (CD-Rom), and U.S. Environmental Protection Agency, Chicago, EPA 905-R-03-003. 2003. Available on CD from U.S. EPA/Great Lakes National Program Office, Chicago. Available online at <http://epa.gov/glnpo/solec/index.html>

e. Canada and the United States. "State of the Great Lakes 2005." Environment Canada, Burlington, Ontario (Cat No. En161-3/0-2005E-PDF) and U.S. Environmental Protection Agency, Chicago (EPA 905-R-06-001), 2006 Available online at <<http://epa.gov/glnpo/solec/index.html>>

f. Bertram, Paul and Nancy Stadler-Salt. "Selection of Indicators for Great Lakes Basin Ecosystem Health, Version 4." Environment Canada, Burlington, Ontario, and U.S. EPA, Chicago. 2000. Available online at <www.binational.net>.

All SOLEC documents, background reports, indicator reports, indicator development processes, conference agenda, proceedings and presentations are available online at <http://epa.gov/glnpo/solec/index.html>. The documents are sorted by SOLEC year and include the State of the Great Lakes reports which are released the following calendar year.

FY 2008 Performance Measure:

- **Long-term average concentration trends of PCBs in whole lake trout and walleye will decline.**

Performance Database: Great Lakes National Program Office (GLNPO) Great Lakes Fish Monitoring Program (GLFMP) ¹(see reference #1 below). This program is broken into two separate elements, Element 1 – Open Water Trend Monitoring and Element 2 – Game Fish Fillet Monitoring. Each program collects and monitors contaminants in Great Lakes fish at alternating locations throughout the Great Lakes Basin; fish are collected at one set of sites during even years and at another set in odd years. Element 1 began with the collection of data in Lake Michigan in 1972 and the additional lakes were added in 1976. Element 2 began with the collection of data in all five of the Great Lakes in the early 1980's. In FY08, the database will contain QA/QCed field data from fish collected in 2006 and all QA/QCed analytical data for fish collected between 1972 and 2005. A new grantee was selected for this program in 2005, thus delaying the release of analytical data collected in 2004 and 2005 until 2007. Data collected in 2006 is expected to be able to be used for reporting in 2008. Data are reported on a calendar year basis and are specific to the even or odd year sampling schedule (even year sites are only compared to other even year sites etc.)

Data Source: GLNPO is the principal source of data for the Great Lakes Fish monitoring program. The Great Lakes States and Tribes assist with fish collection. Previous cooperating organizations include the U.S. Geological Survey (USGS), the U.S. Fish and Wildlife Service (USFWS), and the Food and Drug Administration (FDA).

Methods, Assumptions, and Suitability: This indicator provides concentrations of selected organic contaminants in Great Lakes open water fish. The Great Lakes Fish Monitoring Program is broken into two separate elements that monitor potential exposure to contaminant concentrations for wildlife (Element 1) and humans through consumption (Element 2). Only Element 1 is included in this indicator.

The first element, Open Lakes Trend Monitoring Program, was created to: (1) determine time trends in contaminant concentrations, (2) assess impacts of contaminants on the fishery using fish as biomonitors, and (3) assess potential risk to the wildlife that consume contaminated fish. The first element includes data from ten 600-700 mm lake trout (*Salvelinus namaycush*) whole fish composites (5 fish in each composite) from each of the lakes. Since sufficient lake trout are not found in Lake Erie, data for 400 – 500 mm walleye (*Stizostedion vitreum vitreum*) are used for that Lake.

All GLFMP data are quality-controlled and then loaded into the Great Lakes Environmental Database (GLENDa). Included in GLENDa are flags for each data point that can be used to evaluate the quality of the data. Each Great Lake is a unique environment with a distinct growth rate, food web, and chemical integrity. For this reason, a direct comparison of annual concentrations between basins is not appropriate. However, an average annual basin-wide percent decrease can be determined using an exponential decrease function, and the 1990 data as the baseline. The percent decrease of Element 1 can be calculated and compared to the 5% reduction target to determine if the target has been met. All years of data from all lakes are plotted on the same graph, with each year containing 5 data points. An exponential decrease is then found for the entire data set and the percent decrease is calculated from the best fit line. The Lake Michigan data set represents the worst case scenario in the Great Lakes Basin for the Open Lakes Trend Monitoring Program.

QA/QC Procedures: GLNPO has an approved Quality Management System in place² (see reference #2 below) that conforms to the USEPA Quality Management Order and is audited every 3 years in accordance with Federal policy for Quality Management. The Quality Assurance (QA) plan that supports the analytical portion of the fish contaminant program is approved and available online³ (see reference #3 below). The draft field sampling Quality Assurance Project Plan (QAPP) is being revised and will be submitted to the GLNPO QA Officer for review upon the completion of the Quality Management Plan.

Data Quality Review: GLNPO's Quality Management System has been evaluated as "outstanding" in previous peer and management reviews⁴ (see reference #4 below). GLNPO has implemented all recommendations from these external audits and complies with Agency Quality standards.

Data Limitations: Great Lakes Fish Monitoring Program data are not well-suited to portray localized changes. Nevertheless, data collected at a certain site (odd year or even year sites) can be compared to data collected from the same site. In addition, only very general comparisons can be made of contaminant concentrations between lakes. A recent review of the odd year Open Lake Trend Monitoring in Lake Erie data indicate an increased variability in the data between the years of 1999 and 2003 because during those years several individual samples (fish) fell outside of the desired size range leading to a higher or lower than average mean sample size for the composite.

Error Estimate: The data quality objective of the fish contaminant program was to detect a 20% change in each measured contaminant concentration between two consecutively sampled periods at each site. Based on changing environmental conditions, the data quality objective has been revised to have an 80% probability to detect a 10% change per year, over three to four sampling periods, at the 95% confidence level. An official outside peer review of these data is tentatively scheduled for spring of 2007 to finalize the data quality objective for Element 1 and to create a data quality objective for Element 2.

New/Improved Data or Systems: The GLENDa database is a significant new system with enhanced capabilities. Existing and future fish data will be added to GLENDa.

References:

Supporting Program Documentation: All journal publications relevant to the Great Lakes Fish Monitoring Program, final project reports, and quality documentation can be found at the GLFMP website, <http://www.epa.gov/glnpo/glindicators/fish.html>.

1. *"The Great Lakes Fish Monitoring Program - A Technical and Scientific Model For Interstate Environmental Monitoring."* September, 1990. EPA503/4-90-004.
2. "Quality Management Plan for the Great Lakes National Program Office." EPA905-R-02-009. October 2002, Approved April 2003. <http://www.epa.gov/glnpo/qmp/>
3. *"Great Lakes Fish Monitoring Program – Quality Assurance Project Plan for Sample Collection Activities"*, Great Lakes National Program Office. http://www.epa.gov/glnpo/glindicators/fishtoxics/GLFMP_QAPP_082504.pdf
4. *"GLNPO Management Systems Review of 1999."* Unpublished - in USEPA Great Lakes National Program Office files.

FY 2008 Performance Measure:

- **Long term concentration trends of toxic chemicals in the air in the Great Lakes basin will decline**

Performance Database: Great Lakes National Program Office (GLNPO) integrated atmospheric deposition network ¹ (see reference #1 below) (IADN) operated jointly with Environment Canada. Reporting starts with 1992 data and includes concentrations of

polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and organochlorine pesticides in air and precipitation; however, this Performance Measure addresses only PCBs. Monitoring results from 2006 will be reported in 2008. Data are reported on a calendar year basis the second year after collection.

Data Source: GLNPO and Environment Canada are the principal sources of the data for IADN. Data also come through in-kind support and information sharing with other Federal agencies and Canada. Only data from US stations in IADN are being used for this measure.

Methods, Assumptions, and Suitability: There are five master IADN stations, one for each lake, which are supplemented by satellite stations in other locations. The master stations are located in remote areas and are meant to represent regional background levels. Concentrations from the master stations are used for the performance measure. Concentrations from the satellite stations in Chicago and Cleveland are also sometimes used to demonstrate the importance of urban areas to atmospheric deposition to the Lakes. Air samples are collected for 24 hours using high-volume samplers containing an adsorbent. Precipitation samples are collected as 28-day composites. Laboratory analysis protocols generally call for solvent extraction of the organic sampling media with addition of surrogate recovery standards. Extracts are then concentrated followed by column chromatographic cleanup, fractionation, nitrogen blow-down to small volume (about 1 mL) and injection (typically 1 uL) into gas chromatography instruments.

All IADN data are loaded and quality controlled using the Research Database Management System (RDMQ), a Statistical Analysis System (SAS) program. RDMQ provides a unified set of quality assured data, including flags for each data point that can be used to evaluate the usability of the data. Statistical summaries of annual concentrations are generated by the program and used as input into an atmospheric loading calculation. The loadings calculation is described in detail in the Technical Summary referenced below. However, calculating loadings requires additional data and constants that introduce further error. Therefore, the averaged annual concentrations rather than the loadings are used in the performance measure. Concentrations can vary from year to year due to differences in weather (temperature, wind patterns, etc.), so comparing concentrations from one year to the next is not always appropriate. This performance measure examines the average percent decline for the **long-term trend** determined using an exponential decrease function. Each year the average percent decline is calculated after adding new data. A baseline percent decrease was determined using data through 2000, and the aim is that this rate of decrease will continue.

QA/QC Procedures: GLNPO has a Quality Management System in place, which conforms to the USEPA Quality Management Order and is audited every 3 years in accordance with Federal policy for Quality Management² (see reference #2 below). Quality Assurance Project Plans are in place for the laboratory grantee, as well as for the network as a whole. A jointly-funded QA officer conducts laboratory and field audits, tracks QA statistics, and carries out special QA studies. Data from all contributing agencies are quality-controlled using the SAS-based system.

Data Quality Review: GLNPO's Quality Management System has been evaluated as "outstanding" in previous peer and management reviews³ (see reference #3 below). GLNPO has implemented all recommendations from these external audits and complies with Agency Quality

Standards⁴ (see reference #4 below). The IADN program has a joint Canadian-US quality system and binational Steering Committee that meets periodically in person or via conference calls to make decisions on network operation and data management and quality.

A regular set of laboratory and field blanks is taken and recorded for comparison to the IADN field samples. In addition, a suite of chemical surrogates and internal standards is used extensively in the analyses. There are common performance standards for PCBs, organochlorine pesticides, and PAHs. A common calibration standard for PCBs is now used. A jointly-funded QA officer conducts laboratory and field audits, tracks QA statistics, and carries out special QA studies. As previously mentioned, data from all contributing agencies are quality-controlled using a SAS-based system.

Data Limitations: The sampling design is dominated by rural sites that under-emphasize urban contributions to deposition; thus, although the data are very useful for trends information, there is less assurance of the representativeness of deposition to the whole lake. U.S. and Canadian laboratories use somewhat different sampling and analytical methods; QA studies have found that differences in resulting data are attributable mostly to the sampling differences. There are gaps in open lake water column organics data, thus limiting our ability to calculate atmospheric loadings. This gap is being addressed through the recent implementation by GLNPO of the Great Lakes Aquatic Contaminant Surveillance (GLACS) program, which will collect water contaminant data in the Lakes.

In the past, there has been a lag in the data from the Canadian sites (Burnt Island on Lake Huron and Point Petre on Lake Ontario). U.S. data is usually reported two years after it is collected (i.e., 2004 data was reported in 2006); the Canadian data may not be available on this schedule; consequently only US data is being used to report on this measure.

Error estimate: The performance measure examines the long-term trend in concentrations. Concentrations have an error of +/- 40%, usually less. Differences between laboratories have been found to be 40% or less. This is outstanding given the very low levels of these pollutants in the air and the difficulty in analysis. Improvements in quality assurance (use of a clean lab for Canadian precipitation analysis, making calibration standards consistent among agencies, etc.) are helping to further close this gap, and recent intercomparison site data reflect this.

New/Improved Data or Systems: Joint data that has passed quality review will be available from Canada's National Atmospheric Chemistry (NAtChem) Database and Analysis System, which includes atmospheric data from many North American networks and is linked from IADN's website at: <http://www.msc.ec.gc.ca/iadn/data/form/form_e.html> The IADN homepage can be found at <www.msc.ec.gc.ca/iadn/>. Copies of IADN data are now held in U.S. and Canadian databases. Environment Canada management is working to reduce the data lag from the Canadian IADN stations.

References:

1. "Great Lakes National Program Office Indicators. Air Indicators." <http://www.epa.gov/glnpo/glindicators/air.html>

Details of these analyses can be found in the Laboratory Protocol Manuals or the agency project plans, which can be found on the IADN resource page at <http://www.epa.gov/glnpo/monitoring/air/iadn/iadn.html>

Overall results of the project can be found in “*Technical Summary of Progress under the Integrated Atmospheric Deposition Program 1990-1996*” and the “*Technical Summary of Progress under the Integrated Atmospheric Deposition Network 1997-2002*”. Both (as well as the Atmospheric Loadings reports) can be found on the IADN resource page.

2. “Quality Management Plan for the Great Lakes National Program Office.” EPA905-R-02-009. October 2002, Approved April 2003.

3. “*GLNPO Management Systems Review of 1999*.” Unpublished - in USEPA Great Lakes National Program Office files.

4. “*Integrated Atmospheric Deposition Network Quality Assurance Program Plan - Revision 1.1*.” Environment Canada and USEPA. June 29, 2001. Unpublished - in USEPA Great Lakes National Program Office files.

FY 2008 Performance Measure:

- **Cumulative total of Areas of Concern within the Great Lakes Basin that have been restored and delisted**

Performance Database: USEPA’s Great Lakes National Program Office will track the cumulative total Areas of Concern (AOC) and post that information <http://www.epa.gov/glnpo/aoc/index.html>> Forty-three AOCs have been identified: 26 located entirely within the United States; 12 located wholly within Canada; and five that are shared by both countries. Since 1987, GLNPO has tracked the 31 that are within the US or shared. On June 19, 2006, the Oswego River, NY AOC became the first U.S. AOC to be officially removed from the list of U.S. AOCs. Information is reported on a calendar year basis, however the system is being designed for semi-annual or more frequent updates.

Data Source: Internal tracking and communications with Great Lakes States, the US Department of State and the International Joint Commission (IJC).

Methods, Assumptions, and Suitability: USEPA’s Great Lakes National Program Office is in regular communication with the Great Lakes States, the US Department of State and the IJC, and is responsible for coordinating and overseeing the de-listing of AOCs. Generally speaking, under the Great Lakes Water Quality Agreement, an AOC is an area in the Great Lakes determined to have significant beneficial use impairments, such as restrictions on fish and wildlife consumption, fish tumors, eutrophication, beach closings, added costs to agriculture or industry. In 1989, the IJC established a review process and developed AOC listing/delisting criteria (<http://www.ijc.org/rel/boards/annex2/buis.htm#table1>) for existing and future AOCs. In 2001, the U.S. Policy Committee, led by GLNPO and including State, Tribal, and Federal agencies

responsible for Great Lakes environmental issues, developed delisting guidelines for domestic AOCs (<http://www.epa.gov/glnpo/aoc/delist.html>) and for the binational AOCs shared by Michigan and Ontario <http://www.epa.gov/glnpo/aoc/delist.html> - appendix 5).

QA/QC Procedures: GLNPO has an approved Quality Management System in place¹ (see reference #1 below) that conforms to the USEPA Quality Management Order and is audited every 3 years in accordance with Federal policy for Quality Management.

Data Quality Review: GLNPO's Quality Management System has been given "outstanding" evaluations in previous peer and management reviews² (see reference #2) below. GLNPO has implemented all recommendations from these external audits and complies with Agency Quality standards.

Data Limitations: None known.

Error Estimate: None.

New/Improved Data or Systems: NA

References:

GLNPO will develop and maintain the appropriate tracking system for de-listed U.S. or binational Areas of Concern. Information regarding Areas of Concern is currently available online at: <http://www.epa.gov/glnpo/aoc/index.html>

1. "Quality Management Plan for the Great Lakes National Program Office." EPA905-R-02-009. October 2002, Approved April 2003.
2. "GLNPO Management Systems Review of 1999." Unpublished - in USEPA Great Lakes National Program Office files.

FY 2008 Performance Measure:

- **Cubic yards of contaminated sediment in the Great Lakes remediated (cumulative from 1997)**

Performance Database: Data tracking sediment remediation are compiled in two different formats. The first is a matrix that shows the annual and cumulative totals of contaminated sediment that was remediated in the Great Lakes basin in the reporting year and from 1997 for each Area of Concern or other non-Areas of Concern with sediment remediation. The second format depicts the yearly totals on a calendar year basis graphically. These databases are reported approximately one year after the completion of work, thus, results from calendar year 2007 remediation will be reported in FY 2008.

Data Source: GLNPO collects sediment remediation data from various State and Federal project managers across the Great Lakes region that conduct and coordinate contaminated

sediments work. These data are obtained directly from the project manager via an information fact sheet the project manager completes for any site in the Great Lakes basin that has performed any remedial work on contaminated sediment. The project manager also indicates whether an approved Quality Assurance Project Plan (QAPP) was used in the collection of data at the site. GLNPO does not accept unsolicited data without adequate assurance that a QAPP was in place and the reporters of the data are not likely to be biased.

Methods, Assumptions, and Suitability: The data collected to track sediment remediation in the Great Lakes show the amount of sediment remediated (dredged, capped, other) for that year, the amount of sediment remediated in prior years, and the amount of sediment remaining to be addressed for a particular site. This format is suitable for year-to-year comparisons for individual sites.

QA/QC Procedures: GLNPO relies on the individual government/agency project managers to provide information on whether an approved QAPP was in place during remediation of contaminated sediment. This information is used to decide if the data provided by the project manager are reliable for GLNPO reporting purposes. If an approved QAPP was not used, sediment data would not likely be reported by GLNPO, unless GLNPO finds that alternative information is available that provides sufficient quality documentation for the project and associated data. This approach allows GLNPO to use best professional judgment and flexibility in reporting data from any cases where there was not a QAPP, but (a) the remedial action is noteworthy and (b) the project was conducted by recognized entities using widely accepted best practices and operating procedures.

The tracking database houses information on the calculated amount of sediment remediated at individual sites as provided by the project managers. The individual site project managers are responsible for completing the data request forms, reviewing draft figures to verify that the GLNPO project manager transferred the data correctly, and providing any updated or improved estimates. It is GLNPO's responsibility to determine if the data are usable based upon the information sheet provided by the project managers. GLNPO does not attempt to verify mass and volume estimates due to the variability in how to calculate them. GLNPO ensures that the estimates provided make sense for the site, and that all estimates are reported in the same units. GLNPO management and Sediment Team members review the data, in the graphic and matrix formats, prior to reporting. GLNPO's Sediment Team works closely with partners and has confidence in those who provide data for the summary statistics. This familiarity with partners and general knowledge of ongoing projects allows GLNPO management to detect mistakes or questionable data.

Data Quality Review: The data, in both the graphic and matrix formats, are reviewed by individual project managers, GLNPO's Sediment Team, and management prior to being released. Data quality review procedures are outlined in the QAPP referenced below. GLNPO's Quality Management System has been given "outstanding" evaluations in previous peer and management reviews. GLNPO has implemented all recommendations from these external audits and complies with Agency Quality Standards.

Data Limitations: The data provided in the sediment tracking database should be used as a tool to track sediment remediation progress at sites across the Great Lakes. Many of the totals for sediment remediation are estimates provided by project managers. For specific data uses, individual project managers should be contacted to provide additional information.

Error Estimate: The amount of sediment remediated or yet to be addressed should be viewed as estimated data. A specific error estimate is not available.

New/Improved Data or Systems: Existing tracking systems are anticipated to remain in place.

References:

1. Giancarlo Ross, M.B. Quality Assurance Project Plan for “Great Lakes Sediment Remediation Project Summary Support.” Unpublished – in USEPA Great Lakes National Program Office files.
2. Giancarlo Ross, M.B. “*Sediment Remediation Matrix*”. Unpublished - in USEPA Great Lakes National Program Office files.
3. Giancarlo Ross, M.B. “*Sediment Remediation Pie Charts*”. Unpublished - in USEPA Great Lakes National Program Office files.
4. Giancarlo Ross, M.B. “Compilation of Project Managers Informational Sheets”. Unpublished - in USEPA Great Lakes National Program Office files.

FY 2008 Performance Measures:

- Percent of goal achieved for implementation of nitrogen reduction practices (expressed as progress meeting the nitrogen reduction goal of 162.4 million pounds reduced) [PART annual output measure-Chesapeake Bay Program]
- Percent of goal achieved for implementation of phosphorus reduction practices (expressed as progress meeting the phosphorus reduction goal of 14.36 million pounds) [PART annual output measure-Chesapeake Bay Program]
- Percent of goal achieved for implementation of sediment reduction practices (expressed as progress meeting the sediment reduction goal of 1.69 million tons reduced) [PART annual output measure-Chesapeake Bay Program]
- Reduce point source nitrogen discharges to the Long Island Sound
- Total nitrogen reduction practices implementation achieved as a result of agricultural best management practice implementation per million dollars to implement agricultural BMPs [PART efficiency measure- Chesapeake Bay Program]

Performance Database: Reducing Pollution Summary (Controlling Nitrogen, Phosphorus and Sediment.) Implementation of point & nonpoint source nitrogen and phosphorus reduction practices throughout the Bay watershed, expressed as % of reduction goal achieved. The nitrogen goal is a 162.4 million pound reduction from 1986 levels to achieve an annual cap load of 175

million lbs (based on long-term average hydrology simulations). The phosphorus goal is a 14.36 million pound reduction from FY1986 levels to achieve an annual cap load of 12.8 million lbs (based on long-term average hydrology simulations). Achieving the cap loads is expected to result in achievement of the long-term restoration goals for submerged aquatic vegetation and dissolved oxygen. Point source loads are monitored or estimated based on expert evaluation of treatment processes. Nonpoint source loads are simulated based on reported implementation of best management practices (BMPs) that reduce nitrogen and phosphorus pollution. The simulation removes annual hydrological variations in order to measure the effectiveness of BMP implementation and converts the numerous BMPs, with various pollution reduction efficiencies – depending on type and location in the watershed – to a common currency of nitrogen and phosphorus reduction.

Implementation of sediment reduction practices throughout the Bay watershed, expressed as % of land-based sediment reduction goal achieved. The sediment reduction goal is a 1.69 million ton reduction from FY 1986 levels to achieve an annual cap load of 4.15 million tons (based on average hydrology simulations). Achieving this cap load is expected to result in achievement of the long-term restoration goals for submerged aquatic vegetation and dissolved oxygen. Loads are simulated based upon reported implementation of best management practices (BMPs) that reduce sediment pollution. The simulation removes annual hydrological variations in order to measure the effectiveness of BMP implementation and converts the numerous BMPs, with various pollution reduction efficiencies – depending on type and location in the watershed – to a common currency of sediment reduction.

The Bay data files used in the indicator are located at <http://www.chesapeakebay.net/pubs/statustrends/186-data-2003.xls>. Data have been reported for calendar years 1985, 2000, 2001, 2002, 2003, 2004, 2005 and are expected on an annual basis after 2005. Data are from Chesapeake Bay watershed portions of NY, MD, PA, VA, WV, DE, and DC.

The FY 2008 Annual Performance Report for these measures will be based on the results of the calendar year 2007 data collection. We expect to receive the preliminary results for calendar year 2007 in September 2008

Data Source: Each jurisdiction (NY, MD, PA, VA, WV, DE, and DC) tracks and approves annual point source effluent concentrations, flows data as well as non-point source BMP data. It submits the data to the Chesapeake Bay Program Office. Contact Jeff Sweeney, jsweeney@chesapeakebay.net.

Methods, Assumptions and Suitability: The data are of high quality. Data are consolidated by watershed boundaries at the state level and provided to the Chesapeake Bay Program Office for input into the watershed model.

What is the Watershed Model?

A lumped parameter Fortran-based model (HSPF) that mimics the effects of hydrology, nutrient inputs, and air deposition on land and outputs runoff, groundwater, nutrients and sediment to

receiving waters. Ten years of simulation are used and averaged to develop the reduction effects of a given set of Best Management Practices (BMPs). Using a ten-year average of actual weather (hydrologic, temperature, wind, etc.) ensures wet, dry and average conditions for each season are included. The effectiveness of the model is dependent upon the quality of the assumptions, BMPs and landuse descriptions used. The model is calibrated extensively to real-time monitoring, outside peer review and continual updates as better information, data collection and computer processing power become available.

What are the input data?

The model takes meteorological inputs such as precipitation, temperature, evapotranspiration, wind speed, solar radiation, dewpoint, and cloud cover to drive the hydrologic simulation. The changes in nutrient outputs are primarily determined by such factors as land use acreage, BMPs, fertilizer, manure, atmospheric deposition, point sources, and septic loads.

BMPs: Watershed Model BMPs include all nutrient reduction activities tracked by the jurisdictions for which a source has been identified, cataloged and assigned an efficiency. Efficiencies are based on literature review, recommendations of the appropriate source workgroup and approved by the Nutrient Subcommittee. It is the responsibility of the jurisdictions to track and report all nutrient reduction activities within their borders and maintain documentation to support submissions.

Land use acreage is determined by combining analyses of satellite imagery and county-based databases for agricultural activities and human population. Fertilizer is determined by estimated application rates by crop and modified by the application of nutrient management BMPs. Manure applications are determined by an analysis of animal data from the census of agriculture.

Atmospheric deposition is determined by an analysis of National Atmospheric Deposition Program (NADP) deposition data and modified by scenarios of the Regional Acid Deposition Model. Point Source loads are determined from Discharge Monitoring Reports. Septic loads are estimated in a study commissioned by the Chesapeake Bay Program (CBP).

<http://www.chesapeakebay.net/pubs/1127.pdf>

<http://www.chesapeakebay.net/pubs/114.pdf>

<http://www.chesapeakebay.net/pubs/112.pdf>

<http://www.chesapeakebay.net/pubs/777.pdf>

What are the model outputs?

The watershed model puts out daily flows and nitrogen, phosphorus, and sediment loads for input to the water quality model of the Chesapeake Bay. The daily loads are averaged over a 10-year hydrologic period (1985-1994) to report an average annual load to the Bay. The effect of flow is removed from the load calculations.

What are the model assumptions?

BMPs: Model assumptions are based on three conditions: knowledge, data availability and computing power. The ability to alter what is used in the watershed model is a function of the impact the change would have on calibration. In many cases there is new information, data or methodologies that would improve the model, but changes are not possible because of the impact on the current calibration.

Changes in manure handling, feed additives, new BMPs and some assumptions could be incorporated into the model without impacting the calibration. In these cases, the changes were made.

Other input assumptions, such as multiple manure application levels, increasing the number of and redefining some land uses, defining new nutrient or sediment sources, adjusting for varying levels of management (range of implementation levels) are items scheduled for incorporation in the new model update (2007)

Input assumptions are documented in the above publications. Assumptions of the actual model code are in the HSPF documentation:

ftp://water.usgs.gov/pub/software/surface_water/hspf/doc/hspfhelp.zip

Input data are collected from states and local governments programs. Methods are described at <http://www.chesapeakebay.net/data/index.htm>, (refer to CBP Watershed Model Scenario Output Database, Phase 4.3). For more information contact Kate Hopkins at hopkins.kate@epa.gov or Jeff Sweeney jsweeney@chesapeakebay.net

QA/QC Procedures: State offices have documentation of the design, construction and maintenance of the databases used for the performance measures, showing they conform to existing U.S. Department of Agriculture Natural Resources Conservation Service (USDA/NRCS) technical standards and specifications for nonpoint source data and EPA's Permit Compliance System (PCS) standards for point source data. State offices also have documentation of implemented Best Management Practices (BMPs) based on USDA NRCS standards and specification and the Chesapeake Bay Program's protocols and guidance. BMPs are traditionally used to reduce pollutant loads coming from nonpoint sources such as urban/suburban runoff, agriculture, and forestry activities.

References include: the USDA NRCS Technical Guide and Appendix H from the Chesapeake Bay Program (contact Kate Hopkins at hopkins.kate@epa.gov). Quality assurance program plans are available in each state office.

Data Quality Reviews: All data are reviewed and approved by the individual jurisdictions (NY, MD, PA, VA, WV, DE, and DC) before input to the watershed model. QA/QC is also performed on the input data to ensure basic criteria, such as not applying a BMP at a higher level than allowed. A specific level of input should yield output within a specified range of values. Output is reviewed by both the CBPO staff and the Tributary Strategy Workgroup as an additional level of QA/QC. Any values out of the expected range are analyzed and understood before approval and public release. The model itself is given a quarterly peer review by an outside independent group of experts. There have been no data deficiencies identified in external reviews.

Data Limitations: Data collected from voluntary collection programs are not included in the database, even though they may be valid and reliable. The only data submitted by state and local governments to the Chesapeake Bay Program Office are data that are required for reporting under the cost share and regulatory programs. Cost share programs include state and federal grant programs that require a recipient match. State and local governments are aware that additional data collection efforts are being conducted by non-governmental organizations; however, they are done independently of the cost share programs and are not reported.

Error Estimate: There may be errors of omission, misclassification, incorrect georeferencing, misdocumentation or mistakes in the processing of data.

New/Improved Data or Systems: The next version of the watershed model is currently under development and will be completed in 2007. The new version (phase 5) will have increased spatial resolution and ability to model the effects of management practices. The phase 5 watershed model is a joint project with cooperating state and Federal agencies. Contact Gary Shenk gshenk@chesapeakebay.net or see the web site at <http://www.chesapeakebay.net/phase5.htm>

References:

See <http://www.chesapeakebay.net/data/index.htm>, refer to CBP Watershed Model Scenario Output Database, Phase 4.3. Contact Kate Hopkins at hopkins.kate@epa.gov or Jeff Sweeney jsweeney@chesapeakebay.net Reducing Pollution Summary (Controlling Nitrogen, Phosphorus and Sediment) indicators are published at <http://www.chesapeakebay.net/status.cfm?sid=186>. The nutrient and sediment loads delivered to the Bay data files used in the indicator are located at <http://www.chesapeakebay.net/pubs/statustrends/186-data-2003.xls>. See “Chesapeake Bay Watershed Model Application and Calculation of Nutrient and Sediment Loadings, Appendix H: Tracking Best Management Practice Nutrient Reductions in the Chesapeake Bay Program, A Report of the Chesapeake Bay Program Modeling Subcommittee”, USEPA Chesapeake Bay Program Office, Annapolis, MD, August 1998, available at <http://www.chesapeakebay.net/pubs/777.pdf>
See USDA NRCS Field Office Technical Guide available at <http://www.nrcs.usda.gov/technical/efotg/>. The indicator and data survey is published at http://www.chesapeakebay.net/pubs/2006reports/IndicatorSurvey_Reducing_Pollution_032406.doc.

FY 2008 Performance Measures:

- **Percent of point source nitrogen reduction goal of 49.9 million pounds achieved [PART annual outcome measure- Chesapeake Bay Program]**
- **Percent of point source phosphorus reduction goal of 6.16 million pounds achieved [PART annual outcome measure-Chesapeake Bay Program]**

Performance Database: Point source nitrogen and phosphorus reductions are reported as % of goal achieved and pounds. The goal for point source nitrogen reductions is 49.9 million pound

reduction from FY 1986 levels. The goal for point source phosphorus reductions is 6.16 million pound reduction from FY 1986 levels. Point source nitrogen and phosphorus data is reported based upon monitored results from the previous calendar year.

The Bay data files used in the indicator are located at <http://www.chesapeakebay.net/pubs/statustrends/127-data-2002.xls>. Data have been collected 1985-2004 and are expected on an annual basis after 2004.

The FY 2008 Annual Performance Report for these measures will be based on the results of the 2007 data collection. We expect to receive the preliminary results for 2007 in September 2008.

Data Source: Each jurisdiction (NY, MD, PA, VA, WV, DE, and DC) tracks and approves annual point source effluent concentrations and flow data. It submits the data to the Chesapeake Bay Program Office. Contact; [Ning Zhou](mailto:zhou.ning@epa.gov), zhou.ning@epa.gov.

Methods, Assumptions and Suitability: Point source loads are calculated from measured or estimated values of effluent flows and concentrations. The Chesapeake Bay Program Phase 4.3 Watershed Model is the tool used to transform calculated point source discharge loads (generally, from monitored flow and concentration data) to nutrient loads delivered to Chesapeake Bay tidal waters.

Peer-reviewed methods are employed to estimate point source discharges where measured data are not available. Refer to: “Chesapeake Bay Watershed Model Application & Calculation of Nutrient & Sediment Loadings - Appendix F: Phase IV Chesapeake Bay Watershed Model Point Source Loads” at <http://www.chesapeakebay.net/pubs/114.pdf>; Quality Assurance Project Plan (QAPP) “Standard Operating Procedures for Managing Point Source Data – Chesapeake Bay Program” on file for the EPA grant (contact: Quality Assurance Officer, Mary Ellen Ley, mley@chesapeakebay.net).

The following methods/assumptions pertain to discharge data:

- Monitored discharge data are generated from the EPA-approved standard sampling and analysis methods and documented in the Data Monthly Reports from facilities to jurisdictions.
- Discharge data which date to the earlier years of the record are inadequate for many regions in the Bay watershed; however, the 1986 baseline is consistent throughout the record.
- Facilities have been added to the point source database over the years, not necessarily because they physically came on-line, but because they were previously untracked. In addition, facilities have been turned inactive in the point source database over time because they went off line or combined with other facilities as new plants.
- Protocols of calculating discharges from measured or estimated flows and effluent concentrations have been adjusted throughout the data record to better reflect actual end-of-pipe loads.
- Tributary-specific pollution reduction and habitat restoration plans (“Tributary Strategies”) for some jurisdictions are not final so the goals will be adjusted in the future

as jurisdictions update implementation plans that better reflect projected point source discharges.

QA/QC Procedures: Jurisdictions (NY, MD, PA, VA, WV, DE, and DC) providing point source effluent data to the Bay Program office are expected to submit documentation of their quality assurance and quality control policies, procedures, and specifications in the form of Quality Assurance Management Plans and Quality Assurance Project Plans. Jurisdictional documentation, however, is limited and it is unknown if protocols follow EPA-approved objectives as established in the “Chesapeake Bay Program Quality Assurance Guidelines and Requirements” section of the CBP Grant and Cooperative Agreement Guidance, which is relevant to projects involving the collection of environmental data.

Procedures for compiling and managing point source discharge data at the Chesapeake Bay Program office are documented in the following EPA-approved Quality Assurance Project Plan: “Standard Operating Procedures for Managing Point Source Data – Chesapeake Bay Program” on file for the EPA grant (contact: Quality Assurance Officer, Mary Ellen Ley, mley@chesapeakebay.net).

Data Quality Reviews: Point source data sets from seven jurisdictions are merged at the Chesapeake Bay Program office. Continual peer-review of the thoroughness of discharge data and methods of managing the information by the Point Source Workgroup promotes consistency and completeness among the jurisdictions of calculated end-of-pipe loads.

Data Limitations: The CBP relies on information submitted and approved by the jurisdictions (NY, MD, PA, VA, WV, DE, and DC).

Error Estimate: The CBP tries to trace significant variability in the data and limit its impact.

New/Improved Data or Systems: N/A

References:

Study/survey design procedures for point source discharges can found at:

- “Chesapeake Bay Watershed Model Application & Calculation of Nutrient & Sediment Loadings - Appendix F: Phase IV Chesapeake Bay Watershed Model Point Source Loads” at <http://www.chesapeakebay.net/pubs/114.pdf>
- Quality Assurance Project Plan (QAPP) “Standard Operating Procedures for Managing Point Source Data – Chesapeake Bay Program” on file for the EPA grant (contact: Quality Assurance Officer, Mary Ellen Ley, mley@chesapeakebay.net).

The Point Source Nitrogen Loads Delivered to the Bay indicator is published at <http://www.chesapeakebay.net/status.cfm?sid=127>.

The Point Source Phosphorus Loads Delivered to the Bay indicator is published at <http://www.chesapeakebay.net/status.cfm?sid=128>.

The Wastewater Pollution Controls indicator is published at <http://www.chesapeakebay.net/status.cfm?sid=226>.

The indicator and data survey are published at http://www.chesapeakebay.net/pubs/2006reports/IndicatorSurvey_Reducing_Pollution_032406.doc.

FY 2008 Performance Measure:

- **Percent of forest buffer planting goal of 10,000 miles achieved [PART annual outcome measure-Chesapeake Bay Program]**

Performance Database: Forest buffer planting is reported as % of goal achieved. The long term goal is to plant 10,000 miles of forest buffers. The information is based on cumulative acres planted since FY 1997 provided by the states for the previous calendar year.

The Bay data files used in the indicator are located at <http://www.chesapeakebay.net/pubs/statustrends/83-data-2002.xls>. Data have been collected 1996-2005 and are expected on an annual basis after 2005.

The FY 2008 Annual Performance Report for these measures will be based on the results of the 2007 data collection. We expect to receive the preliminary results for 2007 in March 2008.

Data Source: Sampling design is formulated by the USDA for tracking projects and funds. Data and metadata are sent to the Forestry Work Group (state-level Departments of Forestry) by participating state coordinators and field personnel. Geographic Information System maps are produced by the UMD Center for Environmental Science. Contacts: Sally Claggett, sclaggett@fs.fed.us and Judy Okay, jokay@chesapeakebay.net

Methods, Assumptions and Suitability: Data collected for tracking linear ft, miles, and acres of forest buffers are measured directly. State data are merged to get cumulative miles. Submission criteria have been set and agreed to by State agencies. The data are summarized in a spreadsheet by geographic location with related extent of project sites. A Geographic Information System (GIS) is used to help generate the indicator data.

Data Quality Reviews: The data are collected by state field personnel and submitted to the state-level Departments of Forestry for QA/QC checks.

Data Limitations: The data are only as good as the data originally submitted by the states. This information passes through many hands before being merged into the annual cumulative miles. Human error enters into this type of record. The data are compiled and released with utmost attention to accuracy and validation of locations and extents of riparian forest buffers.

Error Estimate: none calculated.

New/Improved Data or Systems: N/A

References: The indicator is published at <http://www.chesapeakebay.net/status.cfm?sid=83>.

The indicator and data survey are published at
http://www.chesapeakebay.net/pubs/2006reports/ForestBuffersRestored_Indicator.doc.

FY 2008 Performance Measures:

- **Prevent water pollution and protect aquatic ecosystems so that overall aquatic system health of coastal waters of the Gulf of Mexico is improved on the “good/fair/poor” scale of the National Coastal Condition Report**
- **Reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico**

Performance Database: (1) Louisiana Coastal Hypoxia Shelfwide Survey metadata (data housed at National Oceanic and Atmospheric Administration/National Ocean Data Center, Silver Spring, Maryland). Funds for this research are provided by the National Oceanic and Atmospheric Administration, Coastal Ocean Program (NOAA/COP)

(2) Southeast Area Monitoring and Assessment Program (**SEAMAP**) - Gulf surveys.

The data used in assessing performance under this measure have been collected annually on a calendar year basis since 1982.

Data Source: (1) Hydrographic data are collected during annual surveys of the Louisiana continental shelf. Nutrient, pigment and station information data are also acquired. The physical, biological and chemical data collected are part of a long-term coastal Louisiana dataset. The goal is to understand physical and biological processes that contribute to the causes of hypoxia and use the data to support environmental models for use by resource managers.

(2) The Southeast Area Monitoring and Assessment Program (SEAMAP) is a state/Federal/university program for collection, management and dissemination of fishery-independent data and information in the southeastern United States.

Methods, Assumptions and Suitability: The distribution of hypoxia on the Louisiana shelf has been mapped annually in mid-summer (usually late July to early August) over a standard 60- to 80- station grid since 1985. During the shelfwide cruise, data are collected along transects from the mouth of the Mississippi River to the Texas border. Information is collected on a wide range of parameters, including conductivity/temperature/depth (CTD), light penetration, dissolved oxygen, suspended solids, nutrients, phytoplankton, and chlorophyll. Hydrographic, chemical, and biological data also are collected from two transects of Terrebonne Bay on a monthly basis, and bimonthly, off Atchafalaya Bay. There is a single moored instrument array in 20-m water depth in the core of the hypoxic zone that collects vertical conductivity/temperature data, as well as near-surface, mid, and near-bottom oxygen data; an upward directed Acoustic Doppler Current Profiler (ADCP) on the seabed measures direction and speed of currents from the seabed to the surface. There is also an assortment of nutrient and light meters.

Station depths on the cruises range from 3.25 to 52.4 meters. Northern end stations of transects are chosen based on the survey vessel's minimum depth limits for each longitude.

Standard data collections include hydrographic profiles for temperature, salinity, dissolved oxygen, and optical properties. Water samples for chlorophyll *a* and phaeopigments, nutrients, salinity, suspended sediment, and phytoplankton community composition are collected from the surface, near-bottom, and variable middle depths.

The objective is to delimit and describe the area of midsummer bottom dissolved oxygen less than 2 (mg. L).

Details of data collection and methodology are provided in referenced reports.

QA/QC Procedures: NOAA does not require written QA/QC procedures or a Quality Management Plan; however, the procedures related to data collection are covered in metadata files.

The SEAMAP Data Management System (DMS) conforms to the SEAMAP Gulf and South Atlantic DMS Requirements Document developed through a cooperative effort between National Marine Fisheries Service (NMFS) and other SEAMAP participants.

Data Quality Reviews: (1) Essential components of the environmental monitoring program in the Gulf of Mexico include efforts to document the temporal and spatial extent of shelf hypoxia, and to collect basic hydrographic, chemical and biological data related to the development of hypoxia over seasonal cycles. All data collection protocols and data are presented to and reviewed by the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force (the Task Force) in support of the adaptive management approach as outlined in the Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico (the Action Plan).

(2) Biological and environmental data from all SEAMAP-Gulf surveys are included in the SEAMAP Information System, managed in conjunction with National Marine Fisheries Service – Southeast Fisheries Science Center (NMFS-SEFSC). Raw data are edited by the collecting agency and verified by the SEAMAP Data Manager prior to entry into the system. Data from all SEAMAP-Gulf surveys during 1982-2003 have been entered into the system, and data from 2004 surveys are in the process of being verified, edited, and entered for storage and retrieval.

Data Limitations: Monitoring for shelf-wide conditions are currently performed each year primarily, but not exclusively, in July. The spatial boundaries of some monitoring efforts are limited by resource availability. Experience with the datasets has shown that when data are plotted or used in further analysis, outlying values may occasionally be discovered.

Error Estimate: (1) The manufacturers state +/- 0.2mg/L as the error allowance for both SeaBird and Hydrolab oxygen sensors.

References:

Mississippi River/Gulf of Mexico Watershed Nutrient Task force.2001. Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico. Washington, DC.

Rabalais N.N., R.E. Turner, Dubravko Justic, Quay Dortch, and W.J. Wiseman. 1999. Characterization of Hypoxia. Topic 1 Report for the Integrated assessment on Hypoxia in the Gulf of Mexico. NOAA Coastal Ocean Program Decision Analysis Series No. 15. Silver Spring Maryland: National Oceanic and Atmospheric Administration.

Hendee, J.C. 1994. Data management for the nutrient enhanced coastal ocean productivity program. *Estuaries* 17:900-3

Rabalais, Nancy N., W.J. Wiseman Jr., R.E. Turner ; Comparison of continuous records of near-bottom dissolved oxygen from the hypoxia zone of Louisiana. *Estuaries* 19:386-407

SEAMAP Information System <http://www.gsmfc.org/sis.html>

FY 2008 Performance Measure:

- **Restore water and habitat quality to meet water quality standards in 13 coastal areas**

Performance Database: EPA's "Surf Your Watershed" and EPA's WATERS Expert Query Tool

Data Source: Data regarding impaired segments are from EPA's "Surf Your Watershed" and EPA's WATERS Expert Query Tool updated every two years when states submit their 303(d) reports on the status of impaired water segments as required in the Clean Water Act (CWA) 305(b) report. Another source of data is the EPA-approved Decision Documents, the Quality Assurance Project Plan (QAPP) for state 303(d) data.

Methods, Assumptions and Suitability: To begin, the Decision Documents for each Gulf State are acquired. The water bodies listed as impaired for Florida, Alabama, and Mississippi are compared to "Surf Your Watershed" and then to the WATERS Expert Query Tool. Louisiana and Texas have a different form for their Decision Documents, which include only delisted water bodies. For these two states only "Surf Your Watershed" and WATERS Expert Query Tool are used. All the data are cross referenced for discrepancies. Then, tables are created for each watershed in the Gulf of Mexico Program's Priority Watershed Inventory. In all, 67 tables are created. These tables include a segment identification number for viewing the water segment on a map, a link to the URL for "Surf Your Watershed", name of the state basin the segment is located, the watershed the segment is located, the name of the waterbody, the number and type of impairment for that segment, and the year the impairment is listed. Delisting information is also listed in the tables for segments that have that information. The information available for delisting includes the segment identification number, the waterbody name, what impairment was delisted, the basis for the delisting, and a link to the total maximum daily load (TMDL)

document if it exists. Segments that are shared among two or more watersheds are highlighted for easier recognition when counting the number of segments duplicated among watersheds.

Shapefiles are acquired from the states that contain the 303(d) (e.g., impaired) segments for that state. The segments listed in the state shapefile, however, do not always match EPA's ("Surf Your Watershed", WATERS Expert Query Tool, and Decision Documents). Therefore, it is sometimes necessary to contact the state for additional shapefiles that contain missing segments. The data are grouped by watershed with a name to represent the area in the shapefile (ex. 2002_03170009_303d_line). New fields are added to the shapefile such as segment identification number (matches the number from the tables), TMDL status ("Impaired Water Segment," "TMDL Completed," "Restored"), number of impairments for that segment, list of impairments for that segment, and the waterbody name for that segment. Maps are then generated to show the number of impairments in each watershed. "Impaired Water Segments" are visible with a red cross hatch, "TMDL Completed" has a yellow cross hatch, and a "Restored" appears with a blue cross hatch. Each segment is labeled with the identification number found in the shapefile and the table. All maps include the Hydrologic Unit Code (HUC) number and the HUC name, legend, scale bar, inset map, GMPO logo, disclaimer for the state if one was provided, and the date the map was created. In all, 67 maps are created.

QA/QC Procedures: There are three EPA data sources: "Surf Your Watershed," "WATERS," and Decision Documents. Each data source is cross referenced with the other two sources to ensure there are no discrepancies in the listed impaired segments. The EPA data sources are from EPA- reviewed state documents.

Data Quality Reviews: There are no outside reviews of the 67 tables and maps generated in a report. However, GMPO is awaiting final approval of new web pages that will display them. This new site will be a subset of "Surf Your Watershed" and will be labeled as "Surf Your Gulf Watershed". "Surf Your Gulf Watershed" will detail the impaired segments for the 13 priority areas.

Data Limitations: Data are updated every two years on "Surf Your Watershed" and in WATERS Expert Query Tool due to the fact that states submit a 303(d) report every two years on the status of the impaired segments in each state as required in Clean Water Act (CWA) 305(b) report.

Error Estimate: None identified.

References:

EPA's "Surf Your Watershed" <http://cfpub.epa.gov/surf/locate/map2.cfm>

EPA's WATERS (Watershed Assessment Tracking and Environmental Results) Expert Query Tool http://www.epa.gov/waters/tmdl/expert_query.html

FY 2008 Performance Measure:

- **Restore, enhance, or protect acres of important coastal and marine habitats.**

Performance Database: Coastal Emergent wetlands border the Gulf of Mexico and include tidal saltwater and freshwater marshes and mangroves. Encompassing over two million hectares (five million acres or more than half of the national total), the Gulf of Mexico coastal wetlands serve as essential habitat for a diverse range of species.

Total wetland loss (coastal and inland) for the five Gulf States from 1780 until 1980 was estimated to be 40 million square kilometers, approximately 50%. Between 1985 and 1995 the southeastern U.S. lost the greatest area of wetland (51% of the national total). Coastal emergent wetland loss for Louisiana represents 67% of the nation's total loss (177,625 hectares or 438,911 acres) from 1978 to 1990.

The Gulf of Mexico Program achieves its acreage goal each year by cooperative funding of projects that result in the enhancement, protection or restoration of coastal habitat. This coastal habitat includes marshes, wetlands, tidal flats, oyster beds, seagrasses, mangroves, dunes and maritime forest ridge areas.

Data Source: The amount of acreage restored, protected and enhanced by the Gulf of Mexico Program is derived from the individual project's Statement of Work contained within the project proposal. This acreage is then verified by the EPA Project Officer and by the project's Program Manager through site visits during the life of the project, quarterly reports submitted to the Gulf of Mexico Program Office (GMPO), aerial photography, ground-truthing, and digital topographic. Data verification occurs at the end of the project too.

Methods, Assumptions and Suitability: The Gulf of Mexico Program achieves this goal successfully each year by cooperatively funding restoration projects with our multiple federal and state program partners. Our partners additionally follow required QA/QC procedures on their projects and routinely conduct site visits to provide verification of the acreage restored. These partners and our process to restore, protect and enhance Gulf coastal habitat include:

1. Gulf of Mexico Program Office State Proposal Solicitation through Requests for Proposals (RFPs)

2. GMP Partnership Challenge Grant Programs

- A) *National Fish and Wildlife Foundation (NFWF) Cooperative Agreement*

- 5- STAR Habitat Restoration Challenge Grants

- Shell Marine Habitat Restoration Grants

- B) *NOAA Community Restoration Grant Program* Supports Gulf Ecological Management Sites (GEMS)

<http://www.epa.gov/gmpo/habitat/hablinks.html>

QA/QC Procedures: The projects that are funded are required to provide a QA/QC plan if the restoration project involves monitoring. In those cases, EPA has documented Assistance Agreements with QA/QC approved plans. Both NOAA and the National Fish and Wildlife Foundation require QA/QC plans if the projects involve scientific monitoring. Additionally, the EPA Project Manager is required to conduct site visits, during the duration of the project to verify actual acreage restored, protected and/or enhanced. QA/QC includes but is not limited to,

aerial photography, ground-truthing, transect growth monitoring and routine site visits of all funded projects.

Data Quality Reviews: Award Process for supporting habitat at restoration projects through partnership cooperative agreements.

1. Gulf of Mexico Program Office Competitive RFPs
2. GMP Partnership Challenge Grant Program Grants

A) National Fish and Wildlife Foundation (NFWF)

5-STAR Projects - Habitat office staff and team members review proposals, rank and recommend projects for funding. This review includes identification of any duplicative proposals already submitted for funding through other grant programs supported by GMPO, as well as opportunities to broker with other habitat grant funding programs, i.e. through Coastal America and the Corporate Wetlands Restoration Partnership Grant Program (CWRP)

Shell Marine Habitat Restoration Grants - Habitat team reviews and ranks proposals.

B) NOAA Community Restoration Grant Program

Supports Gulf Ecological Management Sites (GEMS). The Gulf of Mexico Foundation, NOAA and the Gulf of Mexico Program established a Steering Committee to review and select the NOAA CRP projects for funding. The steering committee consists of EPA, all GEMS State Managers, NOAA, and USFWS staff. As with our partnership with the National Fish and Wildlife Foundation, the review is to ensure there is no duplication of funding and to seek opportunities for brokering with other restoration grant programs.

Review of the restoration data occurs in the field and through field analysis by the project manager as the project progresses. This review is accomplished through measures such as aerial photography, ground-truthing, transect growth monitoring and routine site visits of all funded projects. Data are verified by EPA and our Program Partners through site visits and quarterly reports.

Data Limitations: Limitations of use for the data are carefully detailed by the data provider and project manager for each project that yields acreage. Images and topographic data have routinely been used for restoration projects and few to no limitations are expected from these datasets beyond that of image resolution.

Error Estimate: The acreage is documented by the project managers for each project in required EPA Quarterly Reports. Data are subject to a second verification following the completion of the project.

FY 2008 Performance Measures:

- **Mean percent stony coral cover in the Florida Keys National Marine Sanctuary (FKNMS) and in the coastal waters of Dade, Broward, and Palm Beach Counties, Florida working with all stakeholders (federal, state, regional, and local)**
- **Maintain the overall health and functionality of seagrass beds in the FKNMS as measured by the long-term seagrass monitoring project that addresses composition and abundance, productivity, and nutrient availability**
- **Maintain the overall water quality of the near shore and coastal waters of the FKNMS**

Performance Database: As required by the Florida Keys National Marine Sanctuary and Protection Act of 1990, EPA and its partners developed a comprehensive long-term status and trends monitoring program as a critical component of the Water Quality Protection Program for the FKNMS. The comprehensive monitoring program was initiated in 1995 and includes water quality, coral reef and seagrass components. Annual results are reported each year on a fiscal-year basis. Historically, EPA has provided the majority of funding for the three monitoring projects, but other agencies (e.g., NOAA, U.S. Army Corps of Engineers (USACE), and state/local government agencies) also provide significant funding.

Data Source: The Water Quality and Seagrass Monitoring Projects are conducted by Florida International University's Southeast Environmental Research Center (SERC) and the Coral Reef Evaluation and Monitoring Project is conducted by the Florida Fish and Wildlife Research Institute. EPA provides funding via cooperative agreements and the other government agencies provide funds via federal assistance agreements or contracts. Monitoring data are collected each year on an annual or quarterly basis depending on the project. Results of each monitoring project are reported in annual reports. The data for each monitoring project is collected and archived by staff of the Florida Fish and Wildlife Research Institute under a cooperative agreement with the EPA. In addition, the principal investigators for each monitoring project have developed Web sites where anyone can go and review the data.

Methods, Assumptions and Suitability: The comprehensive monitoring program for the FKNMS was developed by a large group of technically competent and knowledgeable scientists familiar with the aquatic environment of the Florida Keys and the coral reef ecosystem. For each monitoring project, EPA worked closely with recognized experts to develop a detailed scope of work including sampling locations and frequency, parameters, field and analytical methods, quality assurance/quality control, data management, and reporting. The monitoring program was designed to provide representative coverage of the entire 2,900 square nautical miles of the Sanctuary. In general, monitoring sites were located throughout the FKNMS on a stratified-random basis and were determined to be compatible with EPA's Environmental Monitoring and Assessment Program protocol (<http://www.epa.gov/region4/sesd/reports/epa904r01002.html>). The overall monitoring program was designed to address the primary objective of the comprehensive long-term monitoring program for the FKNMS - to provide data needed to make unbiased, statistically rigorous statements about the "status of and trends in" selected water quality conditions and biological communities in the Sanctuary. For the monitoring program, the null hypothesis is that there is no change over time. The field data are tested against the null hypothesis that no change has occurred. All three monitoring projects (water quality, coral reef

and seagrass) have demonstrated the ability to detect change over time and are suitable for determining the health of the coral reef ecosystem of the FKNMS.

QA/QC Procedures: The principal investigators for each monitoring project developed and submitted to EPA a Quality Assurance Project Plan (QAPP) to ensure that the data generated are accurate and representative of actual conditions and the degree of certainty of the data can be established. The QAPPs were developed in accordance with EPA guidance documents and the principal investigators consulted with the Regional QA/QC Officer and the Project Officer for the monitoring projects. It was required that the QAPP be approved by EPA before any work could begin on a monitoring project.

Data Quality Review: Through the QAPP, the principal investigators explicitly commit to incorporating procedures that will reduce random and systematic errors. In addition, the principal investigators document quality assurance procedures and evaluate the quality of the data being generated by the monitoring projects. Further, the Technical Advisory Committee (TAC) of the Florida Keys National Marine Sanctuary reviews and assesses the monitoring projects and the data they produce on a regular and continuing basis.

Data Limitations: There are no known limitations of the data set.

Error Estimate: Coral Reef Evaluation and Monitoring Project – a power analysis was done at the beginning of the project to determine the limit of detectable change for the point count method used to determine the percent stony coral cover within the FKNMS. The estimate of actual performance is accurate to 2.4%.

Water Quality Monitoring Project – the project collects data from 154 sites within the FKNMS on a quarterly basis. Therefore, error estimates for the 2005 baseline values are mostly due to the large spatial variability and seasonal temporal variability. Because water quality data are not normally distributed, the project uses the median as the measure of central tendency. For chlorophyll a, the interquartile range (IQR) is 0.29 and the median absolute deviation (MAD) is 0.12. The light attenuation k_d IQR is 0.12 and the MAD is 0.05. Dissolved inorganic nitrogen has an IQR of 0.50 and a MAD of 0.26. For total phosphorus, the IQR is 0.90 and the MAD is 0.04.

Seagrass Monitoring Project – benthic plant community structure is measured using the rapid visual assessment technique known as the Braun-Blanquet method. This method is very quick, yet it is robust and highly repeatable, thereby minimizing among-observer differences. The Braun-Blanquet method has proven to be precise enough to detect subtle interannual variations yet robust enough to survive changes in personnel. Elemental content (carbon, nitrogen, and phosphorus) of seagrass leaves is determined by cleaning the leaves of all epiphytes, drying the leaves at low temperature, and grinding to a fine powder. Elemental content is then measured using established methods and calculating on a dry weight basis. All isotopic analyses are determined on the material collected for elemental analysis at the SERC Stable Isotope Lab using standard elemental analyzer isotope ratio mass spectrometer (EA-IRMS) procedures. Analytical reproducibility of the reported values, based on sample replicates, are better than 0.2‰ for ^{15}N and 0.08‰ for ^{13}C .

New/Improved Performance Data or Systems: The database management system for the Water Quality Protection Program of the FKNMS is geographic information based (GIS) and used to record the biological, physical, and chemical results from the comprehensive monitoring projects. The data from the three monitoring projects are collected and archived by the database managers at the Florida Fish and Wildlife Research Institute. The data archives component encompasses both raw and synthesized data. The data integration component incorporates the synthesized data, both tabular and geospatial. These data are integrated into a GIS to facilitate further analysis by scientists and managers. The results data contained within the database integration system are documented with project level metadata as well as attribute or parameter level metadata. An Internet Map Service (IMS) is being created to serve the data and this website will make both data access and mapping capabilities available to users without having access to expensive GIS-mapping software. An IMS allows users to view and query GIS and tabular data via a Web browser without having an expensive GIS on their computer. The overall goal of the database management system is to provide a data integration system that takes into account the varying levels of data produced by the various monitoring projects and the needs of both managers and researchers.

References:

<http://serc.fiu.edu/wqmnetwork/>

www.serc.fiu.edu/wqmnetwork

www.fiu.edu/~seagrass

http://ocean.floridamarine.org/fknms_wqpp

http://research.myfwc.com/features/category_sub.asp?id=2360

FY 2008 Performance Measure:

- **Improve the water quality of the Everglades ecosystem as measured by total phosphorus, including meeting the 10 parts per billion total phosphorus criterion throughout the Everglades Protection Area marsh and the effluent limits to be established for discharges from storm water treatment areas**

Performance Database: As required by the Clean Water Act and Florida's Everglades Forever Act, the oligotrophic Everglades marsh within the Everglades Protection Area must meet the newly adopted 10 parts per billion numeric criterion for total phosphorus. EPA approved the criterion and its application methodology in 2005. A monitoring program to determine whether the criterion is in fact being met throughout the Everglades marsh is necessary to determine whether the water body can be expected to meet its designated use, whether phosphorus concentrations are stable or are increasing, whether the concentrations in impacted areas are improving, and whether watershed phosphorus control efforts costing in excess of \$1 billion are effective.

Data Source: Water quality is monitored throughout the Everglades marsh at dozens of long-term monitoring stations. These stations are sampled cooperatively in a joint effort by Florida Department of Environmental Protection, South Florida Water Management District, Everglades National Park, and Loxahatchee National Wildlife Refuge. Some of these stations were

monitored previously by the United States Geological Survey beginning as long ago as 1953. Results of monitoring are reported in annual reports. The data are collected and are available to the public through a web site. Stormwater Treatment Area (STA) effluent phosphorus monitoring is in place as required by Florida and NPDES permits.

Methods, Assumptions and Suitability: The monitoring program was developed by scientists, with decades of experience regarding Everglades water quality and ecology, from the Florida Department of Environmental Protection, South Florida Water Management District, Everglades National Park, Loxahatchee National Wildlife Refuge and the EPA. The marsh monitoring program is designed to provide representative coverage of the entire 2,000 square mile freshwater Everglades. The monitoring program is capable of detecting temporal trends in phosphorus condition throughout the Everglades. The null hypothesis is that there is no change over time.

QA/QC Procedures: Field samples are collected by standard sampling protocol and analytical results are from accredited laboratories using standard methods. In addition, a series of ongoing laboratory round-robin exercises are overseen by the Florida Department of Environmental Protection. Field and lab protocol are also periodically reassessed by a Technical Oversight Committee that includes five Florida and federal agencies. Quality Assurance Project Plans are in place.

Data Quality Review: Water is sampled in the field by Department of Interior or South Florida Water Management District technical personnel using established Standard Operating Procedures. Data are subject to ongoing quality review by the interagency Technical Oversight Committee on a regular and continuing basis.

Data Limitations: There are no known limitations of the data set.

Error Estimate: Annual average total phosphorus concentrations are accurate to within 1 part per billion.

New/Improved Performance Data or Systems: Interagency dialogue and oversight provide ongoing reassessments that evaluate data credibility and completeness.

References:

<http://www.epa.gov/waterscience/criteria/nutrient/ecoregions/>
<http://www.sfwmd.gov/org/ema/toc/index.html>
http://www.sfwmd.gov/org/ema/toc/archives_docs.html
<http://www.dep.state.fl.us/labs/assessment/index.htm>
<http://www.dep.state.fl.us/labs/everglades/roundrobin.htm>
<http://www.walker.net/#Selected%20Publications>

FY 2008 Performance Measure:

- **Additional miles of river and stream corridor reopened to anadromous fish passage through removal of dams and barriers or installation of by-pass structures such as fishways [Long Island Sound]**

Performance Database: An internal database is under development to track the measure.

Data Source: The states within the Long Island Sound watershed will provide the data to track this measure. The 2005 cumulative baseline is 81 miles reopened. Long Island Sound Study, Sound Health 2006 Environmental Indicators: www.longislandsoundstudy.net/indicators/index.htm on Habitat Protection/River Miles Restored and Coastal Habitat Restored. Stamford, CT: EPA Long Island Sound Office

FY 2008 Performance Measure:

- **Percent of the population in each of the U.S. Pacific Island Territories served by community drinking water systems will receive drinking water that meets all applicable health-based drinking water standards throughout the year (2005 Baseline: 95 percent of the population in American Samoa, 10 percent in CNMI (Commonwealth of the Northern Mariana Islands), and 80 percent of Guam served by community water systems received drinking water that meets all applicable health-based drinking water standards throughout the year.)**

Performance Database: SDWIS (Safe Drinking Water Information System) is the database used to track this performance measure throughout the United States. However, of the three U.S. territories in the Pacific, only American Samoa has put data into this database on a reliable basis. (For example, Guam has not entered data in this database in years. We are working with CNMI and Guam in 2007 to enter data into SDWIS on a reliable basis.) In the interim, in Guam and CNMI we are working to get the data directly from the public water systems.

Data Source: Health-based violations are either reported by the territories (currently American Samoa only) or obtained through direct communication with public water systems (currently Guam and CNMI). Percentage of population served by community drinking water systems receiving 24-hour water is obtained through direct communication with territory (CNMI only). Population data are obtained from U.S. Census data.

Methods, Assumptions and Suitability: Our method is to calculate the performance measure as the percentage of people in the territories served by public water systems who are receiving 24-hour water that meets all health-based drinking water standards (i.e., no health-based violations). We can provide an aggregate value for the three Pacific territories using a weighted average based upon their populations. Our first main assumption is that a public water system must provide 24-hour water on a regular basis before it can provide drinking water that meets all health-based drinking water standards. This is an assumption that generally does not need to be made in the rest of the United States; and in the Pacific territories is an issue mainly in the CNMI. For example, the island of Saipan in the Northern Mariana Islands (population 70,000) is the only municipality of its size in the U.S. without 24-hour water (most of its residents get water

only one or two hours per day; all but the poorest residents rely on bottled water or rain water as the source of their drinking water). This method is suitable for the Pacific islands because the situation is unique to the Pacific Island territories, and is one of the underlying reasons for the need to track access to safe drinking water. Our second main assumption is that health-based violations reported by the territories are correct. Our third main assumption is that US Census data are correct.

QA/QC Procedures: American Samoa follows QA/QC procedures in the data it submits to EPA for entry into the SDWIS database. There is no other Quality Management Plan or Quality Assurance Project Plan currently associated with this indicator.

Data Quality Reviews: Although the territories are responsible for reviewing and assuring quality of health-based violation reporting, EPA has had to communicate directly with public water systems in Guam and CNMI to get the data (and continues to do so as part of ongoing enforcement and compliance efforts). EPA is also in direct communication with the territories to obtain percentage of population receiving 24-hour water. The US Census is responsible for reviewing and assuring population data quality. There is no other peer review or external data quality review.

Data Limitations: Potential data limitations include: (a) inconsistencies in reporting health-based violations among territories; and (b) inaccuracies due to imprecise measurement of percentage of population served by public water systems that receives 24-hour water.

Error Estimate: A quantitative estimate of error in the database is not possible.

New/Improved Data or Systems: Regarding SDWIS data, EPA will be working with the territories of Guam and CNMI in 2007 to provide more complete data to assess performance. Regarding percentage of population receiving 24-hour water, EPA will be working closely with the CNMI public water system and the CNMI Water Task Force (in the Office of the Governor) to both more accurately assess percentage of population receiving 24-hour water, and to provide 24-hour water to a greater percentage of the population.

References: N/A.

FY 2008 Performance Measure:

- **Sewage treatment plants in the U.S. Pacific Island Territories will comply 90 percent of the time with permit limits for biochemical oxygen demand (BOD) and total suspended solids (TSS)** (2005 Baseline: the sewage treatment plants in the Pacific Island Territories complied 59 percent of the time with BOD and TSS permit limits.)

Performance Database: ICIS (Integrated Compliance Information System) is used to track this performance measure.

Data Source: DMRs (Discharge Monitoring Reports) provided to EPA on a quarterly basis by the Pacific Island wastewater utilities are the data source.

Methods, Assumptions and Suitability: Permit conditions require each of the wastewater utilities to use EPA approved sampling methods. DMRs are self-reported by the Pacific island utilities to EPA on a quarterly basis for major facilities (greater than 1 million gallons per day of discharge). The main assumption is that the self-reported data are accurate.

QA/QC Procedures: Each of the Pacific island utility labs has and follows QA/QC procedures for this data.

Data Quality Reviews: EPA reviews the DMR reports to make sure they are thoroughly filled out. There are occasional EPA field audits of the utility labs.

Data Limitations: Potential data limitations include: (a) inconsistencies among personnel in performing sampling and analysis; and (b) incomplete data due to lack of sampling or lack of lab equipment.

Error Estimate: A quantitative estimate of error in the database is not possible.

New/Improved Data or Systems: EPA maintains communication with each of the utilities to improve sampling and analysis of BOD and TSS, and to improve reporting of DMRs.

References: N/A

FY 2008 Performance Measure:

- **Beaches in each of the U.S. Pacific Island Territories monitored under the Beach Safety Program will be open and safe for swimming 96 percent of days of the beach season** (2005 Baseline: beaches were open and safe 64 percent of the 365-day beach season in American Samoa, 97 percent in CNMI and 76 percent in Guam.)

Performance Database: PRAWN ((Program tracking for Advisories, Water quality and Nutrients) is used to track this performance measure.

Data Source: Reports provided to EPA on a quarterly basis by the Pacific Island environmental agencies (Guam EPA, American Samoa EPA, CNMI DEQ) are the data source.

Methods, Assumptions and Suitability: The Pacific Island environmental agencies use EPA-approved methods to take bacteriological samples at beaches and analyze them in their labs. They put together reports that include beach sampling data and number of days beaches were closed or had advisories posted based on bacteriological concerns. The Pacific Island environmental agencies submit these reports to EPA on a quarterly basis. EPA inputs data from the report into the PRAWN database. The main assumption is that the Pacific Island environmental agencies are following the EPA-approved methods for sampling and analysis. The secondary assumption is that EPA's contractor is correctly entering data from the reports.

QA/QC Procedures: Each of the Pacific Island environmental agencies has EPA-certified laboratories. Part of the certification process is establishing and adhering to QA/QC procedures.

Data Quality Reviews: EPA recertifies the labs on a periodic basis. Data quality from all lab procedures is reviewed.

Data Limitations: Potential data limitations include: (a) reporting inconsistencies within the database among jurisdictions which report on a quarterly basis (as the Pacific territories do) and on an annual basis.

Error Estimate: A quantitative estimate of error in the database is not possible.

New/Improved Data or Systems: EPA maintains communication with the Pacific territorial environmental agencies on changes in format which make it easier to enter data into the PRAWN database.

References: N/A.

FY 2008 Performance Measure:

- **Acres of wetland habitat and 3,000 acres of upland habitat in the Lower Columbia River watershed.**

Performance Database: The database used to track habitat restoration in the Lower Columbia River watershed is titled “Regional Restoration Project Inventory”. The database includes at a minimum the following data fields: Project title, lead organization, project partners, latitude/longitude, and acreage.

Results are updated annually on a fiscal year basis.

Data Source: Habitat restoration data are reviewed through direct communication with multiple agencies and partners conducting habitat restoration projects in the Lower Columbia River watershed, and the database is cross-referenced with other state, regional, and federal funding sources and project tracking databases. Due to the numerous partners involved in each project, and their involvement in the maintenance of the database, the confidence in the data accuracy and reliability is high.

Methods, Assumptions and Suitability: Habitat restoration data in the Lower Columbia River watershed is collected and tracked via direct and ongoing communication with the network of agencies and organizations conducting habitat restoration in the watershed. The main assumption for this method is that all agencies and organizations conducting habitat restoration in the watershed are included in the database review. The acreage indicator chosen is suitable for progress towards our goal because the restoration projects included in the database protect, enhance, and restore both wetland and upland habitat.

QA/QC Procedures: QA/QC procedures do not apply to tracking the Regional Restoration Project Inventory database. The database is reviewed by entities involved in or conducting

habitat restoration projects in the Lower Columbia River watershed. The database is maintained annually, reviewed internally, distributed to regional entities conducting habitat restoration, and referenced when reporting several times annually. There is no Quality Management Plan or Quality Assurance Project Plan associated with this indicator.

Data Quality Reviews: The Regional Restoration Project Inventory is a database and reporting tool that employs the available level of project detail by multiple agencies and organizations. This tool is used internally and amongst agencies and organizations conducting habitat restoration in the Lower Columbia River watershed, therefore peer reviews, audits, and reports by external groups are not applicable.

Data Limitations: Potential data limitations include: (a) inconsistencies in or non-standard methods of acreage measurement, due to multiple agencies and organizations reporting; (b) inaccuracies due to imprecise measurement of acreage; (c) significant variability in the data, due to advancements in acreage calculation methods and therefore variable accuracy over time; (e) incomplete or inaccurate data from agencies and organizations that choose not to submit or review project data.

Error Estimate: Based on the level of involvement from agencies and organizations conducting habitat restoration in the Lower Columbia River, the quantitative estimate of actual performance and calculation of error in the database is not possible.

New/Improved Data or Systems: The tracking of habitat restoration project data in the Lower Columbia River watershed will improve with the advancement of tracking technologies, including GIS analysis, and the maintained communication with agencies and organizations conducting habitat restoration in the watershed. The management of the database will adapt to these advancements when technically and feasibly possible.

References: N/A

GOAL 4 OBJECTIVE 4

FY 2008 Performance Measures:

- **Improved protocols for screening and testing (PART Measure)**
- **Effects and exposure milestones met (PART Measure)**
- **Assessment milestones met (PART Measure)**
- **Risk management milestones met (PART Measure)**

Performance Database: N/A

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: Annual milestones in support of the Multi-Year Plan for Endocrine Disruptors research are developed and revised during the annual budget and performance planning process. Self-assessments of progress toward completing these activities are based on the pre-defined goals.

QA/QC Procedures: Procedures are now in place to require that all annual milestones be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management.

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research milestones and outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Endocrine Disruptors Multi-Year Plan, available at: <http://www.epa.gov/osp/myp/edc.pdf> (last accessed on January 3, 2007)

FY 2008 Performance Measure:

- **Number of states using a common monitoring design and appropriate indicators to determine the status and trends of ecological resources and the effectiveness of national programs and policies (PART measure)**

Performance Database: Internal Regional EPA tracking system for partners in twenty-three states.

Data Source: Data are derived from internal assessments of state activities.

Methods, Assumptions and Suitability: Data for this measure are collected based on assessments of the number of states using Environmental Monitoring and Assessment Program (EMAP) data to monitor the condition of ecological resources. EMAP data are generated, in part, by a cooperative agreement with twenty-three states to conduct the National Coastal Assessment Monitoring survey, which introduces a standard protocol for monitoring the ecological condition of estuaries; including, probabilistic sampling designs, response designs for indicators, laboratory analyses, statistical analyses and reporting formats.

QA/QC Procedures: N/A

Data Quality Reviews: N/A

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: EPA anticipates by 2007, all states will have adopted and implemented the National Coastal Assessment Monitoring survey. Improvements in the management of contracts, coordination of the shipment of samples, and distribution of resulting data are now performed by EPA to give states without capability opportunity to partner with the agency.

References:

EMAP data, available at: <http://www.epa.gov/docs/emap/index.html> (last accessed on January 4, 2007)

US EPA. 2001. Environmental Monitoring and Assessment Program (EMAP): National Coastal Assessment Quality Assurance Project Plan, 2001-2004. EPA/620/R-01/002. Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL.

FY 2008 Performance Measures:

- **Percentage of planned outputs delivered in support of public health outcomes long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support of mechanistic data long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support of the aggregate and cumulative risk long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support of the susceptible subpopulations long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support efficient and effective clean-ups and safe disposal of contamination wastes.**
- **Percentage of planned outputs delivered in support of water security initiatives**
- **Percentage of planned outputs delivered in support of risk assessors and decision-makers in the rapid assessment of risk and the determination of cleanup goals and procedures following contamination.**
- **Percentage of planned outputs delivered on time in support of establishment of the environmental National Laboratory Response Network**
- **Percentage of planned outputs delivered in support of HHRA health assessments. (PART Measure)**
- **Percentage of planned outputs delivered in support of Air Quality Criteria/Science Assessment documents (PART Measure)**
- **Percentage of planned outputs delivered in support of HHRA Technical Support Documents (PART Measure)**

- **Percentage of planned outputs delivered (PART Measure)**

Performance Database: Integrated Resources Management Systems (internal database) or other internal tracking system.

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: To provide an indication of progress towards achievement of a program's long-term goals, each program annually develops a list of key research outputs scheduled for completion by the end of each fiscal year. This list is finalized by the start of the fiscal year, and no changes are made after this point. The program then tracks quarterly the progress towards completion of these key outputs against pre-determined schedules and milestones. The final score is the percent of key outputs from the original list that are successfully completed on-time.

QA/QC Procedures: Procedures are now in place to require that all annual outputs be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Human Health Multi-Year Plan, available at: <http://epa.gov/osp/my/HH%20MYP%20Final.pdf> (last accessed January 3, 2007).

Global Change Research Multi-Year Plan, available at: <http://epa.gov/osp/my/global.pdf> (last accessed January 3, 2007)

Human Health Risk Assessment Multi-Year Plan, available at: <http://epa.gov/osp/my/HHRA.pdf> (last accessed January 3, 2007).

FY 2008 Performance Measure:

- **Average cost to produce Air Quality Criteria/Science Assessment documents (Efficiency Measure)**
- **Average time (in days) to process research grant proposals from RFA closure to submittal to EPA's Grants Administration Division, while maintaining a credible**

and efficient competitive merit review system (as evaluated by external expert review) (Efficiency Measure)

Performance Database: N/A

Data Source: Data are generated based on self-assessments of progress toward completing program goals.

Methods, Assumptions and Suitability: The HHRA Program's efficiency measure tracks the cost to produce AQCDs for use by the Office of Air and Radiation in developing their policy options for the NAAQS. Total FTE and extramural dollar costs are cumulated over a five year period and divided by the number of AQCDs produced in this time period, to create a moving annual average \$/AQCD. The Human Health Program's efficiency measure tracks the average time to process and award grants.

QA/QC Procedures: N/A

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the program activities. However, other performance measures and independent program reviews are used to measure the quality and impact of the program.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: N/A

GOAL 5 OBJECTIVE 1

FY 2008 Performance Measures:

- **Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions [PART]**
- **Percentage of concluded enforcement cases requiring that pollution be reduced, treated, or eliminated [PART]**
- **Percentage of concluded enforcement cases requiring implementation of improved environmental management practices [PART]**
- **Dollars invested in improved environmental performance or improved environmental management practices as a result of concluded enforcement actions (i.e., injunctive relief and SEPs)**
- **Pounds of pollutants reduced, treated, or eliminated as a result of audit agreements [PART]**

Performance Databases: The Integrated Compliance Information System Federal Enforcement & Compliance (ICIS FE&C) database tracks EPA judicial and administrative civil enforcement actions. The newly enhanced Criminal Case Reporting System (CCRS) tracks criminal enforcement actions.

Data Source: Most of the essential data on environmental results in ICIS FE&C is collected through the Case Conclusion Data Sheet (CCDS), which Agency staff begin preparing after the conclusion of each civil, judicial and administrative enforcement action. EPA implemented the CCDS in 1996 to capture relevant information on the results and environmental benefits of concluded enforcement cases. Information from the CCDS is used to track progress for several of the performance measures. The CCDS form consists of 22 specific questions which, when completed, describe specifics of the case; the facility involved; information on how the case was concluded; the compliance actions required to be taken by the defendant(s); the costs involved; information on any Supplemental Environmental Project to be undertaken as part of the settlement; the amounts and types of any penalties assessed; and any costs recovered through the action, if applicable. The CCDS documents whether the defendant/respondent, in response to an order for injunctive relief or otherwise in response to the enforcement action, will: (1) implement controls that will reduce pollutants; and/or (2) improve environmental management practices to curtail, eliminate or better monitor and handle pollutants in the future.

The Criminal Enforcement Program also collects information on pollution reductions on a separate case conclusion data form. The criminal enforcement case conclusion form is being used in FY07.

Methods, Assumptions and Suitability: For enforcement actions which result in pollution reductions, staff estimate the amount of pollution reduced for an immediately implemented improvement, or for an average year once a long-term solution is in place. There are established procedures to be used by EPA staff to calculate, by statute, e.g., Clean Water Act (CWA), the pollutant reductions or eliminations. The calculation determines the difference between the current Aout of compliance@ quantity of pollutants released and the post enforcement action Ain compliance@ quantity of pollutants released. This difference is then converted into standard units of measure.

QA/QC Procedures: QA/QC procedures [See references] are in place for both the CCDS and ICIS FE&C data entry. There is a CCDS Training Booklet [See references] and a CCDS Quick Guide [See references], both of which have been updated and distributed throughout regional and headquarters= offices. The criminal enforcement program has prepared a companion guide for use by its field agents. Separate CCDS Calculation and Completion Checklists [See references] are required to be filled out when the CCDS is completed. Criminal enforcement measures are quality assured by the program at the end of the fiscal year.

Quality Management Plans (QMPs) are prepared for each office within The Office of Enforcement and Compliance Assurance (OECA). The Office of Compliance's (OC) QMP, effective for 5 years, was approved July 29, 2003 by the Office of Environmental Information (OEI) and is required to be re-approved in 2008. To satisfy the Government Performance and Results Act (GPRA), the Agency's information quality guidelines, and other significant

enforcement and compliance policies on performance measurement, OECA instituted a requirement for semiannual executive certification of the overall accuracy of ICIS information. In addition, in FY 2003, OC established a quarterly data review process to ensure timely input, data accuracy, and reliability of EPA's enforcement and compliance information.

Data Quality Review: Information contained in the CCDS and ICIS FE&C are required by policy to be reviewed by regional and headquarters= staff for completeness and accuracy. ICIS data are quality-reviewed quarterly, and reviewed and certified at mid-year and end-of-year.

Data Limitations: Pollutant reductions or eliminations reported in CCDS are projected estimates of pollutants to be reduced or eliminated if the defendant carries out the requirements of the settlement. (Information on expected outcomes of state enforcement is not available.) The estimates are based on information available at the time a case is settled or an order is issued. In some instances, this information will be developed and entered after the settlement, during continued discussions over specific plans for compliance. Because of the time it takes to agree on compliance actions, there may be a delay in completing the CCDS. Additionally, because of unknowns at the time of settlement, different levels of technical proficiency, or the nature of a case, OECA=s expectation is that the overall amount of pollutants to be reduced or eliminated will be prudently underestimated based on CCDS information.

Error Estimate: Not available

New & Improved Data or Systems: In November 2000, EPA completed a comprehensive guide on the preparation of the CCDS estimates. This guide, issued to headquarters and regional staff, was made available in print and CD-ROM, and was supplemented in FY 2002 and updated in FY 2004 [See references]. The guide contains work examples to ensure better calculation of the amounts of pollutants reduced or eliminated through concluded enforcement actions. EPA trained each of its ten regional offices during FY 2002. OC=s QMP was approved by OEI July 29, 2003, and is effective for five years. [See references]. A new criminal enforcement case management, tracking and reporting system (CCRS) came on-line during FY 2006 and replaces the existing criminal docket (CRIMDOC). This new system is more user friendly and allows for greater tracking, management, and reporting capabilities.

In June, FY 2006, a new version of the ICIS data system, ICIS FE&C, became operational. The new data system has all of the functionality of old ICIS (ICIS 1.0) but also adds functionality for tracking EPA enforcement and compliance activities. In addition, another component of ICIS, "ICIS-NPDES" is becoming the database of record for the CWA National Pollutant Discharge Elimination System (NPDES) program, including all federal and state enforcement, compliance and permitting data. States will be migrated in phases to ICIS NPDES from the legacy data system, the Permit Compliance System (PCS), over a period of about two years. As a state's data is migrated from PCS to ICIS-NPDES, so too is its NPDES federal compliance and enforcement data for that state.

References: Quality Assurance and Quality Control procedures: Data Quality: Life Cycle Management Guidance, (IRM Policy Manual 2100, dated September 28, 1994, reference Chapter 17 for Life Cycle Management). CCDS: CCDS, Training Booklet, issued November 2000;

Quick Guide for CCDS, issued November 2000, and “Guide for Calculating Environmental Benefits of Enforcement Cases: FY2005 CCDS Update” issued August 2004 available: <http://intranet.epa.gov/oeca/oc/resources/ccds/ccds.pdf>. Information Quality Strategy and OC=s Quality Management Plans: Final Enforcement and Compliance Data Quality Strategy, and Description of FY 2002 Data Quality Strategy Implementation Plan Projects, signed March 25, 2002. ICIS: U.S. EPA, OECA, ICIS Phase I, implemented June 2002. Internal EPA database; non-enforcement sensitive data available to the public through the Freedom of Information Act (FOIA). Criminal Enforcement Division Case Conclusion

FY 2008 Performance Measure:

- **Percentage of regulated entities taking complying actions as a result of on-site compliance inspections and evaluations**

Performance Databases: ICIS FE&C and manual reporting by regions.

Data Sources: EPA regional offices, Office of Civil Enforcement - Air Enforcement Division (Mobile Source program), Office of Compliance - Agriculture Division (Good Laboratory Practices), and the Compliance Assessment and Media Programs Division (Wood Heaters).

Methods, Assumptions and Suitability: The Inspection Conclusion Data Sheet, (ICDS) will be used to analyze results from inspections/evaluations conducted under EPA=s statutes. EPA will analyze ICDS from on-site complying actions taken by facilities, deficiencies observed, and compliance assistance provided. The EPA inspectors complete the ICDS for each inspection or evaluation conducted, and the information is entered into ICIS or reported manually. This measure was selected because it directly counts the number of times compliance assistance has been provided and allows for the analysis of the data to determine trends over time.

QA/QC Procedures: The ICIS FE&C data system has been developed per Office of Environmental Information Lifecycle Management Guidance, which includes data validation processes, internal screen audit checks and verification, system and user documents, data quality audit reports, third party testing reports, and detailed report specifications for showing how data are calculated.

Data Quality Review: The information in the CCDS, ICDS and ICIS FE&C is required by policy to be reviewed by regional and headquarters= staff for completeness and accuracy. In FY2003, to satisfy the GPRA, the Agency’s information quality guidelines, and other significant enforcement and compliance policies on performance measurement, OECA instituted a requirement for semiannual executive certification of the overall accuracy of information. ICIS FE&C data are reviewed quarterly and certified at mid-year and end of year.

Data Limitations: ICIS FE&C is the official database of record for all inspections not reported into one of the legacy data bases (with the exception of the Underground Injection Control (UIC) inspections in some regions). Legacy databases still operational include Air Facility System (AFS), FS, PCS, RCRAInfo, National Compliance Data Base System (NCDB), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) / Toxic Substances Control Act (TSCA)

Tracking System (FTTS). Beginning in 2007, NCDB/FTTS inspection data will be reported into ICIS FE&C. Regions have been encouraged to report all inspection ICDS information into ICIS. If regions continue to use manual reporting for ICDS, it may result in redundant, incomplete, or contradictory data.

New & Improved Data or Systems: In June FY 2006, a new version of the ICIS data system, ICIS FE&C became operational. The new data system has all of the functionality of old ICIS (ICIS 1.0) but adds functionality for tracking EPA enforcement and compliance activities. Further, ICIS-NPDES is beginning to replace the PCS as the database of record for the NPDES program, including all federal and state enforcement, compliance and permitting data. (States will be migrating over to ICIS-NPDES in phases, over a period of about two years.)

References:

- ICIS: U.S. EPA, OECA, ICIS FE&C, implemented June 2006
- ICIS: U.S. EPA, OECA, ICIS-NPDES, implemented June 2006
- Memo dated October 11, 2005: Entering Manually Reported Federal Inspections into ICIS in FY 2006
- Internal EPA database
- Non-enforcement sensitive data available to the public through the Freedom of Information Act (FOIA).

FY 2008 Performance Measures:

- **Percentage of regulated entities receiving direct compliance assistance from EPA reporting that they improved environmental management practices as a result of EPA assistance**
- **Percentage of regulated entities receiving direct assistance from EPA reporting that they reduced, treated, or eliminated pollution, as a result of EPA assistance**

Performance Database: EPA headquarters and regions will manage data on regulated entities receiving direct compliance assistance from EPA through ICIS.

Data source: Headquarters and EPA=s regional offices will enter information in ICIS upon completion and delivery of media and sector-specific compliance assistance including workshops, training, on-site visits and distribution of compliance assistance tools. ICIS is designed to capture outcome measurement information such as increased awareness/understanding of environmental laws, changes in behavior and environmental improvements as a result of the compliance assistance provided.

Methods, Assumptions and Suitability: These measures are automatically produced in the ICIS database which records the number of entities that received direct assistance from EPA and report that they improved an environmental management practice and/or report that they reduced, treated or eliminated pollution as a result of EPA assistance. ICIS produces the percentage by dividing the number of respondents to each of two follow-up survey questions by the number of respondents. The figure is aggregated nationally from the regional data. A percentage measure was chosen to track the goal for year to year comparability as opposed to a direct number which varies year to year.

QA/QC: Automated data checks and data entry guidelines are in place for ICIS.

Data Quality Review: Information contained in the ICIS is reviewed by regional and headquarters staff for completeness and accuracy. In FY2003, OECA instituted a requirement for semiannual executive certification of the overall accuracy of information to satisfy the GPRA, the Agency's information quality guidelines, and other significant enforcement and compliance policies on performance measurement. ICIS data are reviewed quarterly and certified at mid-year and end of year.

Data Limitations: None

Error Estimate: None

New & Improved Data or Systems: EPA plans to improve and/or modify elements of the compliance assistance module in ICIS based on use of the system.

References: US EPA, ICIS Compliance Assistance Module, February 2004; US EPA, Compliance Assistance in the Integrated Compliance Information System Guidance, February 20, 2004. US EPA, 2005 Guidance Addendum for Reporting Compliance Assistance in the ICIS, March 2005.

GOAL 5 OBJECTIVE 2

FY 2008 Performance Measure:

- **Number of pounds of reduced (in millions) of priority chemicals as measured by National Partnership for Environmental Priorities members.**
- **Number of pounds of priority list chemicals removed from or reduced in waste streams per cost to perform such actions. [PART efficiency]**

Performance Database: Under Information Collection Request no. 2050-0190 ("Reporting Requirements Under EPA's National Partnership for Environmental Priorities", renewed April 2006) the National Partnership for Environmental Priorities (NPEP) program collects information on partner (mostly from the industrial sector, and one municipal facility) priority chemical reduction commitments, technical solutions proposed to achieve reductions, and actual reduction achievements. Achievements are verified through discussions between EPA waste minimization national experts and partner technical personnel, and further verified using the Toxics Release Inventory system where possible.

NPEP efficiency measure: The denominator of the efficiency measure, or the cost to perform such actions, equals program cost minus quantifiable benefit per pound of reduction. Program cost is calculated to be the cost for Federal program implementation (FTE + grant and contract funding). Industry cost is neutral. Quantifiable benefits include information collected through NPEP success stories on resource savings (e.g. water, energy) resulting from implementation of waste minimization technologies and processes.

Data Source: As part of their partnership agreement, NPEP partners provide information concerning what priority list chemicals they commit to reduce, the process through which the reduction will be achieved, and the time frame for achieving the commitment. When the commitment is achieved they provide EPA with a “success story” which identifies the actual achievement, confirms the process used to achieve the reduction, and provides additional information of interest to the general public and other technical personnel concerning how the achievement was met. Information is reviewed by EPA waste minimization national experts for reasonableness based on best professional judgment. An internal tracking system is used to track pounds committed, achievement date, and actual achievement. NPEP partner achievement data is further verified against TRI reporting when the partner is a TRI regulated facility. The Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), Section 313 (Toxics Release Inventory) and expanded by the Pollution Prevention Act of 1990 (40 CFR Part 13101; www.epa.gov/tri) requires that regulated facilities report facility-specific, chemical-specific release, waste and recycling data to EPA.

Methods, Assumptions, and Suitability: Regional targets are calculated to meet the national total goal. This is a new measure which does not have comparable historical data. EPA does not intend to reconcile FY 08 results with prior years.

EPA waste minimization national experts are trained in industrial or chemical engineering and have significant experience in evaluating industrial processes for waste minimization potential and efficiency. Their professional judgment forms the basis for accepting the applicants’ waste minimization commitment and achievement. Additionally, when the partner is also a TRI regulated facility, achievement data are verified against TRI reporting

QA/QC Procedures:

Internal tracking: EPA engineers review commitment information. In cases where commitment information is initially incomplete or lacks substantiation, EPA engineers may conduct site visits in order to make a determination that the commitment is reasonably achievable. Information on number of pounds committed for reduction, achievement date and actual achievement is reported by NPEP partners and stored in an internal NPEP tracking system. Tracking system data are periodically reviewed by EPA regional coordinators to ensure that they accurately reflects partner commitments. Corrections are made to tracking system data when they are identified.

TRI Database verification: Most facilities use EPA-certified automated Toxics Release Inventory (TRI) Form R reporting tools, which contain automated error checking mechanisms. Upon receipt of the facilities’ reports, EPA conducts automated edits, error checks, data scrubs, corrections and normalization during data entry and subsequent processing. The Agency does not control the quality of the data submitted by the regulated community. EPA does, however, work with the regulated community to improve the quality of their estimates.

Data Quality Review:

Internal Tracking data: Tracking system data are periodically reviewed by EPA regional coordinators to ensure that they accurately reflects partner commitments. Corrections are made to tracking system data when they are identified.

TRI data: The quality of the data contained in the TRI chemical reports is dependent upon the quality of the data that the reporting facility uses to estimate its releases and other waste management quantities. Use of TRI Form R by submitters and EPA's data reviews help assure data quality. The GAO Report Environmental Protection: EPA Should Strengthen Its Efforts to Measure and Encourage Pollution Prevention (GAO - 01 - 283, February, 2002, <http://www.gao.gov/new.items/d01283.pdf>), recommends that EPA strengthen the rule on reporting of source reduction activities. Although EPA agrees that source reduction data are valuable, the Agency has not finalized regulations to improve reporting of source reduction activities by TRI-regulated facilities.

Data Limitations: For both internal tracking system and TRI data, use of the data should be based on the user's understanding that the Agency does not have direct assurance of the accuracy of the facilities' measurement and reporting processes.

Error Estimate:

Internal Tracking: This is a new measurement tool, implemented with the 2006 – 2011 strategic plan. No error estimate is available at this time. However, EPA is developing an error tracking process for use in 2007 and should have an error estimate for fiscal year 2007 in early 2008.

TRI data: From the various data quality efforts, EPA has learned of several reporting issues such as incorrect assignment of threshold activities and incorrect assignment of release and other waste management quantities (EPA-745-F-93-001; EPA-745-R-98-012; www.epa.gov/tri/tridata/data_quality_reports/index.htm; www.epa.gov/tri/report/index.htm.) For example, certain facilities incorrectly assigned a 'processing' (25,000 lb) threshold instead of an 'otherwise use' (10,000 lb) threshold for certain non-persistent, bioaccumulative and toxic (PBT) chemicals, so they did not have to report if their releases were below 25,000 lbs. Also, for example, some facilities incorrectly reported fugitive releases instead of stack releases of certain toxic chemicals.

New/Improved Data or Systems: Use of internal tracking data allows EPA to measure direct progress resulting from the NPEP program. Historically EPA has measured trends using TRI. Because TRI data are influenced by a variety of factors, including multiple EPA and State regulations, voluntary programs, and national economic trends, use of TRI did not allow EPA to directly measure program results. The internal tracking system is a limited data set and is 100% reviewed by expert engineers, is a reasonably accurate data set.

References: <http://www.epa.gov/epaoswer/hazwaste/minimize/index.htm>; www.epa.gov/tri/ and additional citations provided above. (EPA-745-F-93-001; EPA-745-R-98-012; <http://www.epa.gov/tri/report/index.htm>; www.epa.gov/tri/tridata/data_quality_reports/index.htm; www.epa.gov/tri/report/index.htm)

Bureau of Economic Analysis (BEA) indices are available at <http://www.bea.gov/bean/regional/gsp/>.

FY 2008 Performance Measures:

- **Pounds of hazardous materials reduced by P2 program participants (PART measure)**
- **BTUs of energy reduced, conserved or offset by P2 program participants (annual measure)**
- **Gallons of water reduced by P2 program participants (annual measure)**
- **Business, institutional and government cost reduced by P2 program participants (PART measure)**

The Agency's Pollution Prevention programs, or results centers, include Green Chemistry, Design for the Environment, Green Engineering, Regional Offices for Results, Pollution Prevention Resource Exchange (P2RX), Environmentally Preferable Purchasing, Hospitals for a Healthy Environment, and Green Suppliers Network. Each of these program/results centers operates under the principles of the Pollution Prevention Act and works with others to reduce waste at the source, before it is generated. The programs are designed to facilitate the incorporation of pollution prevention concepts and principles into the daily operations of government agencies, businesses, manufacturers, nonprofit organizations, and individuals. Each program/results center contributes outcome results which are added to the combined flow of results. Data is rolled up into a single tracking tool: "P2 Program 2011 Strategic Targets - Contributions by Program.xls," which aggregates annual progress toward the goals.

Performance Database:

Green Chemistry (GC): EPA has developed an electronic database ("metrics" database) that allows organized storage and retrieval of green chemistry data submitted to EPA on alternative feedstocks, processes, and safer chemicals. The database was designed to store and retrieve, in a systematic fashion, information on the environmental benefits and, where available, economic benefits that these alternative green chemistry technologies offer. The database was also designed to track the quantity of hazardous chemicals and solvents eliminated through implementation of these alternative technologies. Green Chemistry technology nominations are received up to December 31 of the year preceding the reporting year, and it normally takes 6-12 months to enter new technologies into the database. The database currently has information on all technologies received through 2006.

Design for the Environment (DfE): DfE has an evaluation spreadsheet that is populated for all its programs (i.e., Alternatives to Lead Solder in Electronics, Furniture Flame Retardant Alternatives, the Formulator Program, and a collaboration with the Air Office on DfE approaches as implementation mechanisms for regulating Local Area Sources, such as Auto Refinishing). Spreadsheet content vary by project, and generally include measures comparing baseline technologies or products to safer ones, as well as information on partner adoption and/or market share of safer alternatives. For example, the DfE Formulator Program tracks the move to safer chemicals (such as pounds of chemicals of concern no longer used by partners, and conversely pounds of safer ingredients) and reductions in water and energy use.

Green Engineering (GE): GE will be developing an electronic database to keep track of environmental benefits of GE projects including pounds of hazardous chemicals prevented and/or eliminated, gallons of water, British Thermal Units (BTUs) and dollars saved and pounds of carbon dioxide (CO₂) emissions eliminated.

Regional Offices: EPA's Regional Offices' (Regions) P2 results come primarily through grants they award, and results from projects managed by EPA Regional staff. Regional Offices use the GranTrack database to collect and organize information on the P2 and Source Reduction grants they award. GranTrack includes multiple information fields covering administrative and financial aspects of the grants as well as results reported by grantees. The database can be searched and reports developed in numerous ways, including by Region, type of grant, year grant awarded, and year of results. Data may be displayed for individual grants or in aggregate covering multiple grants.

P2Rx: Many state and local P2 programs are currently collecting data on P2 program activities, outputs, and outcomes to feed into the National Pollution Prevention Results System, which will provide data on pollution prevention environmental outcomes performance measures. Standardized metrics have been developed, with definitions, as well as an ongoing system to gather data on these metrics through the regional P2Rx centers. Over 30 state and state-level P2 organizations have signed Memoranda of Agreements to provide data. As the system is implemented, data collected from the programs will be placed first in regional databases managed by the 8 P2Rx centers and then in a new national database. The system was ready for initial use on a national scale in Spring 2006. Each P2Rx center now hosts a Regional Aggregation Module set up to collect data from each program in their region. Actual data entry is just starting. In order to avoid counting data describing the same results twice in EPA performance measurement systems, data from work funded by EPA grants reported through the EPA GranTrack system will be counted in the Regional Center for Results totals, and not in the P2Rx center totals when that data is also reported to the P2Rx center directly by the grantee. Since state and other results funded by EPA grants will be reported through the Regional Center for Results, as just described, the results reported in EPA performance measurement systems through the P2Rx center will therefore be funded from non-federal sources. As a result, EPA cannot claim full responsibility for these results. Nevertheless, EPA support for P2 research, such as technical assistance and outreach through such mechanisms as publications, training, and information inquiries answered by the 8 P2Rx centers, contributes to national P2 progress even when there is no direct EPA funding for a specific project. To capture this indirect effect of EPA's role, 10% of the results reported through the P2Rx center will be counted in EPA performance measurement systems.

Hospitals for a Healthy Environment (H2E) Program: The H2E program maintains its own electronic program database. Data is collected voluntarily from Partners on an ongoing and continuous basis. Data is requested on mercury and waste reduction information broken down by types of waste. Information on BTUs, gallons of water, and dollar savings are only requested in award applications.

Green Suppliers Network (GSN): GSN utilizes a Customer Relationship Management database (CRM) in partnership with the National Institute of Standards and Technology's Manufacturing Extension Partnership Program (NIST MEP) to collect performance metrics for the program. The CRM was originally configured to collect economic information from companies receiving services through the NIST MEP system. The CRM has been modified to capture the environmental metrics collected during a GSN review at a company, such as the value of environmental impact savings identified, energy conserved (BTU, kwh/year), water conserved (gal/year), water pollution reduced (lbs/year), air emissions reduced (lbs/year), hazardous waste reduced (lbs/year), solid waste reduced (lbs/year), and toxic/hazardous chemical use reduced (lbs/year).

EPP Center for Results. Results for Environmentally Preferable Purchasing (EPP) come from the Federal Electronics Challenge (FEC), the Electronic Product Environmental Assessment Tool (EPEAT), and Green Janitorial Products. FEC uses the FEC Administrative Database for storage and retrieval of baseline and annual reporting information from FEC partners. EPP staff run these reporting data through the Environmental Benefits Calculator to calculate pounds of hazardous and non-hazardous pollution reduced, units of energy conserved, and costs saved (among other benefits) on an annual basis. EPEAT-registered manufacturers provide reporting data via the Green Electronics Council, which collects and organizes EPEAT reporting data. As with FEC, the EPP team runs these reporting data through the Environmental Benefits Calculator to calculate pounds of hazardous and non-hazardous pollution reduced, units of energy conserved, and costs saved (among other benefits) on an annual basis. For Janitorial Products, the EPP team will collect annual reporting data from various EPA contacts for EPA's Environmental Management System (EMS), and then run these data through the Green Cleaning Calculator to calculate pounds of hazardous pollution reduced. FY 2006 data will be collected in January 2007. This collection will be the first time FEC uses an online form to collect program data.

Data Source:

Green Chemistry (GC): Industry and academia submit nominations annually to the Office of Pollution Prevention and Toxics (OPPT) in response to the Presidential Green Chemistry Challenge Awards. Environmental and economic benefit information is included in the nomination packages. The metrics database pulls this public benefit information from the nominations. The database currently has information on all technologies received through 2006.

Design for the Environment (DfE): The source of DfE's evaluation information varies by the project and the partner industry. For example, in DfE's Formulator Recognition Program, partners provide proprietary information on the production volume of their improved formulations. For other partnerships, data sources typically include technical studies (e.g., Alternatives Assessments and Life-Cycle Assessments) and market/sales/adoption information from sources such as industry associations.

Green Engineering (GE): Data will come from various sources and partners including the regions, academia and industry. For example, for GE projects related to the pharmaceutical industry, data will be directly reported by the project leaders. Some information may also come

from profiles of recognized projects taken from technical journals or organizations, such as the American Institute of Chemical Engineers, or directly reported by project leaders on industry projects or joint academia-industry projects.

Regional Offices: P2 Grant and Source Reduction grant data are secured from grant applications, grant reports and supplemental forms and entered into the P2 Grant Database, Gran Track.

P2Rx center: See above.

H2E Program: Because the H2E program is a voluntary program, the information collected is voluntarily submitted by hospital Partners. The H2E program maintains an ICR for the collection of data which allows EPA to collect data from third parties under the Paperwork Reduction Act.

Green Suppliers Network (GSN): Data are collected by the GSN Review Team during a GSN review at the company's facility. This team consists of a "lean" manufacturing expert from the NIST MEP system and an environmental expert usually from the state environmental agency or its designee. Lean manufacturing is a business model and collection of methods that help eliminate waste while delivering quality products on time and at least cost. NIST MEP has a system of lean experts who assist businesses through the process of becoming more efficient and cost effective. The metrics are recorded in the final report generated for the company's use and also are entered into the CRM database by the NIST MEP center. All MEP centers are grantees to the Department of Commerce and must adhere to DOC's requirements for the collection and handling of data. These requirements are reinforced by the terms of the "Request for Proposals" to which each center (e.g., grantee) responds and which must be followed during a GSN review.

EPP Center for Results. For FEC, the data source is federal partners. For EPEAT, the data source is EPEAT-registered manufacturers of electronic products. For Janitorial Products, the data source is EPA EMS contacts for procuring janitorial products.

Methods, Assumptions, and Suitability:

Green Chemistry (GC): The public information is tracked directly through internal record-keeping systems. No models or assumptions or statistical methods are employed.

Design for the Environment (DfE): Each DfE partnership identifies and focuses on a unique set of chemicals and industrial processes. For DfE's Formulator Recognition Program, partner-provided data on production volumes is aggregated to determine the total reductions of hazardous chemicals achieved through the program. For Lead-Free Solder and Furniture Flame Retardants, market data for the production volume of the chemical of concern provides the measure for reduction. DfE's Data Program Tracking Spreadsheet includes the methods and assumptions for each project's measures.

Green Engineering (GE): The information will be supplied directly by project leaders and/or academic-industry-region partners. The information will be tracked directly through EPA record keeping systems. GE's Data Program Tracking spreadsheet includes methods and assumptions.

Regional Offices: The data will come from state and other P2 grantees and other sources as described above. No models or assumptions or statistical methods are employed by EPA

P2Rx: The data will come from state and local P2 programs as described above. No models or assumptions or statistical methods are employed.

H2E Program: The data comes directly from program Partners, specifically hospitals. No models or assumptions or statistical methods are employed.

Green Suppliers Network (GSN): Data is entered by the NIST MEP. The data is collected using the standard procedures normally utilized by the environmental agency participating in the GSN review. A standard set of metrics has been defined by the GSN program and is collected at each review. The data are aggregated by NIST MEP headquarters and reported to EPA on a regular basis. These data can also be aggregated by sector. The data are aggregated to maintain confidentiality for all companies participating in the program. No models or statistical methods are employed.

EPP Center for Results. For FEC, various assumptions are used to estimate data (starting in 2006) regarding the number of desktops per employee and the average life cycle of desktops. Also, metric calculations rely on the assumptions that: 1) the EPEAT criteria now qualifying a product for the “bronze” level (see www.epeat.net for criteria); 2) the weight of recycled desktop components; and 3) the commercial process for electricity will not change between 2006-2011. For EPEAT, similar assumptions are made for the weight of plastic components and the weight of packaging for desktops. In the future, when actual data is used to calculate environmental benefits each year, these assumptions will no longer be necessary. Instead, the only assumptions in effect will be that partners report accurate data and those assumptions needed for the Calculator (to be determined) to translate environmental attributes and activities into environmental benefits. The Environmental Benefits Calculator assists institutional purchasers in measuring the environmental and economic benefits of purchasing environmentally preferable products. For Janitorial Products, the method involves reporting the types of products and work practices used during routine cleaning activities in office buildings. The Green Cleaning Calculator assists in calculating pounds of hazardous pollution reduced.

QA/QC Procedures: All Pollution Prevention and Toxics programs operate under the Information Quality Guidelines as found at <http://www.epa.gov/quality/informationguidelines>, last accessed on July 27, 2008 and under the Pollution Prevention and Toxics Quality Management Plan (QMP). The Quality Management Plan is for internal use only.

Green Chemistry: Data undergo a technical screening review by the Agency before being uploaded to the database to determine if the data adequately support the environmental benefits described in the Green Chemistry Challenge Awards application. Subsequent to Agency screening, data are reviewed by an external independent panel of technical experts from academia, industry, government, and nongovernmental organizations (NGOs). Their comments on potential benefits are incorporated into the database. The panel is convened by the Green Chemistry Institute of the American Chemical Society, primarily for judging nominations

submitted to the Presidential Green Chemistry Challenge Awards Program and selecting winning technologies.

Design for the Environment (DfE): Data undergo a technical screening review by DfE before being added to the spreadsheet. DfE determines whether data submitted adequately support the environmental benefits described.

Green Engineering (GE): Data will be reviewed by the partners including industry, academia, and the regions. Data will also be reviewed by GE to ensure transparency, reasonableness and accuracy.

Regional Offices: Data will undergo technical screening review by EPA Regional and Headquarters staff and their contractor before being placed into GranTrack. Data for projects managed directly by EPA Regional staff will be reviewed by Regional personnel. Additional QA/QC steps to be developed, as appropriate.

P2Rx: Data will undergo technical screening review by EPA and other program participants (e.g., Pollution Prevention Resource Exchange (P2Rx) centers) before being placed in the database. Additional QA/QC steps to be developed, as appropriate.

H2E Program: Data undergo technical screening review by the grantee (National Center for Manufacturing Sciences, which administers the program through a subgrant) before being placed in the database. QA/QC plan is a part of the grant requirement.

Green Suppliers Network (GSN): Data is collected and verified under NIST MEP's QA/QC plan. Each NIST MEP Center must follow QA/QC requirements as grantees to the Department of Commerce. Additionally, the environmental data are collected under the specific requirements of the state environmental agency participating in each GSN review. Each state agency utilizes their own QA/QC plan for data collection because they utilize the data for purposes in addition to the GSN program.

EPP Center for Results. Regarding FEC, EPEAT, and Janitorial Products, the calculators of environmental benefits (e.g., the Environmental Benefits Calculator and the Green Cleaning Calculator) underwent internal and external review during their development phases. The Environmental Benefits Calculator is still undergoing an external peer review and will not be finalized until Fall/Winter 2006. Regarding FEC and EPEAT, instructions and guidelines are provided to partners on how to report data. Their reporting forms are reviewed annually by EPA management. For EPEAT, EPEAT-registered manufacturers sign a Memorandum of Understanding in which they warrant the accuracy of the data they provide. For Janitorial Products, contractors sign a contract stating that they are providing janitorial products according to certain specifications. For FEC, EPEAT, and Janitorial Products, data undergo an internal technical review before these data are run through the calculators.

Data Quality Review: All Office of Pollution Prevention and Toxics (OPPT) programs operate under EPA's Information Quality Guidelines as found at

<http://www.epa.gov/quality/informationguidelines> (last accessed on July 27, 2008) and under the OPPT's Quality Management Plan (QMP).

Green Chemistry (GC): Review of industry and academic data as documented in U.S. EPA, Office of Pollution Prevention and Toxics, Green Chemistry Program. Files available at <http://www.epa.gov/opptintr/greenchemistry/> (last accessed on July 27, 2008)

Design for the Environment (DfE): Data collected includes those from industry associations and government reports. Source data is compared with industry trends and examined by industry and NGO partners.

Green Engineering (GE): Data collected will be reviewed to meet data quality requirements.

Regional Offices: The GranTrack metrics and data system incorporate ideas and system features from the National Pollution Prevention Results System, developed with EPA support by such organizations as the Northeast Waste Management Officials Association, Pacific Northwest Pollution Prevention Resource Center, and National Pollution Prevention Roundtable. Data for projects managed directly by EPA Regional staff will be reviewed by Regional personnel.

P2Rx: The new metrics and data system were based, in part, on recommendations in the February 2001 GAO report, "EPA Should Strengthen Its Efforts to Measure and Encourage Pollution Prevention" (GAO-01-283). They also incorporate work by such organizations as the Northeast Waste Management Officials Association, Pacific Northwest Pollution Prevention Resource Center, and National Pollution Prevention Roundtable.

H2E Program: Not applicable

Green Suppliers Network (GSN): Not applicable.

EPP Center for Results. For FEC, data are entered on-line with an additional error-checking function on the online form. The mechanism by which the EPP program is receiving data from the Green Electronics Council is still being determined. For Janitorial Products, data quality review steps (as of 4th quarter 2006) are still under development.

Data Limitations:

Green Chemistry (GC): Occasionally data are not available for a given technology due to confidential business information (the Presidential Green Chemistry Challenge Awards Program does not process CBI). Because the Presidential Green Chemistry Challenge is a voluntary public program, it cannot routinely accept or process CBI. If the program stakeholders cannot verify a technology because of proprietary information, especially during the final judging stage of the awards program, they can and do ask EPA to conduct the verification internally. EPA will then ask the company to share confidential information with CBI-cleared OPPT staff in order for EPA to conduct the verification. It also is occasionally unclear as to what is the percentage market penetration of implemented alternative green chemistry technology (potential benefits vs. realized benefits). In these cases, the database is so noted.

Design for the Environment (DfE): Occasionally, data on innovative chemistries or technologies are claimed CBI by the developing company, thus limiting the implementation of beneficial pollution prevention practices on a wider scale.

Green Engineering (GE): There may be instances in which environment benefits are not clearly quantified and/or available due to various reasons including CBI. In those instances, the data have to be carefully evaluated and considered for reporting. If the information is included, the uncertainties/limitations will be noted

Regional Offices: Limitations arise from the reliance on individual state and other P2 grantees and other sources to gather data. These programs vary in attention to data collection from sources within their jurisdictions, data verification and other QA/QC procedures. Also, despite changes described below to add consistent metrics and definitions, some differences exist. EPA is attempting to address these concerns by strengthening reporting requirements in its P2 grants, focusing on outcomes, and standardizing GranTrack metrics with those in the National P2 Results System. EPA is also in the process of adding a P2 component to the EPA Information Exchange Network (which provides financial support and a comprehensive data system to link state data with EPA).

P2Rx: Limitations arise from the reliance on individual state and local P2 programs to gather data. These programs vary in attention to data collection from sources within their jurisdictions, data verification and other QA/QC procedures. Also, despite development of core measures and a data dictionary, differences in reporting exist among data sources. EPA is attempting to address these concerns by working with the groups described above who have been partners in the development of the National Pollution Prevention Results System. EPA is also in the process of adding a P2 component to EPA Information Exchange Network

H2E Program: Not all hospital Partners have turned in their facility assessment information. However, in order to be considered for an award under the program, hospital Partner MUST submit facility information; therefore, the program has a very complete set of information for hospital Partners who have applied for awards. This introduces self-selection bias to the reported data as the hospitals with the best track records are those that apply for the awards. The program has roughly 10% of all Partner facilities' assessment data. An internal assessment conducted of data collected from Partners revealed some calculation errors and data inconsistencies regarding how waste data is captured by the hospital Partners. The program has gone back to correct some of those errors.

Green Suppliers Network (GSN): Limitations arise from the reliance on individual programs to gather data. These programs vary in attention to data collection from sources within their jurisdictions, data verification and other QA/QC procedures. The GSN program has attempted to address these concerns by strengthening the data collection requirements in the Request for Proposals that MEP centers must be respond to in order to perform a GSN review.

EPP Center for Results. FEC and EPEAT have a built-in reliance on partners for data reporting.

Error Estimate:

Green Engineering (GE): There may be instances in which environmental benefits are not clearly quantified. In those instances, the data will be excluded.

Design for the Environment (DfE): The program simply compiles data and does not conduct statistical analysis. Error estimates are not available

H2E: The program does not use a statistical approach to collect the data and therefore does not have confidence intervals for the performance estimates.

Green Suppliers Network (GSN): Not applicable.

EPP Center for Results. Any errors detected during internal technical review of performance data submitted would be addressed, either through correction of data or elimination of data.

New/Improved Data or Systems:

Regional Offices: EPA recently updated and expanded GranTrack, both to improve usability and to add a much greater level of detail regarding results reported by grantees. In regard to reporting of results, GranTrack includes activity measures, behavioral measures, and outcome measures. The metrics chosen and their definitions generally are consistent with those used in the National Pollution Prevention Results System, described in the P2Rx center. Also, EPA is planning to grant the public restricted access to GranTrack. The following fields will be accessible: general information, projects and results data, status of grant, funding, keywords, partners, and sectors.

P2Rx: This center's data collection system is currently under initial implementation through the partnership described above.

H2E Program: The program is currently beta-testing new facility assessment software which will help hospital Partners collect and compute facility environmental improvement data. The software automatically converts units and tabulates information from the hospital's source data, as well as calculating costs for different waste streams. Anticipated roll-out for the software will be in 2007.

EPP Center for Results. FEC will use additional on-line data entry forms in 2007.

References:

Green Chemistry (GC): <http://www.epa.gov/opptintr/greenchemistry/>
Design for the Environment (DfE): <http://www.epa.gov/opptintr/dfe/>
Green Engineering (GE): <http://www.epa.gov/opptintr/greenengineering/>
Pollution Prevention (P2) Programs: <http://www.epa.gov/oppt/p2home/index.htm>
<http://www.p2.org/workgroup/Background.cfm>
<http://www.epa.gov/Networkg/>
Hospitals for a Healthy Environment (H2E):
<http://www.epa.gov/oppt/pollutionprevention/pubs/h2e.htm>
Green Suppliers Network (GSN): www.greensuppliers.gov
EPP Center for Results. Information about FEC's annual reporting is on the FEC web site at:

<http://www.federalelectronicchallenge.net/report.htm>

Information about the Environmental Benefit Calculator is on the FEC web site at:

<http://www.federalelectronicchallenge.net/resources/docs/enbencalc.pdf>

The EPEAT Subscriber and License Agreement is available on the EPEAT web site at: <http://www.epeat.net/docs/Agreement.pdf>

FY 2008 Performance Measure:

- **Reductions of hazardous chemicals per federal dollar spent (lbs/dollar) [PART efficiency measure]**

EPA measures the accomplishments of the Design for the Environment's (DfE) Formulator Recognition Program by comparing reductions in hazardous chemicals achieved to program resources, including FTE, overhead and extramural dollars spent. The Formulator Recognition Program works with formulators of chemical-intensive products to reduce the use of hazardous chemicals through green chemistry innovations. DfE partners provide information on levels of reduction.

Performance Database: The DfE formulator program collects confidential data each year from a sample of partner companies and enters the information into the formulator program tracking component of the DfE program evaluation spreadsheet. Key data elements used to calculate the efficiency measure are the quantity of hazardous chemicals reduced through reformulation by product type, and spending information obtained from the OPPT Finance Central database. The efficiency measure numerator is the sum of the average pounds of hazardous chemicals reduced per formulation multiplied by the annual quantity of each formulation. The denominator is the annual program resources expended.

Data Source: Partners voluntarily provide information on the pounds of hazardous chemicals reduced per formulation and the annual production of those formulations. Resource data is from OPPT internal sources.

Methods, Assumptions and Suitability: Data on reductions of chemicals are averaged with information from previous years to create an average annual quantity of hazardous chemical reduced per formulation and multiplied by the total number of formulations recognized by the program. The result is the total annual reduction in pounds of hazardous chemicals. The method aggregates across all formulators and assumes that the entire quantity of recognized formulations is reformulated. Program resources are calculated directly from EPA figures. The efficiency measure corresponds directly to the program goal of cost-effectively reducing hazardous chemical use and can compare cost effectiveness year-to-year.

QA/QC Procedures: Design for the Environment operates under EPA's Information Quality Guidelines as found at <http://www.epa.gov/oei/qualityguidelines/index.html> and under the OPPT Quality Management Plan.

Data Quality Reviews: Data undergo a technical screening review by DfE staff before being added to the program tracking spreadsheet.

Data Limitations: The data submitted voluntarily by partners is confidential. The information made public information is limited to aggregated values. In addition, only nine formulators are represented in each annual sample to reduce reporting burden, which may contribute to sampling error.

Error Estimate: Due to the sampling methodology, no error estimate is possible.

New/Improved Data or Systems: Each year additional data is added to the program tracking spreadsheet and averaged with preceding years. Cumulative data will provide a more stable estimate of total pounds of hazardous chemicals reduced through the DfE formulator program.

References:

<http://www.epa.gov/oei/qualityguidelines/index.html>

The DfE Program Tracking Spreadsheet for chemical formulators contains Confidential Business Information.

FY 2008 Performance Measures:

- **Reduce water use at Performance Track facilities**
- **Reduce hazardous materials use at Performance Track facilities**
- **Reduce production of greenhouse gases at Performance Track facilities**
- **Reduce toxic releases to water at Performance Track facilities**
- **Reduce combined NO_x, SO_x, VOC and PM emissions at Performance Track facilities**

Performance Databases: In 2003, EPA developed an electronic database, Performance Track On-Line (a Domino database) which facilities use to electronically submit their environmental performance data. The data are stored in Performance Track Online as well as in the Performance Track Members Database (a Microsoft Access database).

Members report on results in a calendar year. Fiscal year 2008 data represents members' calendar year 2007 performance. That data will be reported to the Performance Track program by April 1, 2008. The data will then be reviewed, aggregated, and available for external reporting in September 2008. (Calendar year 2008 data will become available in September 2009.)

Data Source: All data are self-reported and self-certified by member facilities. As described below, Performance Track engages in quality control to the extent possible, but it does not conduct formal auditing. However, as described below, Performance Track staff visit up to 10% of Performance Track member facilities each year. In addition, a criterion of Performance Track membership is the existence of an environmental management system (EMS) at the facility, a key element of which is a system of measurement and monitoring. Most Performance Track facilities have had independent audits of their EMSs, which create a basis for confidence in the facilities' data.

Methods, Assumptions, and Suitability: Data collected from members' applications and annual performance reports are compiled and aggregated for the externally-reported indicators. Performance Track members commit to two to four environmental improvements, selected from a comprehensive list of environmental indicators. Facilities then report on their performance in these indicators over a three-year period of participation. Because facilities choose the areas in which they will report, the externally reported indicators (listed above) may or may not be included in any particular facility's set of reported indicators. If a facility does not include one or more of the above indicators as one of its commitments, then its performance for that indicator, either positive or negative, will not be included in EPA's aggregated data for the indicator.

The data reflect the performance results across the entire facility, and are thus considered "facility-wide" improvements. Members are not permitted to report on environmental improvements for a subset of the facility; rather, the data reported must represent the performance for the given indicator across the entire facility. Performance Track staff ensures that all improvements are facility-wide by conducting a thorough technical review of the submitted performance data. Any data that are determined to not reflect the entire facility's performance is either revised or excluded from the aggregated and externally reported results. EPA believes that this review process minimizes instances of reporting on non-facility wide improvements.

The data are normalized for production rates or other rates of output at the facilities. Normalized results take into account production or output changes at facilities.

The data can be used to make year-to-year comparisons, but reviewers and analysts should bear in mind that Performance Track membership is constantly in flux. Although members should retain the same set of indicators for their three-year participation period, as new members join the program and others leave, the group of facilities constantly changes. In a few instances, members make replacement commitments due to closure of certain product lines or other major business changes.

Due to unavoidable issues regarding the timing of the application period, a small subset of reported data will represent performance improvements over two years for the facilities' first reporting year.

QA/QC Procedures: Performance data submitted to the program are reviewed for completeness and adherence to program requirements, and undergo a technical screening review by EPA and contractor staff. The quality of the data, however, is dependent on the quality of the measurement or estimation at the facility level. In cases where it appears possible that data is miscalculated or misreported, EPA or contractor staff contact the facility and request resubmittal of the data. If the accuracy of data remains under question or if a facility has provided incomplete or non-standard data, the database is coded to ensure that the data is excluded from aggregated and externally reported results.

As described, Performance Track is quality controlled to the extent possible, but is not audited in a formal way. However, Performance Track staff visit up to 10% of Performance Track member facilities each year. During those visits, facilities are asked about their data collection systems and about the sources of the data reported to the program. Additionally, a prerequisite of Performance Track membership is an environmental management system (EMS) at the facility, a key element of which is a system of measurement and monitoring. Most Performance Track facilities have had independent audits of their EMSs, which increases confidence in the facilities' data. The independent assessment became a requirement in 2004.

Data Quality Reviews: N/A.

Data Limitations: Potential sources of error include miscalculations, faulty data collection, misreporting, and nonstandard reporting on the part of the facility. It is clear from submitted reports that some facilities have a tendency to estimate or round data. Errors are also made in converting units and in calculations. In general, however, EPA is confident that the externally reported results are a fair representation of members' performance.

Error Estimate: Not calculated.

New/Improved Performance Data or Systems: Since spring 2004, all Performance Track applications and annual performance reports have been submitted electronically (through the Performance Track On-Line system), thus avoiding the need for manual data entry. This has also allowed for improved standardization of data collection. Additionally, the program has implemented a new requirement that all members receive an independent assessment of their EMSs prior to membership. Lastly, the program has reduced the chances that data may not reflect facility-wide data by addressing the issue in the review process and by instituting "facility-wide data" requirements for all indicators.

References: Members' applications and annual performance reports can be found on the Performance Track website at <https://yosemite.epa.gov/oepi/ptrack.nsf/faMembers?readform>. *Performance Track On-Line* and the *Performance Track Members Database* are not generally accessible. Performance Track staff can grant access to and review of the databases by request.

FY 2008 Performance Measure:

- **75% of innovation projects under the State Innovation Grant Program and other piloting mechanisms will achieve, on average, 8.0% or greater improvement in environmental results from a project initiation baseline measure for the sectors and facilities (e.g., reductions in air or water discharges, improvements in ambient water or air quality, or improvements in compliance rates) or a 5% or greater improvement in cost-effectiveness and efficiency. In FY08, six (6) projects will be reaching completion, at which point they are evaluated, and the target is for five (5) to meet the performance goal**

Performance Databases: The Office of Environmental Policy Innovation (OEPI) maintains an EPA-internal database, the "State Innovation Grant Database" (a Lotus Notes - Domino

database) to retain and organize data on competition, award and project performance for its State Innovation Grant Program. The data base is managed by OEPI and access within the Agency can be granted to EPA project officers and program officials. In the past, we have granted access to this database to the Office of the Inspector General for use in a program evaluation. Data entry is performed by staff within OEPI. Within the sections on project performance, the database includes all available quarterly project progress reports and final project reports. Quarterly reports are timed to the lifecycle of an individual project rather than all projects on a fixed date. These reports include document in MS Word and WordPerfect formats as well as spreadsheets, all generated by the State Grant recipients to track their project milestones identified in the final project work plan. Beginning in 2006, OEPI will use the data to generate an annual performance report for the State Innovation Grant program. The projects funded by the grant program typically have a 2-4 year lifetime and during that period, each project reports on a quarterly basis and provides a final project outcome report at the termination of the project.

Projects implemented under the State Innovation Grant Program typically do not show measurable environmental outcomes until the programs initiated under the grants are fully implemented. For example, a State implementing an Environmental Results Program for a particular business sector may take up to three years to develop the compliance assistance program and operator manuals, conduct a baseline assessment of performance, implement the compliance assistance workshops, provide adequate time for businesses to fully adopt the program and then conduct a performance assessment for a statistical sample of hundreds of facilities state-wide. Dates captured in the project quarterly reports provide information on attainment of operational milestones and outputs. The final reports are expected to provide measurement of first, second or third order outcomes to assess the success of the project. This is significant because outcome measurement is not possible until the grant project is completed. Only milestones and output measurements (e.g., development of a compliance handbook, compliance assistance workshops) are available during the operation of the individual projects. Thus, performance assessment occurs only at the end of a project. Projects we will report on in 2007 are projects initiated in 2003 and 2004.

Data Source: Data on performance are reported by the States for projects funded under the State Innovation Grant Program. Data are collected by the States using a variety of mechanisms depending upon the specific projects. For instance, for Environmental Results Programs (ERPs), the State prepares a compliance manual for a specific business sector and a compliance worksheet. Participating operators self-certify their performance using the worksheet and its checklist. The States audit statistically random samples of the participating facilities and certify the performance of these facilities independently. States are required to report only composite data for these projects. Other types of projects may rely on a facility's environmental monitoring conducted under a permit to certify performance. Only rarely are new data required for a State Innovation Grant Program project. We rely heavily on existing performance assessments conducted under permitting programs to assess baseline and outcome performance improvement. For instance, the grant program has funded several facility environmental management systems (EMS). Facilities typically have independent third-party audits of their EMSs, which create a basis for confidence in the facilities' data. In general EPA is confident that the externally reported results are a fair representation of members' performance.

Methods, Assumptions, and Suitability: Performance assessment methods will vary across project types in this program. For instance, ERPs focus on improvement in compliance rates and program efficiency. Compliance rates are determined by a statistically-based sample audit of participating facilities within an ERP sector by the State. Currently, the State Innovation Grant program is sponsoring ERP projects in a number of business sectors (dry cleaning, printing, auto body repair, auto salvage, Underground Storage Tanks (USTs), Injection Wells, Concentrated Animal Feeding Operations (CAFOs), Oil and Gas well drilling and operation, dental facility mercury management, etc). Some of these facilities will report compliance based upon operational processes. Others may be able to go beyond compliance reporting and provide estimates of pollution prevention (e.g., pounds of mercury recovered from dental amalgam).

Other project types, such as Environmental Management Systems will typically will utilize facility monitoring protocols developed for their permits and use those to develop assessments of improvements in emissions and discharges. Where EMS-driven projects also develop engineering estimates of improvements in pollutant discharges brought about by manufacturing changes, those estimates would require verification related to any alteration in permits.

Analysts should bear in mind that these projects almost never produce incremental improvements across their lifetime (e.g., in a 3-year project, one third of the projects proposed benefits will not occur in each year. Rather, project outcomes are generally measurable only at the completion of the project which marks full implementation. In a number of instances, full implementation may require time beyond the grant-funded project period. In these instances we have sought commitments from recipient-states to continue measuring performance and reporting to EPA after the grant project itself has been completed. The significant impact on the State Innovation Grant program is that outcomes reported in any year will reflect completion of projects initiated 2-4 years earlier and not incremental benefits during the lifetime of a project. Thus, reporting of outcomes in 2007 will be based upon projects funded in FY 2003 and FY 2004.

QA/QC Procedures: Each project funded under the State Innovation Grant Program is required to develop a Quality Assurance Project Plan (QAPP) that is compliant with EPA guidance. The QAPP is reviewed by the designated QA official from the appropriate EPA Region and OEPI's QA reviewer. States must have an approved QAPP before the beginning of any data collection. OEPI has prepared guidance for state grant recipients on development of performance measures and quality assurance plans. OEPI also requires participation by each new state grant recipient in an annual training workshop that addresses these areas. Additionally, final project reports will be made available to other States and to the public for examination. EPA is also a partner with State Innovation Grant recipients in the conduct of open forums for discussion of projects, such as the ERP All-States Meeting held annually to allow open examination of progress and results in each of the ERP projects.

Data Quality Reviews: N/A.

Data Limitations: Potential sources of error include miscalculations, faulty data collection, misreporting, inconsistent reporting, and nonstandard reporting on the part of the facility. Manually entered data are sometimes typed incorrectly.

Because States are required to submit only synoptic (or meta) data with regard to program performance, we rely on the States to apply the appropriate steps to ensure data accuracy and appropriateness of analysis as described in their QAPP. In 2007, OEPI will initiate a post-award monitoring program that will include steps to audit reporting under the State Innovation grant Program.

Error Estimate: Not calculated.

References: Information on the State Innovation Grant Program, including State pre-proposals and final workplans can be found on the program website at: <http://www.epa.gov/innovation/stategrants>. OEPI anticipates publication of its first State Innovation Grants Program progress report in early 2007.

GOAL 5 OBJECTIVE 3

FY 2008 Performance Measures:

- **Percent of tribes with delegated and non-delegated programs (PART measure)**
- **Percent of tribes with EPA-reviewed monitoring and assessment occurring (PART measure)**
- **Percent of tribes with EPA-approved multimedia work plans (PART measure)**
- **Number of environmental programs implemented in Indian country per million dollars (PART efficiency measure)**

Performance Database: EPA's American Indian Environmental Office (AIEO) developed an information technology infrastructure, named the Tribal Program Enterprise Architecture (TPEA). The TPEA is a suite of secure Internet-based applications that track environmental conditions and program implementation in Indian country as well as other AIEO business functions. One TPEA application, the Objective 5.3 Reporting System, tracks progress in achieving the performance targets under Goal 5 Objective 3 of EPA's National Strategic Plan – "Improve Human Health and the Environment in Indian Country." EPA staff use the Objective 5.3 Reporting System to establish program performance commitments for future fiscal years and to record actual program performance for overall national program management. The Objective 5.3 Reporting System serves as the performance database for all of the annual performance measures and PART measures.

Data Source: Data for the Objective 5.3 Reporting System are input on an ongoing basis by Regional tribal program project officers, as designated by the Regional Indian Coordinators. All persons authorized to input data have individual passwords.

The original documents for the statements and data entered into the fields of the Objective 5.3 Reporting System can be found in the files of the Regional Tribal Project Officers overseeing the particular programs that are being reported on. For example, documents that verify water quality monitoring activities by a particular tribe will be found in the files of the Regional Water 106 Project Officer for the tribe.

The performance measure, “Percent of tribes with delegated and non-delegated programs,” tracks the number of: Treatment in a manner similar to a State (TAS) approvals or primacies; implementations of a tribal program; executions of Direct Implementation Tribal Cooperative Agreements (DITCA); and GAP (General Assistance Programs) grants that have provisions for the implementation of solid waste or hazardous waste programs.

EPA Regional project officers managing Tribes with delegated and non-delegated environmental programs input data, classified by tribe, into the Objective 5.3 Reporting System to derive a national cumulative total.

The performance measure, “Percent of tribes with EPA-reviewed monitoring and assessment occurring (cumulative),” reports the number of active Quality Assurance Project Plans (QAPPs). All ongoing environmental monitoring programs are required to have active QAPPs. Regional tribal program liaisons obtain the information from Regional Quality Assurance Officers and input it into the Objective 5.3 Reporting System. The data are updated continuously and summed at the end of the fiscal year.

The performance measure, “Percent of Tribes with EPA approved multi-media workplans,” tracks the number of tribes with: Performance Partnership Grants (PPGs); Tribal Environmental Agreements (TEAs), Tier I, Tier II, and Tier III; Memoranda of Agreement (MOAs); and Memoranda of Understanding (MOUs), which demonstrate Tribe building. EPA Regional tribal program liaisons input data, which are summed annually. It is possible a tribe will contribute to the measure in more than one way.

The performance measure, “Number of environmental programs implemented in Indian Country per million dollars,” is calculated annually by summing the number of tribes receiving General Assistance Program (GAP) grants, the number of TAS approvals or primacies, the number of DITCAs, and the number of GAP grants that have provisions for the implementation of solid or hazardous waste programs and dividing that sum by the annual GAP appropriation (less rescissions and annual set-asides.)

Methods, Assumptions and Suitability: The Objective 5.3 Reporting System contains all the information for reporting on performance. The measure that tracks delegated and non-delegated programs can be cross-referenced and verified with records from the Integrated Grants Management System. The measure that tracks monitoring and assessment programs can be verified from databases maintained by the Regional Quality Assurance Officers. The measure that tracks multimedia work plans can be verified from official correspondence files between EPA Regions and Tribes, or from project officer case files.

QA/QC Procedures:

Data used in the Tribal Program Enterprise Architecture contains quality assurance and metadata documentation prepared by the originating agency or program. Because the information in the Tribal Program Enterprise Architecture is used for budget and strategic planning purposes, AIEO requires adherence to the Agency’s Information Quality Guidelines. (www.epa.gov/quality/informationguidelines/index.html)

Data Quality Reviews: The certifying official for the information submitted by EPA’s Regional offices to AIEO through the Objective 5.3 reporting System is the Regional Administrator. However, in some cases the Regional Administrator may wish to delegate the signatory authority to some other official such as the Regional Indian Coordinator. The Regional Administrator or his/her designee will be responsible for certifying that the information in the Objective 5.3 Reporting System, and hence the information which supports the performance measures and proposed PART measures is accurate. This procedure generally follows guidance provided in EPA Information Quality Guidelines. (<http://www.epa.gov/quality/information/guidelines/index.html>)

Data Limitations: Because data are input by EPA’s Regional Project Officers on an ongoing basis, there may be slippages between the time a tribal program status has been achieved and the entering of that data into the Objective 5.3 Reporting System. Even though the Regional Project Officer may enter data on an ongoing basis, at the end of the reporting cycle the Objective 5.3 Reporting System will be “locked down,” with the locked dataset reported for the fiscal year. EPA’s Regional Administrator certifies the accuracy of the locked information

Error Estimate: For the Objective 5.3 Reporting System, errors could occur by mis-entering data or neglecting to enter data. However, the data from each region will be certified as accurate at the end of each reporting cycle; error is estimated to be low, about 1-2 percent.

New/Improved Data or Systems: The Objective 5.3 Reporting System, is a part of the AIEO Tribal Program Enterprise Architecture, and is a part of the same Life Cycle milestones of that system. Presently, plans are to focus on Operations and Maintenance activities for the Tribal Program Enterprise Architecture beginning FY08.

References:

Objective 5.3 Reporting System: https://iasint.rtpnc.epa.gov/TATS/tats_prv/entry_page

User id liue

Password test1

OCFO Information Quality Guidelines: <http://intranet.epa.gov/ocfo/policies/iqg/index.htm>

ENABLING SUPPORT PROGRAMS

FY 2008 Performance Measures:

- **Average time to hire non-SES positions from date vacancy closes to date offer is extended, expressed in working days [PART efficiency measure]**

The data are expressed in the following manner: Average number of days (where the time to extend an offer for each vacancy is averaged); EPA’s fiscal year goal is 45-days

Database: Data are derived from EZ-Hire. This is the database that applicants use to apply for jobs at EPA. This data are tracked internally and reported on a fiscal year and quarterly basis.

The data are reported by the servicing human resources office and rolled up into Agency-wide averages.

Data Source: The Office of Human Resources (OHR) EZ-Hire System.

Methods, Assumptions and Suitability: Data on new hires is collected by OHR using the EZ-Hire system. OHR uses EZ-Hire to generate a raw data report on a quarterly basis (after the quarter has been completed). The data are downloaded as an Excel spreadsheet and are tracked by vacancy announcement number and formatted into the various components of the Office of Personnel Management's (OPM) 45-day Hiring Model. OHR staff review the results, and identify any anomalies that may need further investigation. The draft report is then sent to the servicing HR Offices so the data can be validated, corrected, and ultimately transferred to the OHR to be finalized. HR Offices also work with the Selecting Officials to develop explanatory justifications for those vacancies which exceeded the 45-day timeframe.

QA/QC Procedures: EZ-Hire tracks vacancy announcement activity from the time the announcement opens until a job offer is made to a candidate by the Selecting Official.

Data Quality Reviews: OHR staff review and analyze the raw data, prior to it being provided to the HR Offices for validation. Local HR Offices review and validate the data, identify anomalies or data-entry errors, make corrections, and provide the updated information to OHR so that the report can be finalized. Questions about the data or resolution of issues of concern are frequently resolved through discussion and consultation with OHR.

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: EZ-Hire system provides adequate data for analysis of the average time to hire for non-Senior Executive Service (SES) applicants. However, we anticipate the need for additional programming (to be done by the EZ-Hire Contractor) to enable the system to track additional data required by OPM.

References: EZ-Hire

FY 2008 Performance Measure:

- **Average time to hire SES positions from date vacancy closes to date offer is extended, expressed in working days.**

These data are tracked manually on a weekly basis and reported on a quarterly basis. The data are reported by servicing human resources office and are expressed as an average number of days (where the time to extend an offer for each vacancy is averaged for that servicing HR office)

Performance Database: Data are manually maintained by the Executive Resources Staff (ERS) in a Word format. Data are updated thorough-out the various stages of the hiring process.

Data Source: The Office of Human Resources' Executive Resources Staff.

Methods, Assumptions and Suitability: Data from the weekly report are tracked and reported quarterly. ERS staff reviews the results and further investigates any data anomalies prior to finalizing the quarterly report.

QA/QC Procedures: Data are added as vacancy status changes. The weekly report is reviewed by the ERS Team leader. Questions about the data or resolution of issues of concern are frequently resolved through discussion and consultation within the team.

Data Quality Reviews: ERS staff review and analyze the raw data, prior to being provided to the Team leader for validation. The Team leader reviews the data, identifies anomalies or data-entry errors, and provides the updated information to OHR so that the report can be finalized.

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: The current system is sufficient for tracking the SES hiring activities, given the small number of positions filled annually, about 12 per year.

FY 2008 Performance Measures:

- **Percent increase in the number of non-SES managers and supervisors at the targeted proficiency level (intermediate) for *Interpersonal Skills and Oral Communication***
- **Percent increase in the number of non-SES managers and supervisors at the targeted proficiency level (advanced) for *Interpersonal Skills and Oral Communication***

Database: EPA will use an OPM-supplied database and assessment tool. The database is populated with competency/skills of federal leaders that are deemed necessary for successful performance. It includes survey data resulting from employee self-assessments and supervisory assessments on employee HRM competency/skills.

Methods, Assumptions and Suitability: Survey data will be used to identify current competency/skills of the Agency's leadership population. Assessment data will be compared to the competency/skills EPA determines are necessary for mission accomplishment to arrive at a baseline assessment.

Yearly competency assessments of Agency leaders will be completed and compared to the baseline.

QA/QC Procedures: The Office of Human Resources will utilize a skills assessment to determine if the individual leader is making progress in reaching the targeted level of proficiency level. The assessment will include input from various sources (e.g. peers and supervisors). Leaders may also provide self reports on their own progress.

Data Quality Reviews: N/A

Data Limitations: A true assessment of progress is contingent on obtaining independent, verifiable information which describes the progress made. In the arena of competency assessment/human behavior, only a handful of such tools exist for which the results are valid, verifiable and reliable. In addition, competency development efforts are multifaceted (including training, development assignments, mentoring, and others). Participation in these types of programs is essential to the overall competency building effort.

Error Estimate: N/A

New/Improved Data or Systems:

In FY2006, EPA used the Devine Inventory for a baseline assessment of career SES. For the remaining leaders, the Agency will transition from the baseline instrument, Devine Inventory, to another, yet to be selected, and an emphasis will be placed on making a smooth transition on assessment use.

References: *EPA's Business Case for Leadership as Mission-Critical Occupation for Q1, FY06.* There are no prior data or references available for the actual competency/skills assessment tool.

FY 2008 Performance Measure:

- **Cumulative percentage reduction in energy consumption in EPA's 29 laboratories from the 2003 base**

Performance Database: The Agency's contractor provides energy consumption information quarterly and annually. The Agency keeps the energy consumption data in the "Energy Reporting System." The contractor is responsible for validating the data.

Data Source: The Agency's contractor collects quarterly energy data from each of EPA's laboratories. The data are based on metered readings from the laboratory's utility bills for certain utilities (natural gas, electricity, purchased steam, chilled water, high temperature hot water, and potable water) and from on-site consumption logs for other utilities (propane and fuel oil). The data from the on-site consumption logs are compared to invoices to verify that reported consumption and cost data are correct.

Methods, Assumptions, and Suitability: N/A

QA/QC Procedures: EPA's Sustainable Facilities Practices Branch compares reported energy use at each facility against previous years' data to see if there are any significant and unexplainable increases or decreases in energy quantities and costs.

Data Quality Reviews: N/A

Data Limitations: EPA does not have a formal meter verification program to ensure that an on-site utility meter reading corresponds to the charges included in the utility bill.

New/Improved Data or Systems: N/A

References: N/A

FY 2008 Performance Measures:

- **Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data.**
- **Number of states, tribes, and territories that will be able to exchange data with CDX through nodes in real time, using standards and automated data-quality checking.**
- **Number of users from states, tribes, laboratories, and others that choose CDX to report environmental data electronically to EPA.**

Performance Database: CDX Customer Registration Subsystem.

Data Source: Data are provided by State, private sector, local, and Tribal government CDX users.

Methods, Assumptions, and Suitability: All CDX users must register before they can begin reporting. The records of registration provide an up-to-date, accurate count of users. Users identify themselves with several descriptors and use a number of CDX security mechanisms for ensuring the integrity of individuals' identities.

QA/QC Procedures: QA/QC have been performed in accordance with a CDX Quality Assurance Plan [*Quality Assurance Project Plan for the Interim Central Data Exchange System*. Document number: EP005T7. Sept. 17, 2001] and the CDX Design Document v.3, Appendix K registration procedures [*Central Data Exchange Electronic Reporting Prototype System Requirements: Version 3*; Document number: EP005S3. December 2000]. Specifically, data are reviewed for authenticity and integrity. The CDX Quality Assurance Plan was updated in FY 2004 [*Quality Assurance Project Plan for the Central Data Exchange*, 10/8/2004; contact: Charles Freeman 202-566-1694] to incorporate new technology and policy requirements and will undergo another revision by December 2006. Automated edit checking routines are performed in accordance with program specifications and CDX quality assurance guidance [*Quality Assurance Project Plan for the Interim Central Data Exchange System*. Document number: EP005T7. Sept. 17, 2001].

Data Quality Reviews: CDX completed its last independent security risk assessment in January 2005, and all vulnerabilities are being reviewed or addressed. In addition, routine audits of CDX data collection procedures, statistics and customer service operations are provided weekly to

CDX management and staff for review. Included in these reports are performance measures such as the number of CDX new users, number of submissions to CDX, number of help desk calls, number of calls resolved, ranking of errors/problems, and actions taken. These reports are reviewed and actions discussed at weekly project meetings.

Data Limitations: The CDX system collects, reports, and tracks performance measures on data quality and customer service. While its automated routines are sufficient to screen systemic problems/issues, a more detailed assessment of data errors/problems generally requires a secondary level of analysis that takes time and human resources. In addition, environmental data collected by CDX is delivered to National data systems in the Agency. Upon receipt, the National systems often conduct a more thorough data quality assurance procedure based on more intensive rules that can be continuously changing based on program requirements. As a result, CDX and these National systems appropriately share the responsibility for ensuring environmental data quality.

Error Estimate: CDX incorporates a number of features to reduce errors in registration data and that contribute greatly to the quality of environmental data entering the Agency. These features include pre-populating data either from CDX or National systems, conducting web-form edit checks, implementing XML schemas for basic edit checking and providing extended quality assurance checks for selected Exchange Network Data flows using Schematron. The potential error in registration data, under CDX responsibility has been assessed to be less than 1 %.

New/Improved Performance Data or Systems: CDX assembles the registration/submission requirements of many different data exchanges with EPA and the States, Tribes, local governments and the regulated community into a centralized environment. This system improves performance tracking of external customers and overall management by making those processes more consistent and comprehensive. The creation of a centralized registration system, coupled with the use of web forms and web-based approaches to submitting the data, invite opportunities to introduce additional automated quality assurance procedures for the system and reduce human error.

References: CDX website (www.epa.gov/cdx).

FY 2008 Performance Measure:

- **Percent of Federal Information Security Management Act reportable systems that are certified and accredited.**

Performance Database: Automated Security Self-Evaluation and Remediation Tracking (ASSERT) database.

Data Source: Information technology (IT) system owners in Agency Program and Regional offices.

Methods, Assumptions, and Suitability: Annual IT security assessments are conducted using the methodology mandated by the Office of Management and Budget (OMB), the National

Institute of Standards, and Technology (NIST) Security Self-Assessment Guide for Information Technology Systems. ASSERT has automated and web-enabled this methodology.

QA/QC Procedures: Automated edit checking routines are performed in accordance with ASSERT design specifications to ensure answers to questions in ASSERT are consistent. The Office of Inspector General consistent with §3545 FISMA, and the Chief Information Officer's information security staff conduct independent evaluations of the assessments. The Agency certifies results to OMB in the annual FISMA report.

Data Quality Reviews: Program offices are required to develop security action plans composed of tasks and milestones to address security weaknesses. Program offices self-report progress toward these milestones. EPA's information security staff review these self-reported data, conduct independent validation of a sample, and discuss anomalies with the submitting office.

Data Limitations: Resources constrain the security staff's ability to validate all of the self-reported compliance data submitted by program systems' managers.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Annual Information Security Reports to OMB: <http://intranet.epa.gov/itsecurity/progreviews/>;
OMB guidance memorandum: <http://www.whitehouse.gov/omb/memoranda/2003.html>;
ASSERT web site: <https://cfint.rtpnc.epa.gov/assert/>; NIST Special Publication 800-26, *Security Self-Assessment Guide for Information Technology Systems*, November 2001:
<http://csrc.nist.gov/publications/nistpubs/index.html>; and, Federal Information Security Management Act, PL107-347: http://csrc.nist.gov/policies/FISMA_final.pdf

FY 2008 Performance Measures:

- **Environmental and business actions taken for improved performance or risk reduction; environmental and business recommendations or risks identified for corrective action; and return on the annual dollar investment, as a percentage of the OIG budget, from audits and investigations**
- **Criminal, civil, administrative, and fraud prevention actions**

Performance Database: The OIG Performance Measurement and Results System captures and aggregates information on an array of measures in a logic model format, linking immediate outputs with long-term intermediate outcomes and results. OIG performance measures are designed to demonstrate value added by promoting economy, efficiency and effectiveness; and preventing and detecting fraud, waste, and abuse as described by the Inspector General Act of 1978 (as amended). Because intermediate and long-term results may not be realized for several years, only verifiable results are reported in the year completed. Database measures include numbers of: 1) recommendations for environmental and management improvement; 2) legislative, regulatory policy, directive, or process changes; 3) environmental, program

management, security and resource integrity risks identified, reduced, or eliminated; 4) best practices identified and implemented; 5) examples of environmental and management improvements made; 6) monetary value of funds questioned, saved, fined, or recovered; 7) criminal, civil, and administrative actions taken, 8) public or congressional inquiries resolved; and 9) certifications, allegations disproved, and cost corrections.

Data Source: Designated OIG staff enter data into the system. Data are from OIG performance evaluations, audits, research, court records, EPA documents, data systems, and reports that track environmental and management actions or improvements made and risks reduced or avoided. OIG also collects independent data from EPA's partners and stakeholders.

Methods, Assumptions, and Suitability: OIG performance results are a chain of linked events, starting with OIG outputs (e.g., recommendations, reports of best practices, and identification of risks). The subsequent actions taken by EPA or its stakeholders/partners, as a result of OIG's outputs, to improve operational efficiency and environmental program delivery are reported as intermediate outcomes. The resulting improvements in operational efficiency, risks reduced/eliminated, and conditions of environmental and human health are reported as outcomes. By using common categories of performance measures, quantitative results can be summed and reported. Each outcome is also qualitatively described, supported, and linked to an OIG product or output. The OIG can only control its outputs, and has no authority, beyond its influence, to implement its recommendations that lead to environmental and management outcomes.

QA/QC Procedures: All performance data submitted to the database require at least one verifiable source assuring data accuracy and reliability. Data quality assurance and control are performed as an extension of OIG products and services, subject to rigorous compliance with the Government Auditing Standards of the Comptroller General¹⁷, and regularly reviewed by OIG management, an independent OIG Management Assessment Review Team, and external independent peer reviews. Each Assistant Inspector General certifies the completeness and accuracy of performance data.

Data Quality Reviews: There have not been any previous audit findings or reports by external groups on data or database weaknesses in the OIG Performance Measurement and Results System. All data reported are audited internally for accuracy and consistency.

Data Limitations: All OIG staff are responsible for data accuracy in their products and services. However, there is a possibility of incomplete, miscoded, or missing data in the system due to human error or time lags. Data supporting achievement of results are often from indirect or external sources, with their own methods or standards for data verification/validation.

Error Estimate: The error rate for outputs is estimated at +/-2%, while the error rate for reported long-term outcomes is presumably greater because of the longer period needed for tracking results and difficulty in verifying a nexus between our work and subsequent actions and impacts beyond our control. Errors tend to be those of omission.

¹⁷Government Auditing Standards (2003 Revision), General Accounting Office, GAO-03-673G, June 2003; Available on the Internet at www.gao.gov/govaud/ybk01.htm, last updated December 18, 2006

New/Improved Data or Systems: The OIG developed the Performance Measurement and Results System as a prototype in FY 2001 and constantly revises the clarity and quality of the measures as well as system improvements for ease of use. During FY 2006, we gave staff briefings on the application of OIG measures and the OIG Performance Measurement and Results System. We expect the quality of the data to continue improving as staff gain greater familiarity with the system and measures, and we will enhance this system by linking it to a follow-up process to better track actions and impacts. We also anticipate creating linkages to customer satisfaction results and resource investments, to provide a full-balanced scorecard with return on investment information for accountability and decision making.

References: All OIG non-restricted performance results are referenced in the OIG Performance Measurement and Results System with supporting documentation available either through the OIG Web Site or other Agency databases. The OIG Web Site is www.epa.gov/oig.¹⁸

¹⁸ U.S. EPA, Office of Inspector General, Audits, Evaluations, and Other Publications, Available on the Internet at www.epa.gov/oig, last updated December 12, 2006

VERIFICATION AND VALIDATION

GOAL 1 OBJECTIVE 1

FY 2008 Performance Measures:

- **Tons of SO₂ emissions from electric power generation sources (tons/yr from 1980 baseline) (PART measure)**
- **Percent change in average sulfur deposition and mean ambient sulfate concentrations reduced (% from baseline) (PART measure)**
- **Percent change in average nitrogen deposition and mean ambient nitrate concentrations reduced (% from baseline) (PART measure)**

Performance Databases:

Emissions Tracking System (ETS) - SO₂ and NO_x emissions

- Clean Air Status and Trends Network (CASTNET) - dry deposition
 - National Atmospheric Deposition Program (NADP) - wet deposition
 - Temporally Integrated Monitoring of Ecosystems program (TIME) - surface water chemistry
- Long-Term Monitoring Network program (LTM) – surface water chemistry

Data Sources: On a quarterly basis, ETS receives and processes hourly measurements of SO₂, NO_x, volumetric flow, CO₂, and other emission-related parameters from more than 3,400 fossil fuel-fired utility units affected under the Title IV Acid Rain Program. These measurements are collected by certified continuous emission monitoring systems (CEMS) or equivalent continuous monitoring methods.

CASTNET measures particle and gas acidic deposition chemistry. Specifically, CASTNET measures sulfate and nitrate dry deposition and meteorological information at approximately 88 monitoring sites, primarily in the East. Two additional sites are planned as part of a multi-year network refurbishment and modernization project. These sites are scheduled to be in operation by 2007 and will help fill the coverage gap in the middle of country. CASTNET is a long-term dry deposition network funded, operated and maintained by EPA's Office of Air and Radiation (OAR). The National Park Service operates approximately 30 of the monitoring stations in cooperation with EPA.

NADP is a national long-term wet deposition network that measures precipitation chemistry and provides long-term geographic and temporal trends in concentration and deposition of precipitation components. Specifically, NADP provides measurements of sulfate and nitrate wet deposition at approximately 255 monitoring sites. EPA, along with several other Federal agencies, states, and private organizations, provide funding and support for NADP. The Illinois State Water Survey/University of Illinois maintains the NADP database.

The deposition monitoring networks have been in operation for over 25 years. They provide invaluable measurements on long-term trends and episodes in acid deposition; such data are essential for assessing progress toward the program's intended environmental outcomes. These

networks need to be modernized to ensure the continued availability of these direct environmental measures. Maintaining a robust long-term atmospheric deposition monitoring network is critical for the accountability of the Acid Rain and Clean Air Interstate Rule (CAIR) Programs (and/or Clear Skies if new legislation is enacted).

The TIME project measures surface water chemistry and is based on the concept of a probability sample, where each site is chosen to be statistically representative of a target population. In the Northeast (New England and the Adirondacks), this target population consists of lakes likely to be responsive to changes in rates of acidic deposition (i.e., those with Gran ANC < 100 µeq/L). In the Mid-Atlantic, the target population is upland streams with a high probability of responding to changes in acidic deposition (i.e., Northern Appalachian Plateau streams with Gran ANC < 100 µeq/L). Each lake or stream is sampled annually (in summer for lakes, in spring for streams), and results are extrapolated to the target population. The most recent (2003) TIME trends analysis reported data from 43 Adirondack lakes, 30 New England lakes, and 31 Appalachian Plateau streams.

The TIME project goals are to determine not only how a representative sample of water bodies is changing through time, but also whether the proportion of the population that is acidic has changed. The project is operated cooperatively with numerous collaborators in state agencies, academic institutions and other federal agencies.

The LTM project complements TIME's statistical approach to sampling lakes and streams. LTM samples a subset of sensitive lakes and streams with long-term data, most dating back to the early 1980s. These sites are sampled 3 to 15 times per year. This information is used to characterize how the most sensitive aquatic systems in each region are responding to changing deposition, as well as providing information on seasonal chemistry and episodic acidification. In most regions, a small number of higher ANC (e.g., GranANC >100 µeq/L) sites are also sampled, and help separate temporal changes due to acidic deposition from those attributable to other disturbances such as changes in land use. The most recent (2003) LTM trends analysis reported data from 48 Adirondack lakes, 24 New England lakes, 9 Northern Appalachian Plateau streams, and 69 streams in the Blue Ridge region of Virginia and West Virginia. The project is operated cooperatively with numerous collaborators in state agencies, academic institutions and other federal agencies.

Methods, Assumption, and Suitability Promulgated methods are used to aggregate emissions data across all United States' utilities for each pollutant and related source operating parameters such as heat input.

QA/QC Procedures:

Promulgated QA/QC requirements dictate performing a series of quality assurance tests of CEMS performance. For these tests, emissions data are collected under highly structured, carefully designed testing conditions, which involve either high quality standard reference materials or multiple instruments performing simultaneous emission measurements. The resulting data are screened and analyzed using a battery of statistical procedures, including one that tests for systematic bias. If a CEM fails the bias test, indicating a potential for systematic underestimation of emissions, the source of the error must be identified and corrected or the data

are adjusted to minimize the bias. Each affected plant is required to maintain a written QA plan documenting performance of these procedures and tests. Further information is available at: <http://www.epa.gov/airmarkets/reporting/index.html>.

CASTNET established a Quality Assurance Project Plan (QAPP) in November 2001; The QAPP contains data quality objectives and quality control procedures for accuracy and precision. {U.S. EPA, Office of Air Quality Planning and Standards, *Clean Air Status and Trends Network (CASTNet) Quality Assurance Project Plan* (Research Triangle Park, NC: U.S. EPA, November 2001). In addition, the program publishes annual quality assurance reports. Both the CASTNET QAPP and 2003 Annual Quality Assurance Report may be found at <http://www.epa.gov/castnet/library.html>.

NADP has established data quality objectives and quality control procedures for accuracy, precision and representation, available on the Internet: <http://nadp.sws.uiuc.edu/QA/>. The intended use of these data is to establish spatial and temporal trends in wet deposition and precipitation chemistry.

For TIME and LTM, the field protocols, laboratory methods, and quality assurance procedures are specific to each research group. QA/QC information is contained in the cited publications of each research group and compiled in Newell et al. (1987). The EMAP and TIME protocols and quality assurance methods are generally consistent with those of the LTM cooperators, and are detailed in Peck (1992) and in Table 3 of Stoddard et al (2003).

Data Quality Review:

The ETS provides instant feedback to sources on data reporting problems, format errors, and inconsistencies. The electronic data file QA checks are described at <http://www.epa.gov/airmarkets/reporting/index.html> (see *Electronic Data Report Review Process*, *ETS Tolerance Tables*, *Active ETS Error Codes/Messages* and *Range Format Errors*). All quarterly reports are analyzed to detect deficiencies and to identify reports that must be resubmitted to correct problems. EPA also identifies reports that were not submitted by the appropriate reporting deadline. Revised quarterly reports, with corrected deficiencies found during the data review process, must be obtained from sources by a specified deadline. All data are reviewed, and preliminary and final emissions data reports are prepared for public release and compliance determination.

CASTNET underwent formal peer review in 1997 by a panel of scientists from EPA and the National Oceanic Atmospheric Administration (NOAA). Findings are documented in *Examination of CASTNET: Data, Results, Costs, and Implications* (United States EPA, Office of Research and Development, National Exposure Research Laboratory, February 1997).

The NADP methods of determining wet deposition values have undergone extensive peer review; this process has been managed by NADP program office at the Illinois State Water Survey/University of Illinois. Assessments of changes in NADP methods are developed primarily through the academic community and reviewed through the technical literature process.

The TIME and LTM data used in EPA trends analysis reports are screened for internal consistency among variables, including ion balance and conductance balance. Samples with unexplained variation in these variables are deleted. Sites with mean Gran ANC greater than 200 $\mu\text{eq/L}$ also are deleted. EPA trends analyses exclude sites with chloride values that are outliers in their region, because high Cl^- is typically associated with human development in the watershed. The Cl^- and associated Na^+ would alter normal soil ion exchange relationships, thus obscuring the response to acidic deposition.

Data Limitations: In order to improve the spatial resolution of CASTNET, additional monitoring sites are needed, particularly in the middle of the country.

Error Estimate: None

New/Improved Data or Systems: The program plans to modernize and enhance CASTNET to ensure network viability and enhance the monitoring capacity to support ongoing and future accountability needs, particularly relating to long range pollutant transport. The refurbishment of CASTNET will result in more comprehensive air quality data and information, made available faster by enabling real-time access to air quality information and promoting integration with other networks through regional/rural monitoring strategies. Refurbishment activities to be pursued in FY 2007 include: (1) completion of a pilot phase study to evaluate options for upgrading CASTNET with new advanced measurement instrumentation; (2) selection and procurement of advanced technology monitoring equipment for up to 10 sites; (3) establishment of 2 new sites in the middle of the country to improve geographic coverage and spatial resolution; and (4) implementation of new ecological indicators of air quality and atmospheric deposition to expand the suite of environmental metrics available for measuring the performance and efficiency of EPA's clean air programs.

References: For additional information about CASTNET, see <http://www.epa.gov/castnet.html> and for NADP, see <http://nadp.sws.uiuc.edu/>.

For a description of EPA's Acid Rain program, see <http://www.epa.gov/airmarkets/arp/index.html/> and in the electronic Code of Federal Regulations at <http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-C.html> (40 CFR parts 72-78.)

For TIME and LTM data quality and QA/QC procedures, see Newell, A. D., C. F. Powers, and S. J. Christie. 1987. Analysis of Data from Long-term monitoring of Lakes. U.S. Environmental Protection Agency, Corvallis, OR.

Peck, D. V. 1992. Environmental Monitoring and Assessment Program: Integrated Quality Assurance Project Plan for the Surface Waters Resource Group. EPA/600/X-91/080, U.S. Environmental Protection Agency.

Stoddard, J. L., J. S. Kahl, F. A. Deviney, D. R. DeWalle, C. T. Driscoll, A. T. Herlihy, J. H. Kellogg, P. S. Murdoch, J. R. Webb, and K. E. Webster. 2003. Response of surface water chemistry to the Clean Air Act Amendments of 1990. EPA/620/R-03/001, U.S. Environmental Protection Agency, Corvallis, Oregon.

FY 2008 Performance Measures:

- **Reduction in population-weighted ambient concentration of fine particulate matter (PM 2.5) in all monitored counties (PART measure)**
- **Reduction in population-weighted ambient concentration of ozone in monitored counties (PART measure)**

Performance Databases:

AQS —The Air Quality Subsystem (AQS) stores ambient air quality data used to evaluate an area's air quality levels relative to the NAAQS.

FREDS—The Findings and Required Elements Data System is used to track progress of states and Regions in reviewing and approving the required data elements of the State Implementation Plans (SIP). SIPs are clean air plans and define what actions a state will take to improve the air quality in areas that do not meet national ambient air quality standards

Data Sources:

AQS: State & local agency data from State and Local Air Monitoring Stations (SLAMS).

Population: Data from Census-Bureau/Department of Commerce

FREDS: Data are provided by EPA's Regional offices.

Methods, Assumptions, and Suitability: Design values are calculated for every county with adequate monitoring data (for more information on and a definition for design values, see www.epa.gov/ttn/oarpg/t1/memoranda/cdv.pdf). Air quality levels are evaluated relative to the baseline level and the design value. The change in air quality concentrations is then multiplied by the number of people living in the county. This analysis assumes that the populations of the areas are held constant at 2000 Census levels. Data comparisons over several years allow assessment of the air program's success.

QA/QC Procedures: AQS: The QA/QC of the national air monitoring program has several major components: the Data Quality Objective (DQO) process, reference and equivalent methods program, EPA's National Performance Audit Program (NPAP), system audits, and network reviews (Available on the Internet: www.epa.gov/ttn/amtic/npaplist.html). To ensure quality data, the SLAMS are required to meet the following: 1) each site must meet network design and site criteria; 2) each site must provide adequate QA assessment, control, and corrective action functions according to minimum program requirements; 3) all sampling methods and equipment must meet EPA reference or equivalent requirements; 4) acceptable data validation and record keeping procedures must be followed; and 5) data from SLAMS must be summarized and reported annually to EPA. Finally, there are system audits that regularly review the overall air quality data collection activity for any needed changes or corrections. Further information available on the Internet: <http://www.epa.gov/cludygxb/programs/namslam.html> and through United States EPA's Quality Assurance Handbook (EPA-454/R-98-004 Section 15)

Populations: No additional QA/QC beyond that done by the Census Bureau/Department of Commerce.

FREDS: No formal QA/QC procedures.

Data Quality Review:

AQS: No external audits have been done in the last 3 years. However, internal audits are regularly conducted.

Populations: No additional QA/QC beyond that done by the Census Bureau/Department of Commerce.

FREDS: None

Data Limitations:

AQS: None known

Populations: Not known

FREDS: None known

Error Estimate: At this time it is not possible to develop an error estimate. There is still too much uncertainty in the projections and near term variations in air quality (due to meteorological conditions for example) exist.

New/Improved Data or Systems:

AQS: In January 2002, EPA completed the reengineering of AQS to make it a more user friendly, Windows-based system. As a result, air quality data are more easily accessible via the Internet. AQS has also been enhanced to comply with the Agency's data standards (*e.g.*, latitude/longitude, chemical nomenclature). Beginning in July 2003, agencies submitted air quality data to AQS thru the Agency's Central Data Exchange (CDX). CDX is intended to be the portal through which all environmental data coming to or leaving the Agency will pass.

Population: None

FREDS: None

References: For additional information about criteria pollutant data, non-attainment areas, and other related information, see: <http://www.epa.gov/airtrends/>.

FY 2008 Performance Measures:

- **Percent of significant Title V operating permit revisions issued within 18 months of receiving a complete permit application. (PART measure)**
- **Percent of new Title V operating permits issued within 18 months of receiving a complete permit application. (PART measure)**

Performance Databases: TOPS (Title V Operating Permit System).

Data Sources: Permitting Agencies (State and Local) via EPA Regional Offices

Methods, Assumptions, and Suitability: The performance measure is calculated by comparing the number of new permits or significant permit modifications issued during past 18 months to the total number of new permits or significant permit modifications received during the same period. Data are collected every 6 months. There are no underlying assumptions in the development of this measure.

QA/QC Procedures: Some data quality checks include: 1) making sure the number of permits issued in 18 months is equal to or less than the total number of permits received. 2) ensuring the percentages seem reasonable compared to previous reporting periods, and 3) making sure clock does not restart when additional information is submitted after the application is received.

Data Quality Review: Same as QA procedures

Data Limitations: None

Error Estimate: There is no estimate on the number of errors that could have been made during data entry.

New/Improved Data or Systems: TOPS has been revised and improved for 2006 to ensure better consistency between states and to specifically track PART measures.

References: For additional information about criteria pollutant data, non-attainment areas, and other related information, see: <http://www.epa.gov/airtrends/>.

FY 2008 Performance Measure:

- **Percent of major NSR permits issued within one year of receiving a complete permit application. (PART measure)**

Performance Databases: RBLC (RACT (Reasonably Available Control Technology) BACT (Best Available Control Technology) LAER (Lowest Achievable Emissions Rate) Clearinghouse)

Data Sources: Permitting Agencies (State and Local)

Methods, Assumptions, and Suitability: The performance measure is calculated by determining the time period between the date of complete permit application and permit issuance. The percentage represents the number of major NSR permits issued within one year of complete application to the total number of permits issued within that same period. There are no underlying assumptions in the development of this performance measure.

QA/QC Procedures: Some data quality checks include: 1) making sure the permit issuance dates are after the complete permit application dates and appear reasonable, 2) ensuring the permit processing times are similar for comparable permits in previous reporting periods and 3)

making sure the time period does not restart when additional information is submitted after the application is received.

Data Quality Review: Same as QA procedures

Data Limitations: None

Error Estimate: There is no estimate on the number of errors that could have been made during data entry.

New/Improved Data or Systems: N/A

References: For additional information about criteria pollutant data, non-attainment areas, and other related information, see: <http://www.epa.gov/airtrends/>.

FY 2008 Performance Measure:

- **Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value. (PART measure)**

Performance Databases:

AQS —The Air Quality Subsystem (AQS) stores ambient air quality data used to evaluate an area's air quality levels relative to the NAAQS.

AIRNow DMC —The AIRNow Data Management System (DMC) stores real-time ambient air quality data used for the sole purpose of reporting real-time AQI and air quality forecasting.

Data Sources:

AQS/DMC: State & local agency data from State and Local Air Monitoring Stations (SLAMS) and National Air Monitoring Stations (NAMS).

Methods, Assumptions, and Suitability:

Data are gathered from monitors using EPA-approved federal reference and/or equivalent methods, all of which are published via the Federal Register. EPA assumes the collecting agency has properly maintained each monitor and that the data sent to EPA have passed at least an automated QA/QC check. The monitoring networks have been providing data for decades and the data are considered highly reliable. In addition these data form the basis of EPA's attainment decisions, trend analysis, and health impact assessments.

QA/QC Procedures:

AQS: The QA/QC of the national air monitoring program has several major components: the Data Quality Objective (DQO) process, reference and equivalent methods program, EPA's National Performance Audit Program (NPAP), system audits, and network reviews (Available on the Internet: www.epa.gov/ttn/amtic/npaplist.html). To ensure quality data, the SLAMS are required to meet the following: 1) each site must meet network design and site criteria; 2) each site must provide adequate QA assessment, control, and corrective action functions according to minimum program requirements; 3) all sampling methods and equipment must meet EPA reference or equivalent requirements; 4) acceptable data validation and record keeping procedures must be followed; and 5) data from SLAMS must be summarized and reported annually to EPA. Finally, there are system audits that regularly review the overall air quality data collection activity for any needed changes or corrections. Further information available on the Internet: <http://www.epa.gov/cludygxb/programs/namslam.html> and through United States EPA's Quality Assurance Handbook (EPA-454/R-98-004 Section 15)

DMC: The QA/QC procedures at each State, local, Tribal, or Federal agency are the same as documented above. Because the DMC handles real-time data, additional QA/QC data checks are built into the data flow process to further guard against erroneous values being passed through the system. Data in the DMC are not considered final and are not used for any regulatory purpose. Data in the AQS system are the official values used for regulatory analyses.

Data Quality Review:

AQS: No external audits have been done in the last 3 years. However, internal audits are regularly conducted.

DMC: No external audits have been done in the last 3 years. However, internal audits are regularly conducted and data are routinely processed by external users where applicable.

Data Limitations:

AQS: None known

DMC: None known

Error Estimate: At this time it is not possible to develop an error estimate. There is still too much uncertainty in the projections and near term variations in air quality (due to meteorological conditions for example) exist.

New/Improved Data or Systems:

AQS: In January 2002, EPA completed the reengineering of AQS to make it a more user friendly, Windows-based system. As a result, air quality data are more easily accessible via the Internet. AQS has also been enhanced to comply with the Agency's data standards (*e.g.*, latitude/longitude, chemical nomenclature). Beginning in July 2003, agencies submitted air

quality data to AQS thru the Agency's Central Data Exchange (CDX). CDX is intended to be the portal through which all environmental data coming to or leaving the Agency will pass.

DMC: AIRNow Data Management Center was redesigned in 2004 to more efficiently handle additional pollutants and provide for easier access to real-time data. In addition, automated QA/QC procedures were updated and increased flexibility for state/local agencies to update information was included.

References: For additional information about criteria pollutant data, non-attainment areas, and other related information, see: <http://www.epa.gov/airtrends/>. For more information on the monitoring network, as well as reference and equivalent methods, see the Ambient Monitoring Technology Information Center (AMTIC) at: <http://www.epa.gov/ttn/amtic> . For information on the AIRNow real-time program, see: <http://www.airnow.gov/>.

FY 2008 Performance Measures:

- Millions of tons of volatile organic compounds (VOCs) reduced since 2000 from mobile sources. (PART measure)
- Millions of tons of nitrogen oxide (NOx) reduced since 2000 from mobile sources. (PART measure)
- Tons of particular matter (PM 10) reduced since 2000 from mobile sources (PART measure)
- Tons of particular matter (PM 2.5) reduced since 2000 from mobile sources (PART measure)
- Limit the increase of CO Emissions (in tons) from mobile sources (PART measure)

Performance Database: National Emissions Inventory Database. See: <http://www.epa.gov/ttn/chief/trends/>

Data Source: Mobile source emissions inventories and Regulatory Impact Analyses

Estimates for on-road, off-road mobile source emissions are built from inventories fed into the relevant models, which in turn provide input to the National Emissions Inventory Database.

The MOBILE vehicle emission factor model is a software tool for predicting gram per mile emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, carbon dioxide, particulate matter, and toxics from cars, trucks, and motorcycles under various conditions. Inputs to the model include fleet composition, activity, temporal information, and control program characteristics.

The NONROAD emission inventory model is a software tool for predicting emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, particulate matter, and sulfur dioxides from small and large off road vehicles, equipment, and engines. Inputs to the model include fleet composition, activity and temporal information.

Certain mobile source information is updated annually. Inputs are updated annually only if there is a rationale and readily available source of annual data. Generally, Vehicle Miles Traveled (VMT), the mix of VMT by type of vehicle (Federal Highway Administration (FHWA)-types), temperature, gasoline properties, and the designs of Inspection/Maintenance (I/M) programs are updated each year. Emission factors for all mobile sources and activity estimates for non-road sources are changed only when the Office of Transportation and Air Quality requests that this be done and is able to provide the new information in a timely manner. The most recent models for mobile sources are Mobile 6 and Nonroad 2002. (Available on the Internet at <http://www.epa.gov/otaq/models.htm>.)

EPA regulatory packages always include detailed Regulatory Impact Analysis which estimates the costs industry is projected to accrue in meeting EPA regulations. These cost estimates will form the basis of the numbers in the EPA performance measures. Also, costs for the EPA mobile source program (including personnel costs) will be included also. Estimates will be made for various years for tons/dollar for pollutants (the total of HC, CO, NOx, and PM) removed.

Methods, Assumptions, and Suitability: EPA issues emissions standards that set limits on how much pollution can be emitted from a given mobile source. Mobile sources include vehicles that operate on roads and highways ("on road" or "highway" vehicles), as well as nonroad vehicles, engines, and equipment. Examples of mobile sources are cars, trucks, buses, earthmoving equipment, lawn and garden power tools, ships, railroad locomotives, and airplanes. Vehicle and equipment manufacturers have responded to many mobile source emission standards by redesigning vehicles and engines to reduce pollution.

EPA uses models to estimate mobile source emissions, for both past and future years. The estimates are used in a variety of different settings. The estimates are used for rulemaking.

The most complete and systematic process for making and recording such mobile source emissions is the "Trends" inventory process executed each year by the Office of Air Quality Planning and Standards' (OAQPS) Emissions, Monitoring, and Analysis Division (EMAD). The Assessment and Standards Division, within the Office of Transportation and Air Quality, provides EMAD information and methods for making the mobile source estimates. In addition, EMAD's contractors obtain necessary information directly from other sources; for example, weather data and the Federal Highway Administration's (FHWA) Vehicle Miles Traveled (VMT) estimates by state. EMAD creates and publishes the emission inventory estimate for the most recent historical year, detailed down to the county level and with over 30 line items representing mobile sources. At irregular intervals as required for regulatory analysis projects, EMAD creates estimates of emissions for future years. When the method for estimating emissions changes significantly, EMAD usually revises its older estimates of emissions in years prior to the most recent year, to avoid a sudden discontinuity in the apparent emissions trend. EMAD publishes the national emission estimates in hardcopy; county-level estimates are available electronically. Additional information about transportation and air quality related to estimating, testing for, and measuring emissions, as well as research being conducted on technologies for reducing emissions is available at <http://www.epa.gov/otaq/research.htm>

When major changes are made in the emission models or resulting inventories (and even the cost estimates), the performance measures will be reviewed to determine if they should be updated.

QA/QC Procedures: The emissions inventories are continuously improved.

Data Quality Review: The emissions inventories are reviewed by both internal and external parties, including the states, locals and industries.

Data Limitations: The limitations of the inventory estimates for mobile sources come from limitations in the modeled emission factors (based on emission factor testing and models predicting overall fleet emission factors in g/mile) and also in the estimated vehicle miles traveled for each vehicle class (derived from Department of Transportation data).<http://www.epa.gov/otaq/m6.htm>. For nonroad emissions, the estimates come from a model using equipment populations, emission factors per hour or unit of work, and an estimate of usage. This nonroad emissions model accounts for over 200 types of nonroad equipment. Any limitations in the input data will carry over into limitations in the emission inventory estimates.

Error Estimate: Additional information about data integrity is available on the Internet:
<http://www.epa.gov/otaq/m6.htm>.

New/Improved Data or Systems: To keep pace with new analysis needs, new modeling approaches, and new data, EPA is currently working on a new modeling system termed the Multi-scale Motor Vehicles and Equipment Emission System (MOVES). This new system will estimate emissions for on road and off road sources, cover a broad range of pollutants, and allow multiple scale analysis, from fine scale analysis to national inventory estimation. When fully implemented, MOVES will serve as the replacement for MOBILE6 and NONROAD. The new system will not necessarily be a single piece of software, but instead will encompass the necessary tools, algorithms, underlying data and guidance necessary for use in all official analyses associated with regulatory development, compliance with statutory requirements, and national/regional inventory projections. Additional information is available on the Internet:
<http://www.epa.gov/otaq/ngm.htm>

References: For additional information about mobile source programs see:
<http://www.epa.gov/otaq/>.

FY 2008 Performance Measures:

- **Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics (PART measure)**
- **Cumulative percentage reduction in tons of toxicity-weighted (for noncancer risk) emissions of air toxics (PART measure)**

Performance Databases:

- National Emissions Inventory (NEI) for Hazardous Air Pollutants (HAPs)
- EPA's Health Criteria Data for Risk Characterization

Data Source:

To better measure the percentage change in cancer and noncancer risk to the public, a toxicity-weighted emission inventory performance measure has been developed. This measure utilizes data from the NEI for air toxics along with data from EPA's Health Criteria Data for Risk Characterization (found at www.epa.gov/ttn/atw/toxsource/summary.html), which is a compendium of cancer and noncancer health risk criteria used to develop a risk metric. This compendium includes tabulated values for long-term (chronic) inhalation for many of the 188 hazardous air pollutants. These health risk data were obtained from various data sources including EPA, the U.S. Agency for Toxic Substances and Disease Registry, California Environmental Protection Agency, and the International Agency for Research on Cancer. The numbers from the health risk database are used for estimating the risk of contracting cancer and the level of hazard associated with adverse health effects other than cancer.

The NEI for HAPs includes emissions from large and small industrial sources inventoried as point sources, smaller stationary area and other sources, such as fires inventoried as non-point sources, and mobile sources. Prior to 1999 NEI for HAPs, there was the National Toxics Inventory (NTI). The baseline NTI (for base years 1990 - 1993) includes emissions information for 188 hazardous air pollutants from more than 900 stationary sources and from mobile sources. It is based on data collected during the development of Maximum Achievable Control Technology (MACT) standards, state and local data, Toxics Release Inventory (TRI) data, and emissions estimates using accepted emission inventory methodologies. The baseline NTI contains county level emissions data and cannot be used for modeling because it does not contain facility specific data.

The 1996 NTI and the 1999 NEI for HAPs contain stationary and mobile source estimates. These inventories also contain estimates of facility-specific HAP emissions and their source specific parameters such as location (latitude and longitude) and facility characteristics (stack height, exit velocity, temperature, etc).

The primary source of data in the 1996 and 1999 inventories are state and local air pollution control agencies and Tribes. These data vary in completeness, format, and quality. EPA evaluates these data and supplements them with data gathered while developing MACT and residual risk standards, industry data, and TRI data.

For more information and references on the development of the 1996 NTI, please go to the following web site: www.epa.gov/ttn/chief/nti/index.html#nti. For more information and references on the development of the 1999 NEI for HAPs, please go to the following web site: www.epa.gov/ttn/chief/net/index.html#1999.

Methods, Assumptions and Suitability: As the NEI is only developed every three years, EPA utilizes an emissions modeling system to project inventories for "off-years" and to project the inventory into the future. This model, the EMS-HAP (Emissions Modeling System for Hazardous Air Pollutants), can project future emissions, by adjusting stationary source emission data to account for growth and emission reductions resulting from emission reduction scenarios such as the implementation of the Maximum Achievable Control Technology (MACT) standards.

Once the EMS-HAP process has been performed, the EPA would tox-weight the inventory by “weighting” the emissions for each pollutant with the appropriate health risk criteria. This would be accomplished through a multi-step process. Initially, pollutant by pollutant values would be obtained from the NEI for the current year and the baseline year (1990/93). Conversion of actual tons for each pollutant for the current year and the baseline year to “toxicity-weighted” tons would be accomplished by multiplying the appropriate values from the health criteria database such as the unit risk estimate (URE) or lifetime cancer risk (defined at www.epa.gov/ttn/atw/nata/gloss.htm#rfc) to get the noncancer tons. These toxicity-weighted values act as a surrogate for risk and allow EPA to compare the toxicity-weighted values against a 1990/1993 baseline of toxicity-weighted values to determine the percentage reduction in risk on an annual basis

Complete documentation on development of the NEI for HAPs can be found at <http://www.epa.gov/ttn/chief/net/index.html>. For more information and references on EMS-HAP, go to the following web sites: <http://www.epa.gov/scram001/tt22.htm#aspen> and <http://www.epa.gov/ttn/chief/emch/projection/emshap.html>. The growth and reduction information used for the projections are further described at <http://www.epa.gov/ttn/chief/emch/projection/emshap.html>

QA/QC Procedures: The NTI and the NEI for HAPs are databases designed to house information from other primary sources. The EPA performs extensive quality assurance/quality control (QA/QC) activities, including checking data provided by other organizations, to improve the quality of the emission inventory. Some of these activities include: (1) the use of an automated format QC tool to identify potential errors of data integrity, code values, and range checks; (2) use of geographical information system (GIS) tools to verify facility locations; and (3) automated content analysis by pollutant, source category and facility to identify potential problems with emission estimates such as outliers, duplicate sites, duplicate emissions, coverage of a source category, etc. The content analysis includes a variety of comparative and statistical analyses. The comparative analyses help reviewers prioritize which source categories and pollutants to review in more detail based on comparisons using current inventory data and prior inventories. The statistical analyses help reviewers identify potential outliers by providing the minimum, maximum, average, standard deviation, and selected percentile values based on current data. The EPA has developed an automated QC content tool for data providers to use prior to submitting their data to EPA. After investigating errors identified using the automated QC format and GIS tools, the EPA follows specific guidance on augmenting data for missing data fields. This guidance is available at the following web site: http://www.epa.gov/ttn/chief/emch/invent/qaaugmentationmemo_99nei_60603.pdf

The NTI database contains data fields that indicate if a field has been augmented and identifies the augmentation method. After performing the content analysis, the EPA contacts data providers to reconcile potential errors. The draft NTI is posted for external review and includes a README file, with instructions on review of data and submission of revisions, state-by-state modeling files with all modeled data fields, and summary files to assist in the review of the data. One of the summary files includes a comparison of point source data submitted by different organizations. During the external review of the data, state and local agencies, Tribes, and

industry provide external QA of the inventory. The EPA evaluates proposed revisions from external reviewers and prepares memos for individual reviewers documenting incorporation of revisions and explanations if revisions were not incorporated. All revisions are tracked in the database with the source of original data and sources of subsequent revision.

The external QA and the internal QC of the inventory have resulted in significant changes in the initial emission estimates, as seen by comparison of the initial draft NEI for HAPs and its final version. For more information on QA/QC of the NEI for HAPs, please refer to the following web site for a paper presented at the 2002 Emission Inventory Conference in Atlanta. “QA/QC - An Integral Step in the Development of the 1999 National Emission Inventory for HAPs”, Anne Pope, et al. www.epa.gov/ttn/chief/conference/ei11/qa/pope.pdf

EPA’s Office of Environmental Information (OEI) has created uniform data standards or elements, which provide “meta” information on the standard NEI Input Format (NIF) fields. These standards were developed by teams representing states, Tribes, EPA and other Federal agencies. The use of common data standards among partners fosters consistently defined and formatted data elements and sets of data values, and provides public access to more meaningful data. The standards relevant to the NEI for HAPs are the: SIC/NAICS, Latitude/Longitude, Chemical Identification, Facility Identification, Date, Tribal and Contact Data Standards. The 1999 NEI for HAPs is compliant with all new data standards except the Facility Identification Standard because OEI has not completed its assignment of Facility IDs to the 1999 NEI for HAPs facilities.

For more information on compliance of the NEI for HAPs with new OMB Information Quality Guidelines and new EPA data standards, please refer to the following web site for a paper presented at the 2003 Emission Inventory Conference in San Diego. “The Challenge of Meeting New EPA Data Standards and Information Quality Guidelines in the Development of the 2002 NEI Point Source Data for HAPs”, Anne Pope, et al. www.epa.gov/ttn/chief/conference/ei12/dm/pope.pdf The 2002 NEI for HAPs will undergo scientific peer review in early 2005.

The tables used in the EPA’s Health Criteria Data for Risk Characterization (found at www.epa.gov/ttn/atw/toxsource/summary.html) are compiled assessments from various sources for many of the 188 substances listed as hazardous air pollutants under the Clean Air Act of 1990. Because different sources developed these assessments at different times for purposes that were similar but not identical, results are not totally consistent. To resolve these discrepancies and ensure the validity of the data, EPA applied a consistent priority scheme consistent with EPA risk assessment guidelines and various levels of scientific peer review. These risk assessment guidelines can be found at <http://www.epa.gov/ncea/raf/car2sab/preamble.pdf>.

Data Quality Review: EPA staff, state and local agencies, Tribes, industry and the public review the NTI and the NEI for HAPs. To assist in the review of the 1999 NEI for HAPs, the EPA provided a comparison of data from the three data sources (MACT/residual risk data, TRI, and state, local and Tribal inventories) for each facility. For the 1999 NEI for HAPs, two periods were available for external review - October 2001 - February 2002 and October 2002 - March

2003. The final 1999 NEI was completed and posted on the Agency website in the fall of 2003. Beginning in 2005, the NTI will undergo an external scientific peer review.

The EMS-HAP has been subjected to the scrutiny of leading scientists throughout the country in a process called “scientific peer review”. This ensures that EPA uses the best available scientific methods and information. In 2001, EPA’s Science Advisory Board (SAB) reviewed the EMS-HAP model as part of the 1996 national-scale assessment. The review was generally supportive of the assessment purpose, methods, and presentation; the committee considers this an important step toward a better understanding of air toxics. Additional information is available on the Internet: www.epa.gov/ttn/atw/nata/peer.html.

The data compiled in the Health Criteria Data for Risk Characterization (found at www.epa.gov/ttn/atw/toxsource/summary.html) are reviewed to make sure they support hazard identification and dose-response assessment for chronic exposures as defined in the National Academy of Sciences (NAS) risk assessment paradigm (www.epa.gov/ttn/atw/toxsource/paradigm.html). Because the health criteria data were obtained from various sources they are prioritized for use (in developing the performance measure, for example) according to 1) conceptual consistency with EPA risk assessment guidelines and 2) various levels of scientific peer review. The prioritization process is aimed at incorporating the best available scientific data.

Data Limitations and Error Estimates: While emissions estimating techniques have improved over the years, broad assumptions about the behavior of sources and serious data limitations still exist. The NTI and the NEI for HAPs contain data from other primary references. Because of the different data sources, not all information in the NTI and the NEI for HAPs has been developed using identical methods. Also, for the same reason, there are likely some geographic areas with more detail and accuracy than others. Because of the lesser level of detail in the baseline NTI, it is currently not suitable for input to dispersion models. For further discussion of the data limitations and the error estimates in the 1999 NEI for HAPs, please refer to the discussion of Information Quality Guidelines in the documentation at: www.epa.gov/ttn/chief/net/index.html#haps99 .

In 2004, the Office of the Inspector General (OIG) released a final evaluation report on “EPA’s Method for Calculating Air Toxics Emissions for Reporting Results Needs Improvement” (report can be found at www.epa.gov/oig/reports/2004/20040331-2004-p-00012.pdf). The report stated that although the methods used have improved substantially, unvalidated assumptions and other limitations underlying the NTI continue to impact its use as a GPRA performance measure. As a result of this evaluation and the OIG recommendations for improvement, EPA prepared an action plan and is looking at ways to improve the accuracy and reliability of the data. EPA will meet bi-annually with OIG to report on its progress in completing the activities as outlined in the action plan.

While the Agency has made every effort to utilize the best available science in selecting appropriate health criteria data for toxicity-weighting calculations there are inherent limitations and errors (uncertainties) associated with this type of data. While it is not practical to expose humans to chemicals at target doses and observe subsequent health implications over long

periods of time, most of the agencies health criteria is derived from response models and laboratory experiments involving animals. The parameter used to convert from exposure to cancer risk (i.e. the Unit Risk Estimate or URE) is based on default science policy processes used routinely in EPA assessments. First, some air toxics are known to be carcinogens in animals but lack data in humans. These have been assumed to be human carcinogens. Second, all the air toxics in this assessment were assumed to have linear relationships between exposure and the probability of cancer (i.e. effects at low exposures were extrapolated from higher, measurable, exposures by a straight line). Third, the URE used for some air toxics compounds represents a maximum likelihood estimate, which might be taken to mean the best scientific estimate. For other air toxics compounds, however, the URE used was an “upper bound” estimate, meaning that it probably leads to an overestimation of risk if it is incorrect. For these upper bound estimates, it is assumed that the URE continues to apply even at low exposures. It is likely, therefore, that this linear model over-predicts the risk at exposures encountered in the environment. The cancer weighting-values for this approach should be considered “upper bound” in the science policy sense.

All of the noncancer risk estimates have a built-in margin of safety. All of the Reference Concentrations (RfCs) used in toxicity-weighting of noncancer are conservative, meaning that they represent exposures which probably do not result in any health effects, with a margin of safety built into the RfC to account for sources of uncertainty and variability. Like the URE used in cancer weighting the values are, therefore, considered “upper bound” in the science policy sense. Further details on limitations and uncertainties associated with the agencies health data can be found at: www.epa.gov/ttn/atw/nata/roy/page9.html#L10

New/Improved Data or Systems: The 1996 NTI and 1999 NEI for HAPs are a significant improvement over the baseline NTI because of the added facility-level detail (e.g., stack heights, latitude/longitude locations), making it more useful for dispersion model input. Future inventories (2002 and later years) are expected to improve significantly because of increased interest in the NEI for HAPs by regulatory agencies, environmental interests, and industry, and the greater potential for modeling and trend analysis. During the development of the 1999 NEI for HAPs, all primary data submitters and reviewers were required to submit their data and revisions to EPA in a standardized format using the Agency’s Central Data Exchange (CDX). For more information on CDX, please go the following web site: www.epa.gov/ttn/chief/nif/cdx.html

Beginning in 2006, the toxicity-weighted emission inventory data will also be used as a measurement to predict exposure and risk to the public. This measure will utilize ambient monitoring of air toxics as a surrogate for population exposure and compare these values with health benchmarks to predict risks.

References:

The NTI and NEI data and documentation are available at the following sites:

Emissions Inventory Data: <ftp://ftp.epa.gov/EmisInventory/>
Available inventories: 1996 NTI, 1999 NEI for HAPs

Contents: Modeling data files for each state
Summary data files for nation
Documentation
README file

Audience: individuals who want full access to NTI files

NEON: <http://ttnwww.rtpnc.epa.gov/Neon/>
Available inventories: 1996 NTI and 1999 NEI for HAPs
Contents: Summary data files
Audience: EPA staff

CHIEF: www.epa.gov/ttn/chief
1999 NEI for HAPs data development materials
1999 Data Incorporation Plan - describes how EPA compiled the 1999 NEI for HAPs
QC tool for data submitters
Data Augmentation Memo describes procedures EPA will use to augment data
99 NTI Q's and A's provides answers to frequently asked questions
NIF (Input Format) files and descriptions
CDX Data Submittal Procedures - instructions on how to submit data using CDX
Training materials on development of HAP emission inventories
Emission factor documents, databases, and models

Audience: State/local/Tribal agencies, industry, EPA, and the public

Information on the Emissions Modeling System for Hazardous Air Pollutants:
EMS-HAP: <http://epa.gov/scram001/tt22.htm#aspen>
<http://www.epa.gov/ttn/chief/emch/projection/emshap.html>
Contents: 1996 NTI and 1999 NEI for HAPs
Audience: public

Information on EPA's Health Criteria Data for Risk Characterization:
Health Criteria Data: <http://www.epa.gov/ttn/atw/toxsource/summary.html>
Contents: Tabulated dose response values for long-term (chronic) inhalation and oral exposures; and values for short-term (acute) inhalation exposure
Audience: public

GOAL 1 OBJECTIVE 2

FY 2008 Performance Measure:

- Number of additional homes (new and existing) with radon reducing features (PART measure)

Performance Database: Annual industry survey data of home builders provided by the National Association of Home Builders.

Data Source: The survey is an annual sample of home builders in the United States most of whom are members of the National Association of Home Builders (NAHB). NAHB members construct 80% of the homes built in the United States each year. Using a survey methodology reviewed by EPA, NAHB Research Center estimates the percentage of these homes that are built radon resistant. The percentage built radon resistant from the sample is then used to estimate what percent of all homes built nationwide are radon resistant. To calculate the number of people living in radon resistant homes, EPA assumes an average of 2.67 people per household. NAHB Research Center has been conducting this annual builder practices survey for over a decade, and has developed substantial expertise in the survey's design, implementation, and analysis. The statistical estimates are typically reported with a 95 percent confidence interval.

Methods, Assumptions, and Suitability: NAHB Research Center conducts an annual survey of home builders in the United States to assess a wide range of builder practices. NAHB Research Center voluntarily conducts this survey to maintain an awareness of industry trends in order to improve American housing and to be responsive to the needs of the home building industry. The annual survey gathers information such as types of houses built, lot sizes, foundation designs, types of lumber used, types of doors and windows used, etc. The NAHB Research Center Builder Survey also gathers information on the use of radon-resistant design features in new houses, and these questions comprise about two percent of the survey questionnaire.

In January of each year, the survey of building practices for the preceding calendar year is typically mailed out to home builders. For the most-recently completed survey, for building practices during calendar year 2003, NAHB Research Center reported mailing the survey to about 45,000 active United States home building companies, and received about 2,300 responses, which translates to a response rate of about 5 percent. The survey responses are analyzed, with respect to State market areas and Census Divisions in the United States, to assess the percentage and number of homes built each year that incorporate radon-reducing features. The data are also used to assess the percentage and number of homes built with radon-reducing features in high radon potential areas in the United States (high risk areas). Other analyses include radon-reducing features as a function of housing type, foundation type, and different techniques for radon-resistant new home construction. The data are suitable for year-to-year comparisons.

QA/QC Procedures: Because data are obtained from an external organization, QA/QC procedures are not entirely known. According to NAHB Research Center, QA/QC procedures have been established, which includes QA/QC by the vendor that is utilized for key entry of data.

Data Quality Review: Because data are obtained from an external organization, Data Quality Review procedures are not entirely known. NAHB Research Center indicates that each survey is manually reviewed, a process that requires several months to complete. The review includes data quality checks to ensure that the respondents understood the survey questions and answered the questions appropriately. NAHB Research Center also applies checks for open-ended questions to verify the appropriateness of the answers. In some cases, where open-ended

questions request numerical information, the data are capped between the upper and lower three percent of the values provided in the survey responses. Also, a quality review of each year's draft report from NAHB Research Center is conducted by the EPA project officer.

Data Limitations: The majority of home builders surveyed are NAHB members. The NAHB Research Center survey also attempts to capture the activities of builders that are not members of NAHB. Home builders that are not members of NAHB are typically smaller, sporadic builders that in some cases build homes as a secondary profession. To augment the list of NAHB members in the survey sample, NAHB Research Center sends the survey to home builders identified from mailing lists of builder trade publications, such as Professional Builder magazine. There is some uncertainty as to whether the survey adequately characterizes the practices of builders who are not members of NAHB. The effects on the findings are not known.

Although an overall response rate of 5 percent could be considered low, it is the response rate for the entire survey, of which the radon-resistant new construction questions are only a very small portion. Builders responding to the survey would not be doing so principally due to their radon activities. Thus, a low response rate does not necessarily indicate a strong potential for a positive bias under the speculation that builders using radon-resistant construction would be more likely to respond to the survey. NAHB Research Center also makes efforts to reduce the potential for positive bias in the way the radon-related survey questions are presented.

Error Estimate: See Data Limitations

New/Improved Data or Systems: None

References: The results are published by the NAHB Research Center in annual reports of radon-resistant home building practices. See <http://www.nahbrc.org/> last accessed 12/21/2005 for more information about NAHB. The most recent report, "Builder Practices Report: Radon Reducing Features in New Construction 2003," Annual Builder and Consumer Practices Surveys by the NAHB Research Center, Inc., November, 2004. Similar report titles exist for prior years.

FY 2008 Performance Measure:

- **Number of people taking all essential actions to reduce exposure to indoor environmental asthma triggers (PART measure)**

Performance Database: The national telephone survey (*National Survey on Environmental Management of Asthma and Children's Exposure to ETS*) seeks information about the measures taken by people with asthma, and parents of children with asthma to minimize exposure to indoor environmental asthma triggers. Additional information about asthma morbidity and mortality in the US is obtained from the Centers for Disease Control and Prevention (CDC). Annual expenditures for health and lost productivity due to asthma are obtained from the National Heart Lung and Blood Institute (NHLBI) Chartbook www.nhlbi.nih.gov/resources/docs/02_chtbk.pdf last accessed 12/21/2005.

EPA also collects data on children exposed to environmental tobacco smoke in the home. This information is used in supporting the asthma goals of the program. EPA focuses its work on ETS on children in low income and minority populations, and on children with asthma. The *National Survey on Environmental Management of Asthma and Children's Exposure to ETS*, which includes a series of questions about whether respondents allow smoking in their home, whether young children are in the home, what resident family members smoke and how often, and how much visitors contribute to exposure, is used to track progress toward reducing childhood ETS exposure. Information about ETS is obtained periodically from the Centers for Disease Control and Prevention (CDC) including the National Health Interview, the National Health and Nutrition Examination Survey (for cotinine data), and the Behavioral Risk Factor Surveillance Survey (for state tobacco/ETS exposure data).

Data Source: The *National Survey on Environmental Management of Asthma and Children's Exposure to ETS* (OMB control number 2060-0490) source is EPA. Data on asthma morbidity and mortality is available from the National Center for Health Statistics at the CDC (www.cdc.gov/nchs last accessed 12/21/2005). Data on annual expenditures for health and lost productivity due to asthma are obtained from the NHLBI Chartbook.

Methods, Assumptions and Suitability: End-of-year performance for the asthma program is a best professional estimate using all data sources (including annual measures on partner performance and advertising awareness outlined below). The survey provides statistically sound results every three years for one period of time; Scheduled surveys will provide performance results for years 2006 and 2009. The estimate of the number of people with asthma who have taken steps to reduce their exposure to indoor environmental asthma triggers as of 2007 will be based on a projection from previous surveys, and this estimate will be verified using the 2009 survey data. Data on annual measures is also used to support progress towards the long term performance measure.

National Survey on Environmental Management of Asthma and Children's Exposure to ETS (OMB control number 2060-0490): This survey is the most robust data set for this performance measure, but it is not administered annually. The first survey, administered in 2003, was designed in consultation with staff from EPA and the CDC National Center for Health Statistics (NCHS) to ensure that respondents will understand the questions asked and will provide the type of data necessary to measure the Agency's objectives. In addition, care has been taken to ensure that the survey questions target the population with asthma by using the same qualifier question that appears on other national surveys on asthma collected by the CDC.

From an initial sampling frame of 124,994 phone numbers, 14,685 households were contacted successfully and agreed to participate in the screening survey. Of the 14,685 individuals screened, approximately 18 percent, or 2,637 individuals, either have asthma or live with someone who does. Only those individuals who have asthma or live with someone who does were considered to be eligible respondents.

Respondents were asked to provide primarily yes/no responses. In some cases, respondents were given a range of responses in the form of multiple choice questions and were asked to indicate the one which best defined their response. The survey seeks information on those environmental management measures that the Agency considers important in reducing an individual's exposure

to known indoor environmental asthma triggers. By using yes/no and multiple choice questions, the Agency has substantially reduced the amount of time necessary for the respondent to complete the survey and has ensured consistency in data response and interpretation.

The information collected has been used to establish a baseline to reflect the characteristics of our nation's asthma population and future iterations of this survey will measure additional progress toward achieving performance goals. The next survey will take place in 2006.

QA/QC Procedures: The National Survey is designed in accordance with approved Agency procedures. Additional information is available on the Internet: <http://www.epa.gov/icr/players.html> last accessed 12/21/2005. The computer assisted telephone interview methodology used for this survey helps to limit errors in data collection. In addition, the QA/QC procedures associated with conducting the survey include pilot testing of interview questions, interviewer training to ensure consistent gathering of information, and random data review to reduce the possibility of data entry error.

Data Quality Review: EPA reviews the data from all sources to ascertain reliability.

Data Limitations: Asthma: Random digit dialing methodology is used to ensure that a representative sample of households has been contacted; however, the survey is subject to inherent limitations of voluntary telephone surveys of representative samples. For example, 1) survey is limited to those households with current telephone service; 2) interviewers may follow survey directions inconsistently. An interviewer might ask the questions incorrectly or inadvertently lead the interviewee to a response; or 3) the interviewer may call at an inconvenient time (i.e., the respondent might not want to be interrupted at the time of the call and may resent the intrusion of the phone call; the answers will reflect this attitude.).

ETS: Currently available cotinine (a chemical in environmental tobacco smoke) survey data do not address 50% of the age specific portion of EPA's target population. It does not include birth to three years old, the portion of children most susceptible to the effects of ETS.

Error Estimate: In its first data collection with this instrument, the Agency achieved results within the following percentage points of the true value at the 95 percent confidence level (survey instrument):

Adult Asthmatics	plus or minus	2.4%
Child Asthmatics	plus or minus	3.7%
Low Income Adult Asthmatics	plus or minus	6.1%

These precision rates are sufficient to characterize the extent to which the results measured by the survey accurately reflect the characteristics of our nation's asthmatic population.

New/Improved Data or Systems: Data from the *National Survey on Environmental Management of Asthma and Children's Exposure to ETS* (OMB control number 2060-0490) were collected from August 4-September 17, 2003 and represent the first data collection with this instrument.

References:

Asthma

National Center for Health Statistics, Centers for Disease Control and Prevention (www.cdc.gov/nchs/ last accessed 7/27/2005)

EPA Indoor Environments Division (www.epa.gov/iaq/ last accessed 12/21/2005)

ETS

National Health Interview Survey and National Health and Nutrition Examination Survey are part of the National Center for Health Statistics, Centers for Disease Control and Prevention (<http://www.cdc.gov/nchs> last accessed 12/21/2005)

Behavioral Risk Factor Surveillance Survey, Centers for Disease Control and Prevention (<http://www.cdc.gov/brfss/index.htm> last accessed 12/21/2005),

US Surgeon General's report on tobacco (<http://www.cdc.gov/tobacco/sgr/index.htm/> last accessed 7/27/2005),

National Cancer Institute's (NCI) *Tobacco Monograph Series* (<http://cancercontrol.cancer.gov/tcrb/monographs/> last accessed 12/21/2005),

NCI funded *Tobacco Use Supplement* portion of the US Census Bureau's *Current Population Survey* (<http://riskfactor.cancer.gov/studies/tus-cps/> last accessed 12/21/2005),

Healthy People 2010 (<http://www.healthypeople.gov/> last accessed 12/21/2005).

FY 2008 Performance Measure:

- **Additional health care professionals trained annually by EPA and its partners on the environmental management of asthma triggers (PART measure)**

Performance Database: The performance database consists of quarterly Partner status reports used to document the outcomes of individual projects.

Data Source: Partner status reports are generated by those organizations receiving funding from EPA and are maintained by individual EPA Project Officers.

Methods, Assumptions and Suitability: On an annual basis, EPA requires (programmatic terms and conditions of the award) all funded organizations to provide reports identifying how many health care professionals are educated about indoor asthma triggers.

QA/QC Procedures: It is assumed that organizations report data as accurately and completely as possible; site-visits are conducted by EPA project officers.

Data Quality Review: Project officers review data quality.

Data Limitations: N/A

New/Improved Data or Systems: EPA is exploring the development of a centralized data base.

References: N/A

FY 2008 Performance Measure:

- **Percent of public that is aware of the asthma program's media campaign (PART measure)**

Performance Database: A media tracking study used to assess behavior change within that sector of the public viewing the public service announcements.

Data Source: An independent initiative of the Advertising Council provides media tracking of outcomes of all their public service campaigns and this is publicly available information.

Methods, Assumptions and Suitability: Methods are those of the Advertising Council, and not controlled by EPA.

QA/QC Procedures: Methods are those of the Advertising Council, and not controlled by EPA.

Data Quality Review: Methods are those of the Advertising Council, and not controlled by EPA.

Data Limitations: Methods are those of the Advertising Council, and not controlled by EPA.

New/Improved Data or Systems: Methods are those of the Advertising Council, and not controlled by EPA.

References: Advertising Council Reporting. EPA Assistance Agreement number X-82820301. For additional information see the Ad Council web site <http://www.adcouncil.org/> last accessed 12/21/05.

FY 2008 Performance Measure:

- **Estimated annual number of schools establishing Indoor Air Quality programs based on EPA's Tools for Schools guidance (PART measure)**

Performance Database:

EPA collects national data by conducting a survey of indoor air quality management practices in schools approximately every three years. The first survey was administered in 2002. EPA is partnering with CDC to incorporate IAQ management practice indicators, consistent with the benchmark survey, into the School Health Policies and Programs Study (SHPPS) to be administered in 2006. EPA will implement this IAQ module as a smaller survey in 2009, as the SHPPS survey is only conducted at 6 year intervals.

To measure annual progress, EPA estimates the number of schools who establish IAQ Tools for Schools (TfS) programs each year from reports from partner organizations and regional recruiters, supplemented by tracking the volume of guidances distributed and number of people trained by EPA and its partners. EPA also collects information on program benefits such as reduced school nurse visits, improved workplace satisfaction among staff, reduced absenteeism, and cost savings experienced by schools.

Data Source: The sources of the data include cooperative partners, USEPA and the statistical sample of all the public and private schools in the nation during the 1999 – 2000 school year (118,000); data are from the United States Department of Education National Center for Education Statistics.

Methods, Assumptions and Suitability: Calculations for the number of people experiencing improved IAQ are based upon an average 525 students, staff and faculty per school (data are from the United States Department of Education National Center for Education Statistics). That number, along with the number of schools that are adopting/implementing TfS, are used to estimate the performance result.

End-of-year performance is a best professional estimate using all data sources. The survey provides more statistically sound results for one period of time; the next scheduled survey will provide performance results for year 2006. EPA's 2006 survey will be included as part of CDC's 2006 School Health Policies and Programs Study, which is conducted every six years.

QA/QC Procedures: It is assumed that partner organizations report data as accurately and completely as possible; site visits and regular communication with grantees are conducted by EPA projects officers.

Data Quality Review: EPA reviews the data from all sources in the performance database to ascertain reliability and to resolve any discrepancies.

Data Limitations: The primary limitation associated with Cooperative Agreement Partner status reporting is the error introduced as a result of self-reporting.

Error Estimate: Not relevant for this year.

New/Improved Data or Systems: Prior to the 2002 survey, EPA tracked the number of schools receiving the TfS guidance and estimated the population of the school to determine the number of students/staff experiencing improved indoor air quality. The survey was administered to establish a baseline for schools implementing IAQ management practices. EPA queried a

statistically representative sample of schools to estimate the number of schools that have actually adopted and implemented good IAQ management practices consistent with the TfS guidance. EPA plans to re-administer the survey as a component of CDC's School Health Policies and Programs Study, which will show progress from the baseline.

References: See the United States Department of Education National Center for Education Statistics, <http://nces.ed.gov/> last accessed 12/21/2005. See also Indoor Air Quality Tools for Schools Kit (402-K-95-001) at <http://www.epa.gov/iaq/schools> last accessed 12/21/2005 and see www.cdc.gov/nccdphp/dash/shpps/ For additional information about the School Health Policies and Programs Study (SHPPS), a national survey periodically conducted to assess school health policies and programs at the state, district, school, and classroom levels.

GOAL 1 OBJECTIVE 3

FY 2008 Performance Measure:

- **Remaining US consumption of HCFCs, measured in tons of ozone depleting potential (ODP) (PART measure)**

Performance Database: The Allowance Tracking System (ATS) database is maintained by the Stratospheric Protection Division (SPD). ATS is used to compile and analyze quarterly information on U.S. production, imports, exports, transformations, and allowance trades of ozone-depleting substances (ODS).

Data Source: Progress on restricting domestic exempted consumption of Class II HCFCs is tracked by monitoring industry reports of compliance with EPA's phase-out regulations. Data are provided by U.S. companies producing, importing, and exporting ODS. Corporate data are typically submitted as quarterly reports. Specific requirements as outlined in the Clean Air Act are available on the Internet at: <http://www.epa.gov/oar/caa/caa603.txt>. Monthly information on domestic production, imports, and exports from the International Trade Commission is maintained in the ATS.

Methods, Assumptions and Suitability: Data are aggregated across all U.S. companies for each individual ODS to analyze U.S. total consumption and production.

QA/QC Procedures: Reporting and record-keeping requirements are published in 40 CFR Part 82, Subpart A, Sections 82.9 through 82.13. These sections of the Stratospheric Ozone Protection Rule specify the required data and accompanying documentation that companies must submit or maintain on-site to demonstrate their compliance with the regulation.

The ATS data are subject to a Quality Assurance Plan (Quality Assurance Plan, USEPA Office of Atmospheric Programs, July 2002). In addition, the data are subject to an annual quality assurance review, coordinated by Office of Air and Radiation (OAR) staff separate from those on the team normally responsible for data collection and maintenance. The ATS is programmed to ensure consistency of the data elements reported by companies. The tracking system flags

inconsistent data for review and resolution by the tracking system manager. This information is then cross-checked with compliance data submitted by reporting companies. SPD maintains a user's manual for the ATS that specifies the standard operating procedures for data entry and data analysis. Regional inspectors perform inspections and audits on-site at the producers', importers', and exporters' facilities. These audits verify the accuracy of compliance data submitted to EPA through examination of company records.

Data Quality Reviews: The Government Accounting Office (GAO) completed a review of U.S. participation in five international environmental agreements, and analyzed data submissions from the U.S. under the Montreal Protocol on Substances that Deplete the Ozone Layer. No deficiencies were identified in their January 2003 report.

Data Limitations: None, since companies are required by the Clean Air Act to report data. EPA's regulations specify a quarterly reporting system.

Error Estimate: None.

New/Improved Data or Systems: The Stratospheric Protection Division is developing a system to allow direct electronic reporting.

References: See <http://www.epa.gov/ozone/desc.html> for additional information on ODSs. See <http://www.unep.ch/ozone/montreal.shtml> for additional information about the Montreal Protocol. See <http://www.unmfs.org/> for more information about the Multilateral Fund. Quality Assurance Plan, USEPA Office of Atmospheric Programs, July 2002

GOAL 1 OBJECTIVE 4

FY 2008 Performance Measures:

- **Million metric tons of carbon equivalent (mmtce) of greenhouse gas emissions reduced in the building sector (PART measure)**
- **Million metric tons of carbon equivalent (mmtce) of greenhouse gas emissions reduced in the industry sector (PART measure)**
- **Million metric tons of carbon equivalent (mmtce) of greenhouse gas emissions reduced in the transportation sector (PART measure)**

Performance Database: Climate Protection Partnerships Division Tracking System. The tracking system's primary purpose is to maintain a record of the annual greenhouse gas emissions reduction goals and accomplishments for the voluntary climate program using information from partners and other sources. It also measures the electricity savings and contribution towards the President's greenhouse gas intensity goal.

Data Source: EPA develops carbon and non-CO₂ emissions baselines. A baseline is the "business-as-usual" case without the impact of EPA's voluntary climate programs. Baseline

data for carbon emissions related to energy use comes from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model (IPM) of the U.S. electric power sector. These data are used for both historical and projected greenhouse gas emissions and electricity generation, independent of partners' information to compute emissions reductions from the baseline and progress toward annual goals. The projections use a "Reference Case" for assumptions about growth, the economy, and regulatory conditions. Baseline data for non-carbon dioxide (CO₂) emissions, including nitrous oxide and other high global warming potential gases, are maintained by EPA. The non-CO₂ data are compiled with input from industry and also independently from partners' information.

Data collected by EPA's voluntary programs include partner reports on facility-specific improvements (e.g. space upgraded, kilowatt-hours (kWh) reduced), national market data on shipments of efficient products, and engineering measurements of equipment power levels and usage patterns

Baseline information is discussed at length in the U.S. Climate Action Report 2002. The report includes a complete chapter dedicated to the U.S. greenhouse gas inventory (sources, industries, emissions, volumes, changes, trends, etc.). A second chapter addresses projected greenhouse gases in the future (model assumptions, growth, sources, gases, sectors, etc.)

U.S. Department of State. 2002. "U.S. Climate Action Report—2002. Third National Communication of the United States of America under the United Nations Framework Convention on Climate Change."

Partners do contribute *actual* emissions data biannually after their facility-specific improvements but these emissions data are not used in tracking the performance measure. EPA, however, validates the estimates of greenhouse gas reductions based on the actual emissions data received.

Methods, Assumptions, and Suitability: Most of the voluntary climate programs' focus is on energy efficiency. For these programs, EPA estimates the expected reduction in electricity consumption in kilowatt-hours (kWh). Emissions prevented are calculated as the product of the kWh of electricity saved and an annual emission factor (e.g., metric tons carbon equivalent (MMTCE) prevented per kWh). Other programs focus on directly lowering greenhouse gas emissions (e.g., Natural Gas STAR, Landfill Methane Outreach, and Coalbed Methane Outreach); for these, greenhouse gas emission reductions are estimated on a project-by-project basis. EPA maintains a tracking system⁶ for emissions reductions.

The Integrated Planning Model, used to develop baseline data for carbon emissions, is an important analytical tool for evaluating emission scenarios affecting the U.S. power sector. The IPM has an approved quality assurance project plan that is available from EPA's program office.

QA/QC Procedures: EPA devotes considerable effort to obtaining the best possible information on which to evaluate emissions reductions from voluntary programs. Peer-reviewed carbon-conversion factors are used to ensure consistency with generally accepted measures of greenhouse gas (GHG) emissions, and peer-reviewed methodologies are used to calculate GHG reductions from these programs.

Partners do contribute *actual* emissions data biannually after their facility-specific improvements but these emissions data are not used in tracking the performance measure. EPA, however, validates the estimates of greenhouse gas reductions based on the actual emissions data received.

Data Quality Review: The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. The second such interagency evaluation, led by the White House Council on Environmental Quality, examined the status of U.S. climate change programs. The review included participants from EPA and the Departments of State, Energy, Commerce, Transportation, and Agriculture. The results were published in the *U.S. Climate Action Report-2002* as part of the United States' submission to the Framework Convention on Climate Change (FCCC). The previous evaluation was published in the *U.S. Climate Action Report-1997*. A 1997 audit by EPA's Office of the Inspector General concluded that the climate programs examined "used good management practices" and "effectively estimated the impact their activities had on reducing risks to health and the environment..."

Data Limitations: These are indirect measures of GHG emissions (carbon conversion factors and methods to convert material-specific reductions to GHG emissions reductions). Also, the voluntary nature of the programs may affect reporting. Further research will be necessary in order to fully understand the links between GHG concentrations and specific environmental impacts, such as impacts on health, ecosystems, crops, weather events, and so forth.

Error Estimate: These are indirect measures of GHG emissions. Although EPA devotes considerable effort to obtaining the best possible information on which to evaluate emissions reductions from its voluntary programs, errors in the performance data could be introduced through uncertainties in carbon conversion factors, engineering analyses, and econometric analyses. The only programs at this time aimed at avoiding GHG emissions are voluntary.

New/Improved Data or Systems: The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. EPA continues to update inventories and methodologies as new information becomes available.

References: The U.S. Climate Action Report 2002 is available at: www.epa.gov/globalwarming/publications/car/index.html. The accomplishments of many of EPA's voluntary programs are documented in the Climate Protection Partnerships Division Annual Report. The most recent version is *Protecting the Environment Together: ENERGY STAR and other Voluntary Programs*, Climate Protection Partnerships Division 2003 Annual Report.

GOAL 1 OBJECTIVE 5

FY 2008 Performance Measures:

- **Percent progress toward completion of a hierarchy of air pollutant sources based on the risk they pose to human health (PART Measure)**

- **Percent of planned actions accomplished toward the long-term goal of reducing uncertainty in the science that supports the standard-setting and air quality management decisions (PART Measure)**

Performance Database: EPA will track these program outputs annually using an internal database.

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: To provide an indication of progress towards achievement of the Clean Air Research Program's long-term goals, the program annually develops a list of key research milestones and outputs in support of the Multi-Year Plan that are scheduled for completion by the end of each fiscal year. This list is finalized by the start of the fiscal year, and no changes are made after this point. The program then tracks quarterly the progress towards completion of these key outputs against pre-determined schedules and milestones. The final score is the percent of key outputs from the original list that are successfully completed on-time. Additionally, the Clean Air research program includes in this metric completion of follow-up recommendations from external peer reviews.

QA/QC Procedures: Procedures are now in place to require that all annual milestones be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management.

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research milestones and outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Air Toxics Multi-Year Plan, available at: <http://www.epa.gov/osp/myp/airtox.pdf> (last accessed January 3, 2007)

Particulate Matter Multi-Year Plan, available at: <http://www.epa.gov/osp/myp/pm.pdf> (last accessed January 3, 2007)

GOAL 2 OBJECTIVE 1

FY 2008 Performance Measures:

- **The percentage of the population served by community water systems that receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection**
- The percentage of the population in Indian country served by community water systems receiving drinking water that meets all applicable health-based standards
- The percentage of community water systems that will provide drinking water that meets all applicable health-based standards in person months
- **Percent of community water systems that meet all applicable health-based drinking water standards through approaches that include effective treatment and source water protection (PART measure)**

Performance Database: Safe Drinking Water Information System - Federal Version (SDWIS or SDWIS/FED). SDWIS contains basic water system information, population served, and detailed records of violations of the Safe Drinking Water Act and the statute's implementing regulations. The performance measure is based on the population served by community water systems that were active during any part of the performance year and did not have any violations designated as "health based." Exceedances of a maximum contaminant level (MCL) and violations of a treatment technique are health-based violations. SDWIS has provided annual results for ten years and reports on a fiscal year basis.

Data Source: Data are provided by agencies with primacy (primary enforcement authority) for the Public Water System Supervision (PWSS) program. These agencies are either: States, EPA for non-delegated states or territories, and the Navajo Nation Indian tribe, the only tribe with primacy. Primacy agencies collect the data from the regulated water systems, determine compliance, and report a subset of the data to EPA (primarily inventory and summary violations).

Methods, Assumptions and Suitability: Under the drinking water regulations, water systems must use approved analytical methods for testing for contaminants. State certified laboratories report contaminant occurrence to states that, in turn, determine exceedances of maximum contaminant levels or non-compliance with treatment techniques and report these violations to EPA. These results are subject to periodic performance audits and compared to results that states report to SDWIS. Primacy agencies' information systems and compliance determinations are audited on an average schedule of once every 3 years, according to a protocol. To measure program performance, EPA aggregates the SDWIS data into national statistics on overall compliance with health-based drinking water standards using the measures identified above.

QA/QC Procedures: EPA conducts a number of Quality Assurance/Quality Control steps to provide high quality data for program use, including:

- (1) SDWIS/FED edit checks built into the software to reject erroneous data.
- (2) Quality assurance manuals for states and Regions, which provide standard operating procedures for conducting routine assessments of the quality of the data, including timely corrective action(s).
- (3) Training to states on reporting requirements, data entry, data retrieval, and error correction.

- (4) User and system documentation produced with each software release and maintained on EPA's web site. System, user, and reporting requirements documents can be found on the EPA web site, <http://www.epa.gov/safewater/>. System and user documents are accessed via the database link <http://www.epa.gov/safewater/databases.html>, and specific rule reporting requirements documents are accessed via the regulations, guidance, and policy documents link <http://www.epa.gov/safewater/regs.html>.
- (5) Specific error correction and reconciliation support through a troubleshooter's guide, a system-generated summary with detailed reports documenting the results of each data submission, and an error code database for states to use when they have questions on how to enter or correct data.
- (6) User support hotline available 5 days a week.

The SDWIS/FED equivalent of a quality assurance plan is the data reliability action plan¹ (DRAP). The DRAP contains the processes and procedures and major activities to be employed and undertaken for assuring the data in SDWIS meet required data quality standards. This plan has three major components: assurance, assessment, and control.

Data Quality Review: SDWIS data quality was identified as an Agency weakness in 1999 and has a corrective action completion target date that extends to 2007. SDWIS' weaknesses centered around five major issues: 1) completeness of the data (e.g., the inventory of public water systems, violations of maximum contaminant levels, enforcement actions) submitted by the states, 2) timeliness of the data sent by the states, i.e., if states do not report at specified times, then enforcement and oversight actions suffer, 3) difficulty receiving data from the states, 4) both cost and difficulty processing and storing data in SDWIS after it has been received, and 5) difficulty getting SDWIS data for reporting and analysis.

The first two issues are being addressed over a three-year period (2004-2007) through two (2000 and 2003) Data Reliability Action Plans. OGWDW is now working with the states to complete a 2006 data quality review and plan. An information strategic plan² (ISP) was developed and implemented to address the last three issues, which deal primarily with technology (hardware and software) concerns. Implementation of the ISP, which ended in 2005, documents ways to improve tools and processes for creating and transferring data to EPA and incorporates newer technologies and adapts the Agency's Enterprise Architecture Plan to integrate data and allow the flow of data from reporting entities to EPA via the Agency's secure central data exchange (CDX) environment.

Routine data quality assurance and quality control (QA/QC) analyses of the Safe Drinking Water Information System (SDWIS) by the Office Water (OW) have revealed a degree of non-reporting of violations of health-based drinking water standards, and of violations of regulatory

¹ *Data Reliability Action Plan*. U.S. EPA, October 2002. Office of Ground Water and Drinking Water internal work plan document. *Drinking Water Data Reliability Analysis and Action Plan (2003) For State Reported Public Water System Data In the EPA Safe Drinking Water Information System/Federal Version (SDWIS/FED)*

² U.S. EPA, Office of Water, *Office of Ground Water and Drinking Water Information Strategy* (under revision). See *Options for OGWDW Information Strategy (Working Draft)*, EPA 816-P-01-001. Washington, DC, February 2001. Available on the Internet at <http://www.epa.gov/safewater/data/informationstrategy.html>

monitoring and reporting requirements (discussed further under Data Limitations). As a result of these data quality problems, the baseline statistic of national compliance with health-based drinking water standards likely is lower than previously reported. The Agency is more accurately quantifying data quality and should be better able to estimate the impact on national compliance with health-based drinking water standards. OGWDW also is working with states to develop a data quality objective for these data to better gauge progress toward data quality improvement. Even as improvements are made, SDWIS serves as the best source of national information on compliance with Safe Drinking Water Act requirements for program management, the development of drinking water regulations, trends analyses, and public information.

Data Limitations: Recent state data verification and other quality assurance analyses indicate that the most significant data quality problem is under-reporting by the states of monitoring and health-based standards violations and inventory characteristics. The most significant under-reporting occurs in monitoring violations. Even though those are not covered in the health based violation category, which is covered by the performance measure, failures to monitor could mask treatment technique and MCL violations. Such under-reporting of violations limits EPA's ability to: 1) accurately portray the amount of people affected by health-based violations, 2) undertake geo-spatial analysis, 3) integrate and share data with other data systems, and 4) precisely quantify the population served by systems, which are meeting the health-based standards. Therefore, the estimates of population-served could be high or low. As described in the Data Quality Review section above, EPA is currently changing the protocol to enhance the results of data audits as the best near-term option to improve these estimates, while continuing to explore other approaches, including use of contaminant occurrence data.

Error Estimate: EPA will be analyzing data, derived from the improved data audit protocol, with a robust statistical basis from which to extrapolate national results, and better aligned with requirements of the Data Quality Act. The long-term value of the improved audit process is that each year's results will be statistically representative and provide information closer in time to the needed performance reporting; for example, 2006 results, the first year of the improved audit process will be reported in 2007.

New/Improved Data or Systems: Several approaches are underway.

First, EPA will continue to work with states to implement the DRAP and ISP, which have already improved the completeness, accuracy, timeliness, and consistency of the data in SDWIS/FED through: 1) training courses for specific compliance determination and reporting requirements, 2) state-specific technical assistance, 3) increased number of data audits conducted each year, and 4) assistance to regions and states in the identification and reconciliation of missing, incomplete, or conflicting data.

Second, more states (as of January 2007, 53 States, Tribes, and territories are using SDWIS/STATE) will use SDWIS/STATE,³ a software information system jointly designed by

³ SDWIS/STATE (Version 8.1) is an optional Oracle data base application available for use by states and EPA regions to support implementation of their drinking water programs.

U.S. EPA, Office of Ground Water and Drinking Water. Data and Databases. Drinking Water Data & Databases – SDWIS/STATE, July 2002. Information available on the Internet: http://www.epa.gov/safewater/sdwis_st/current.html

states and EPA, to support states as they implement the drinking water program.

Third, EPA has modified SDWIS/FED to (1) simplify the database, (2) minimize data entry options resulting in complex software, (3) enforce Agency data standards, and (4) ease the flow of data to EPA through a secure data exchange environment incorporating modern technologies, all of which will improve the accuracy of the data. In 2006, full use of SDWIS/FED for receiving state reports will be implemented. Data will be stored in a data warehouse system that is optimized for analysis, data retrieval, and data integration from other data sources. It will improve the program's ability to more efficiently use information to support decision-making and effectively manage the program.

Finally, EPA, in partnership with the states, is developing information modules on other drinking water programs: the Source Water Protection Program, the Underground Injection Control Program (UIC), and the Drinking Water State Revolving Fund. These modules will be integrated with SDWIS to provide a more comprehensive data set with which to assess the nation's drinking water supplies, a key component of the goal. Agreement will shortly be reached on the data elements for reporting source water and UIC data. Plans have now been developed for design of systems to address these data flows. Developing the systems to receive the data is scheduled for 2007.

References:

Plans*

- SDWIS/FED does not have a Quality Assurance Project Plan - it is a legacy system which has "evolved" since the early 80s prior to the requirement for a Plan. The SDWIS/FED equivalent is the Data Reliability Action Plan
- Information Strategy Plan – SDWIS/FED (see footnote 2)
- Office of Water Quality Management Plan, available at <http://www.epa.gov/water/info.html>
- Enterprise Architecture Plan

Reports*

- 1999 SDWIS/FED Data Reliability
- 2003 SDWIS/FED Data Reliability Report - contains the Data Reliability Action Plan and status report

Guidance Manuals, and Tools

- PWSS SDWIS/FED Quality Assurance Manual
- Various SDWIS/FED User and System Guidance Manuals (includes data entry instructions, data On-line Data Element Dictionary-a database application, Error Code

* These are internal documents maintained by EPA's Office of Ground Water and Drinking Water. Please call 202-564-3751 for further information.

Data Base (ECDB) - a database application, users guide, release notes, etc.) Available on the Internet at <<http://www.epa.gov/safewater/sdwisfed/sdwis.htm>>

- Regulation-Specific Reporting Requirements Guidance. Available on the Internet at <<http://www.epa.gov/safewater/regs.html>>

Web site addresses

- OGWDW Internet Site <<http://www.epa.gov/safewater/databases.html>> and contains access to the information systems and various guidance, manuals, tools, and reports.
- Sites of particular interest are:
<<http://www.epa.gov/safewater/data/getdata.html>> contains information for users to better analyze the data, and

<<http://www.epa.gov/safewater/sdwisfed/sdwis.htm>> contains reporting guidance, system and user documentation and reporting tools for the SDWIS/FED system.

FY 2007 Performance Measure:

- The percentage of community water systems that have undergone a sanitary survey within the past three years

Performance Database: Primary enforcement responsibility (e.g. primacy) for the Public Water System Supervision (PWSS) program is authorized under §1413 of the Safe Drinking Water Act (SDWA). States and Indian Tribes are given primacy for public water systems in their jurisdiction if they meet certain requirements. A critical component of primacy is the requirement that a state must have a program to conduct sanitary surveys of the systems in its jurisdiction. A sanitary survey is an on-site review of the water sources, facilities, equipment, operation, and maintenance of a public water system for the purpose of evaluating the adequacy of the facilities for producing and distributing safe drinking water. Inspectors conducting sanitary surveys must apply basic scientific information and have a working knowledge of the operation, maintenance, management, and technology of a water system to identify sanitary risks that may interrupt the multiple barriers of protection at a water system. There are eight essential elements of a sanitary survey as defined by the EPA/State Joint Guidance on Sanitary Surveys⁴ and the interim enhanced surface water treatment rule: water source; treatment; distribution system; finished water storage; pumps, pump facilities and controls; monitoring, reporting and data verification; water system management and operations; and operator compliance with state requirements.

Performance data for this measure will be compiled from information collected during file audits of randomly selected community water systems (data verification or DV). The purpose of a DV is two-fold: (1) to detect discrepancies between the PWS data in the state files or database and the data reported to SDWIS/FED and (2) to ensure that the State is determining compliance in accordance with EPA approved state regulations. After the conduct of each DV, a report is

⁴ Guidance Manual for Conducting Sanitary Surveys of Public Water Systems; Surface Water and Ground Water Under the Direct Influence (GWUDI), (EPA 815-R-99-016, April 1999)
<http://www.epa.gov/safewater/mdbp/pdf/sansurv/sansurv.pdf>

generated which includes the findings for compliance with sanitary survey requirements. DVs are conducted on a cycle in order to visit each state at a frequency of every three years. Final reports for each state serve as the official data source for this measure until a new DV is conducted. Information derived for the DV reports will be calculated annually for this measure.

Data Source: State specific Final Data Verification Reports provide information on compliance with sanitary survey requirements. Information from DV reports for states will be calculated to measure performance.

Methods, Assumptions and Suitability: To assure that data collected during a DV is consistently captured and analyzed, the DV team follows the “EPA Protocol for Participation in a PWSS Program Data Verification” which includes revisions through April 4, 2005. The protocol provides guidance on statistical methodology for defining variables, calculating the statistical proportion (P), determining the appropriate sample size and selecting the systems for file review. Before selecting a sample of systems, the DV team must decide whether it wishes to stratify (or sort) the sample by some characteristic. Stratifying the sample permits more precision, allowing the team to make observations about subsets of systems. A sample may be stratified by system type, size, source, or a combination of these factors. For DV purposes, the sample is always stratified by system type (i.e., CWSs, NTNCWSs, and TNCWSs) since different regulations apply to different types of systems. Once the DV team determines the subset of systems from which the sample will be drawn, along with the number of systems which must be reviewed from that subset of systems, the SDWIS/FED random number generator selects the systems for review. Statistical principles dictate that samples must be selected in a truly random fashion in order to obtain unbiased estimates and achieve the desired precision level. For states whose files are kept in one central office, sample selection is straightforward. The SDWIS/FED random number generator pulls a random sample of systems from the entire subset of systems within the state. Hence, all systems have an equal chance of being chosen.

QA/QC Procedures: To assure the data collected during a DV is complete and accurate, the DV team follows the “EPA Protocol for Participation in a PWSS Program Data Verification.” This protocol is intended as a “handbook” for people performing a DV. The protocol contains detailed instructions for reviewing and analyzing data for sanitary surveys. Since neither time nor resources allow a complete review of all sanitary survey data, the DV team must use a random sample of systems that is drawn from the total number of systems in each state. This random sample is statistically representative of systems in the state. The team then uses the statistical sampling results to draw reasonably accurate assumptions about all of the systems in the state, based on just a few systems.

Data Quality Reviews: Information derived from DVs is captured in a draft report and submitted to EPA (HQ and Regions) as well as the state where the DV was conducted for review. States and EPA conduct data quality reviews and provide additional information or data as necessary to assure accuracy and completeness. EPA works with states to resolve data issues. Reports are finalized and thus used to measure performance.

Data Limitations: OGWDW has an existing database for PWSS program information, the Safe Drinking Water Information System (SDWIS). Violations of sanitary survey requirements are

captured in SDWIS. However, the data field to record sanitary survey frequency is not a mandatory field. Due to resource limitations, sanitary survey data cannot be verified for every system in every state each year. OGWDW employs a methodology to analyze a representative sample of systems during an audit.

FY 2008 Performance Measures:

- **Fund Utilization Rate for the DWSRF**
- **Number of additional projects initiating operations**

Performance Database: Drinking Water State Revolving Fund National Information Management System (DWNIMS.)

Data Sources: Data are entered by state regulatory agency personnel and by EPA's Regional staff; they are collected and reported once yearly.

Methods, Assumptions and Suitability: Data entered into DWNIMS directly represent the units of performance for the performance measure. These data are suitable for year-to-year comparison and trend indication.

QA/QC Procedures: EPA's headquarters and Regional offices are responsible for compiling the data and querying states as needed to assure data validity and conformance with expected trends. States receive data entry guidance from EPA headquarters in the form of annual memoranda (e.g., "2005 DWNIMS Data Collection.")

Data Quality Reviews: EPA's headquarters and Regional offices annually review the data submitted by the states. State data are publicly available at <http://www.epa.gov/safewater/dwsrf/dwnims.html> in individual state reports. Headquarters addresses significant data variability issues directly with states or through the appropriate EPA Regional office. Additionally, EPA's contractor tests the data for logical consistency. An annual EPA headquarters' "DWNIMS Analysis" provides detailed data categorization and comparison. This analysis is used during:

1. Annual EPA Regional office and state reviews to identify potential problems with the program's pace which might affect the performance measure.
2. Reviews by EPA's headquarters of regional oversight of state revolving funds.
3. Annual reviews by EPA's Regional offices of their states' revolving funds operations.

State data quality is also evaluated during annual reviews performed by EPA Regions. Any inconsistencies that are found in need of correction are incorporated into future DWNIMS reports. These adjustments are historically rare and very minor.

Data Limitations: There are no known limitations in the performance data, which states submit voluntarily. Erroneous data can be introduced into the DWNIMS database by typographic or definitional error. Typographic errors are controlled and corrected through data testing performed by EPA's contractor. Definitional errors due to varying interpretations of information

requested for specific data fields have been largely reduced. These definitions are publicly available at: <http://www.epa.gov/safewater/dwsrf/nims/dwdatadefs.pdf> . There is typically a lag of approximately two months from the date EPA asks states to enter their data into the DWNIMS database, and when the data are quality-checked and available for public use.

New/Improved Data or Systems: This system has been operative since DWSRF inception. It is updated annually, and data fields are changed or added as needed.

References:

State performance data as shown in NIMS are available by state at:

<http://www.epa.gov/safewater/dwsrf/dwnims.html>

Definitions of data requested for each data field in NIMS is available at:

<http://www.epa.gov/safewater/dwsrf/nims/dwdatadefs.pdf>

2005 DWNIMS Data Collection – memo from Jeff Bryan, 7/12/05

DWNIMS analysis

FY 2008 Performance Measure:

- **Percentage of state-monitored shellfish-growing acres impacted by anthropogenic sources that are approved or conditionally approved for use.**

Performance Database: There is no database currently available, although one is under development (see below)². In the past, data to support this measure came from surveys of States that are members of the Interstate Shellfish Sanitation Conference (ISSC), conducted by NOAA at 5-year intervals and periodic updates requested from the Interstate Shellfish Sanitation Conference (most recent, 2003 2005 data released in 2004 2006³).

Data Source: The ISSC requests the data on approved acreages from shellfish producing states and prepares reports. Survey responses are voluntary.

Methods, Assumptions and Suitability: The methods used by the state programs to produce the data used by the ISSC are based on the National Shellfish Sanitation Plan and Model Ordinance; the operation of those state programs is overseen by the FDA⁴.

QA/QC Procedures: States are responsible for the internal QA/QC of their data.

Data Quality Reviews: The ISSC reviews the state data during report preparation to ensure completeness and accuracy, and follows up with states where necessary.

Data Limitations: Based on NOAA's previous surveys and the voluntary nature of the information collected, potential data limitations may include incomplete coverage of shellfish growing areas.

Error Estimate: No estimates are available.

New/Improved Data or Systems: The ISSC initiated development of the Shellfish Information Management System (SIMS) in July 2002. The database is being developed and implemented by the National Oceanographic and Atmospheric Administration (NOAA) on behalf of the Interstate Shellfish Sanitation Conference (ISSC), a Cooperative Program chartered by the Food and Drug Administration (FDA). The database will include relevant information that is collected by State Shellfish Control Authorities. Historically, NOAA collected shellfish-growing area data in 5-year intervals, 1985, 1990, and 1995. These data were not stored in a database. Once operational, SIMS will be the first national shellfish growing area database and will include NOAA's 1995⁵ and the states' baseline (the ISSC is considering the most appropriate baseline year) and most current year data. State summary information can then be used to track trends relevant to the performance measure, with the 1995 data as against the baseline. The SIMS database is designed as a real time database. The ISSC plans to request data updates annually, but states may update their data any time. These data may be accessed at any time so timely status reports can be generated.

Currently, no long-term database management plan exists.

References:

1. U.S. Environmental Protection Agency. 2006 - 2011 EPA Strategic Plan. Washington, D.C. Pre-publication Copy, September 29, 2006. <http://www.epa.gov/ocfo/plan/plan.htm>
2. Kracker, L.M., Comar P.G., Meaburn, G.M., and K Murugesan. 2005. SIMS: A Shellfish Information Management System for Molluscan Shellfish. NOAA Technical Memorandum NOS NCCOS 17. 53 pp.
3. Interstate Shellfish Sanitation Conference. Analysis of Classified Shellfish Waters 1985-2005. Columbia, South Carolina. September 2006. <http://www.issc.org>
4. U.S. Food and Drug Administration. National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish 2005. Washington D.C. <http://www.cfsan.fda.gov/~ear/nss3-toc.html>
5. National Oceanic and Atmospheric Administration (NOAA), 1997. The 1995 National Shellfish Register of Classified Growing Waters. Silver Spring, MD: Office of Ocean Resources Conservation and Assessment, Strategic Environmental Assessments Division. 398 pp.

FY 2008 Performance Measure:

- **Reduce the percentage of women of child-bearing age having mercury levels in blood above the level of concern identified by the National Health and Nutrition Examination Survey (NHANES).**

Performance Database: There is no publicly accessible database that contains this information. Rather, the information is reported by the Centers for Disease Control and Prevention (CDC) every two years. The latest report is the *Third National Report on Human Exposure to Environmental Chemicals*, which presents findings for the years 2001 and 2002, and was published in 2005. In the report, CDC reported that 5.7% of the women of child-bearing age have mercury blood levels above the level of concern.¹

Data Source: CDC's National Center for Health Statistics conducts the National Health and Nutrition Examination Survey (NHANES) in which chemicals or their metabolites are measured in blood and urine samples from a random sample of participants. NHANES is a series of surveys designed to collect data on the health and nutritional status of the U.S. population. CDC reports the NHANES results in the *National Report on Human Exposure to Environmental Chemicals*. The *Second National Report on Human Exposure to Environmental Chemicals* was released in 2003 and presented biomonitoring exposure data for 116 environmental chemicals for the civilian, non-institutionalized U.S. population over the 2-year period 1999-2000. The *Third National Report on Human Exposure to Environmental Chemicals* presents similar exposure data for the U.S. population for 148 environmental chemicals over the period 2001-2002. The Third Report also includes the data from the Second Report.

Methods, Assumptions and Suitability: Biomonitoring measurements for the Report were from samples from participants in NHANES. NHANES collects information about a wide range of health-related behaviors, performs a physical examination and collects samples for laboratory tests. Beginning in 1999, NHANES became a continuous survey, sampling the U.S. population annually and releasing the data in 2-year cycles. The sampling plan follows a complex, stratified, multistage, probability-cluster design to select a representative sample of the civilian, noninstitutionalized population in the United States. Additional detailed information on the design and conduct of the NHANES survey is available at <http://www.cdc.gov/nchs/nhanes.htm>. The CDC National Center for Health Statistics (NCHS) provides guidelines for the analysis of NHANES data at http://www.cdc.gov/nchs/data/nhanes/nhanes_general_guidelines_june_04.pdf. Other details about the methodology including statistical methods are reported in the *Third National Report on Human Exposure to Environmental Chemicals*.

QA/QC Procedures: The CDC quality assurance and quality control procedures are not specified in the *Third National Report on Human Exposure to Environmental Chemicals*. However, the Data Sources and Data Analysis chapter in the report does delineate the assumptions inherent in the analysis.

Data Quality Review: The data comes from the NHANES study, which CDC has designed to have a high quality.

Data Limitations: NHANES is designed to provide estimates for the civilian, non-institutionalized U.S. population. The current design does not permit examination of exposure levels by locality, state, or region; seasons of the year; proximity to sources of exposure; or use of particular products. For example, it is not possible to extract a subset of the data and examine levels of blood lead that represent levels in a particular state's population.

Error Estimate: The *Third National Report on Human Exposure to Environmental Chemicals* provides 95% confidence intervals for all statistics. At the point of interest for this measure, the 95% confidence interval is roughly 1.2 ug/l.

New/Improved Data or Systems: None.

References

Centers for Disease Control and Prevention. "Third National Report on Human Exposure to Environmental Chemicals." NCEH Pub. No. 05-0570. Atlanta, GA. July 2005. Available at <http://www.cdc.gov/exposurereport/>.

FY 2008 Performance Measure:

- **Number of waterborne disease outbreaks attributable to swimming in or other recreational contact with, coastal and Great Lakes waters measured as a five-year average.**

Performance Database: Data on waterborne disease outbreaks (WBDOs) are collected by the states and are submitted to the Centers for Disease Control (CDC) under an agreement with the Council of State and Territorial Epidemiologists, the organization that sponsors the collection of the data. EPA/ORD collaborates with CDC in the analysis of the data. The data are published every two years for the prior second and third years' occurrence of outbreaks as a Surveillance Summary in the CDC's Morbidity and Mortality Weekly Report (MMWR), e.g. data from 1997-1998 were published in 2000. Outbreaks of gastroenteritis, dermatitis, and other diseases are listed according to date of occurrence, state in which the outbreak occurred, etiological agent, the number of cases that resulted from the outbreak, class of the outbreak data (index of data quality for the reporting of the outbreak), and the type of source (e.g., lake, river, pool) involved.

Data Source: Since 1971, CDC and the U.S. Environmental Protection Agency have maintained a collaborative surveillance system for collecting and periodically reporting data that relate to occurrences and causes of WBDOs. The surveillance system includes data about outbreaks associated with drinking water and recreational water. State, territorial, and local public health departments are primarily responsible for detecting and investigating WBDOs and for voluntarily reporting them to CDC.

Methods, Assumptions and Suitability: State, territorial, and local public health agencies report WBDOs to CDC on a standard form (CDC form 52.12). CDC annually requests reports from state and territorial epidemiologists or from persons designated as WBDO surveillance coordinators. As indicated above, the data are submitted to CDC by the states under an agreement with the Council of State and Territorial Epidemiologists. Original data forms and the primary database itself are not available for external review because of concerns about the integrity and confidentiality of the data, which include information such as the names of data reporters, specific identities of water bodies, and identities of facilities and properties, both public and private, at which the outbreaks occurred. Many, if not most outbreaks occur in treated man-made water environments which are not reflective of outcomes of Clean Water Act programs. Others occur in untreated natural waters in smaller waterbodies not impacted by EPA programs or activities. Accordingly, cooperation of database managers is required to identify specific outbreaks which should be counted under this measure as occurring in waters of the United States.

The unit of analysis for the WBDO surveillance system is an outbreak, not an individual case of a waterborne disease, although this information is reported. Two criteria must be met for an event to be defined as a water-associated disease outbreak. First, two or more people must have experienced a similar illness after exposure to water. This criterion is waived for single cases of laboratory-confirmed primary amebic meningoencephalitis (PAM). WBDOs associated with cruise ships are not summarized in the CDC report.

QA/QC Procedures: Data are submitted to CDC on a standard reporting form in hard copy by mail. Procedures for reporting outbreaks on the Internet for web-entry electronic submission are currently under development. Upgrades to the reporting system to incorporate electronic data reporting are anticipated to be implemented within the next three years¹. Currently, CDC annually obtains reports from state or territorial epidemiologists or persons designated as WBDO surveillance coordinators. Numeric and text data are abstracted from the outbreak form and supporting documents and entered into a database for analysis. Information on QA/QC procedures employed by the individual states or other reporting entities is not included in the CDC reporting.

Data Quality Review: The CDC and EPA/ORD report team review the outbreak reports to ensure the information is complete, following up with the state or local government to obtain additional information where needed. There are currently no external party reviews of this information conducted prior to publication.

WBDOs reported to the surveillance system are classified according to the strength of the evidence implicating water as the vehicle of transmission. The classification scheme (i.e., Classes I-IV) is based on the epidemiologic and water-quality data provided on the outbreak report form. Epidemiologic data are weighted more than water-quality data. Although outbreaks without water-quality data might be included in this summary, reports that lack epidemiologic data were excluded. Single cases of PAM are not classified according to this scheme. Weighting of epidemiologic data does not preclude the relative importance of both types of data. The purpose of the outbreak reporting system is not only to implicate water as the vehicle for the outbreak but also to understand the circumstances that led to the outbreak.

Data Limitations: There are two primary limitations to the CDC WBDO data with respect to this performance measure. The first limitation relates to original data forms and the primary database itself not being available for external review. The implication of this limitation is that database managers or report authors will have to be consulted to identify which of the reported outbreaks have, in fact, occurred in Waters of the United States. The second limitation is the fact that very few outbreaks have been reported over the ten years of data that have been reviewed in consideration of a baseline for this measure.²⁻⁶ The implication of this measure is that were a small number of outbreaks to occur within a given year, it may still be within the range of normal statistical variability and therefore not an effective performance measure.

One key limitation of the data collected as part of the WBDO surveillance system is that the information pertains only to disease outbreaks rather than endemic illness. The epidemiologic trends and water-quality concerns observed in outbreaks might not necessarily reflect or correspond with trends associated with endemic waterborne illness. To address this problem,

EPA and CDC are collaborating on the NEEAR Water Study to assess the magnitude of waterborne illness associated with routine, non-outbreak-associated exposure to marine and freshwater recreational areas.

Error Estimate: The relative quality of data and the error estimate associated with data of a given quality are indicated by the classification of the outbreak report. A classification of I indicates that adequate epidemiologic and water-quality data were reported. Specifically, a classification of I indicates that adequate data were provided about exposed and unexposed persons with a relative risk or odds ratio of ≥ 2 or P value of ≤ 0.05 , which indicates statistical significance. Higher classification numbers (II-IV) indicate relatively higher error estimates based on factors such as completeness of data and sample size. For instance, outbreaks that affect fewer persons are more likely to receive a classification of III rather than I because of the relatively limited sample size available for analysis.

New/Improved Performance Data or Systems: The manual reporting of WBDOs has been practiced since the collaborative surveillance system for collecting and reporting data began in 1971. Plans are now in place to transform the outbreak reporting system over the next three years to incorporate electronic data reporting. It is anticipated that the implementation of these upgrades will increase the number of reported outbreaks substantially. An increased number of reported WBDOs resulting from electronic reporting would require the baseline for the performance measure to be reset to a baseline consistent with the new level of reporting in order to yield meaningful trends in the occurrence of waterborne outbreaks in the future.

References

1. U.S. EPA. Office of Research and Development. Personal Communication w/ Calderon RL, author. Washington, DC, December 2005.
2. Yoder JS, Blackburn BG, Craun GF, Hill V, Levy DA, Calderon RL, et al. Surveillance for waterborne-disease outbreaks---United States, 2001--2002. In: CDC Surveillance Summaries, October 22, 2004. MMWR 2004;53(SS-08): 1--22
3. Lee SH, Levy DA, Craun GF, Beach MJ, Calderon RL. Surveillance for waterborne-disease outbreaks---United States, 1999--2000. In: CDC Surveillance Summaries, November 22, 2002. MMWR 2002;51(SS-8): 1--47.
4. Barwick RS, Levy DA, Craun GF, Beach MJ, Calderon RL. Surveillance for waterborne disease outbreaks---United States, 1997--1998. In: CDC Surveillance Summaries, May 26, 2000. MMWR 2000;49 (No. SS-4):1--34.
5. Levy DA, Bens MS, Craun GF, Calderon RL, Herwaldt BL. Surveillance for waterborne-disease outbreaks---United States, 1995--1996. In: CDC Surveillance Summaries, December 11, 1998. MMWR 1998;47(No. SS-5):1--34.
6. Kramer MH, Herwaldt BL, Craun GF, Calderon RL, Juranek DD. Surveillance for waterborne-disease outbreaks---United States, 1993--1994. In: CDC Surveillance Summaries, April 12, 1996. MMWR 1996;45 (No. SS-1):1--33.

FY 2008 Performance Measure:

- **Percentage of days of the beach season that coastal and Great Lakes beaches monitored**

by state beach safety programs are open and safe for swimming

Performance Database: The data are stored in PRAWN (Program tracking, beach Advisories, Water quality standards, and Nutrients), a database that includes fields identifying the beaches for which monitoring and notification information are available and the date the advisory or closure was issued, thus enabling trend assessments to be made. The database also identifies those states that have received a BEACH (Beaches Environmental Assessment and Coastal Health) Act [P.L. 106-284] grant. EPA reports the information annually, on a calendar year basis, each May. The calendar year data are then used to support fiscal year commitments (e.g., 2007 calendar year data are used to report against FY 2008 commitments). As of 2005, States and Territories monitor for pathogens at 4,025 coastal and Great Lakes beaches, up from 2,823 beaches in 2002¹.

Data Source: Since 1997 EPA has surveyed state and local governments for information on their monitoring programs and on their advisories or closures. The Agency created the PRAWN database to store this information. State and local governmental response to the survey was voluntary up through calendar year 2002. Starting in calendar year 2003, data for many beaches along the coast and Great Lakes had to be reported to EPA as a condition of grants awarded under the BEACH Act². Since 2005, states have used an on-line process called eBeaches to electronically transmit beach water quality and swimming advisory information to EPA instead of using the paper survey. The latest information reported by a state or local government is accessible to the public through the BEACON (Beach Advisory Closing On-line Notification) system.

Methods, Assumptions and Suitability: The data are an enumeration of the days of beach-specific advisories or closures issued by the reporting state or local governments during the year. Performance against the target is tracked using a simple count of the number of beaches responding to the survey and the days over which the advisory or closure actions were taken. This is compared to the total number of days that every beach could be open. Thus the data are suitable for the performance measure.

QA/QC Procedures: Since 1997, EPA has distributed a standard survey form, approved by OMB, to coastal and Great Lake state and county environmental and public health beach program officials in hard copy by mail. The form is also available on the Internet for web-entry electronic submission. When a state or local official enters data using the web-entry format, a password is issued to ensure the appropriate party is completing the survey. Currently the Agency has procedures for information collection (see Office of Water's "Quality Management Plan," approved September 2001 and published July 2002³). In addition, coastal and Great Lakes states receiving BEACH Act grants are subject to the Agency's grant regulations under 40 CFR 31.45. These regulations require states and tribes to develop and implement quality assurance practices for the collection of environmental information.

Data Quality Review: EPA reviews the survey responses to ensure the information is complete, following up with the state or local government to obtain additional information where needed. The Agency also reviews the QA/QC reports submitted by States and Territories as part of their grant reporting. There have been no external party reviews of this information.

Data Limitations: From calendar year 1997 to calendar year 2002, participation in the survey and submission of data was voluntary. While the voluntary response rate has been high, it did not capture the complete universe of beaches. The voluntary response rate was 92% in calendar year 2002 (240 out of 261 contacted agencies responded). The number of beaches for which information was collected increased from 1,021 in calendar year 1997 to 2,823 in calendar year 2002. Participation in the survey is now a mandatory condition for implementation grants awarded under the BEACH Act program to coastal and Great Lakes states, with information now available for 4,025 of 6,099 coastal and Great Lakes beaches. All coastal and Great Lakes states and territories now apply annually for implementation grants.

Error Estimate: Not all coastal and Great Lakes beaches are monitored. In 2005, States and Territories report that they monitor at 4,025 of the 6,099 coastal and Great Lakes beaches. This monitoring varies between States. For example, North Carolina monitors all its 247 beaches whereas South Carolina monitors 23 of 299 beaches it identified. Where monitoring is done, there is some chance that the monitoring may miss some instances of high pathogen concentrations. EPA's 2002 National Health Protection Survey of Beaches found that 90% of the nation's beaches are monitored once a week or less⁴. Studies in southern California found that weekly sampling missed 75% of the pathogen exceedances⁵, and that 70% of the exceedances lasted for only one day⁶. An EPA Office of Research and Development (ORD) beach monitoring study found a positive correlation between pathogen indicator densities one day as compared to densities the next day, but that the correlation was negligible when compared to densities after four days⁷. These studies indicate that weekly sampling most likely misses many pathogen events that can affect public health. This information is not sufficient to calculate the potential error in the reporting, but it is sufficient to indicate that the reporting may understate the number of days that beaches should be closed or under advisory.

New/Improved Data or Systems: Participation in the survey is now a mandatory condition for grants awarded under the BEACH Act program. As the Agency awards these implementation grants, it will require standard program procedures, sampling and assessment methods, and data elements for reporting. The amount, quality, and consistency of available data will improve to the extent that state governments apply for and receive these grants. In FY 2008, EPA expects all 35 coastal and Great Lakes states to again apply for grants to implement monitoring and notification programs.

References:

- U.S. EPA. Office of Water. "EPA's Beach Report: 2005 Swimming Season." EPA-823-F-06-010. Washington, DC, June 2006. Available at <http://www.epa.gov/waterscience/beaches/seasons/2005/2005fs.pdf>
- U.S. EPA. Office of Water. "National Beach Guidance and Required Performance Criteria for Grants." EPA-823-B-02-004. Washington DC: EPA, June 2002. Available at <http://www.epa.gov/waterscience/beaches/guidance/all.pdf>
- U.S. EPA. Office of Water. "A Quality Management Plan." EPA 821-X-02-001. Washington, DC: EPA, July 2002. Available at http://www.epa.gov/water/programs/qmp_july2002.pdf

- U.S. EPA. Office of Water. "EPA's BEACH Watch Program: 2002 Swimming Season." EPA-823-F-03-007. Washington, DC, May 2003. Available at <http://www.epa.gov/waterscience/beaches/beachwatch2003-newformat.pdf>
- Leecaster. M.K. and S.B. Weisberg, Effect of Sampling Frequency on Shoreline Microbiology Assessments, *Marine Pollution Bulletin*, 42(11), 2001.
- Boehm, A.B., et. al., Decadal and Shorter Period Variability of Surf Zone Water Quality at Huntington Beach, California, *Environmental Science and Technology*, 36(18), 2002.
- U.S. EPA. Office of Research and Development. "The EMPACT Beaches Project, Results and Recommendations from a Study on Microbiological Monitoring In Recreational Waters." EPA 600/9-02/xxx. Washington, DC, Sept. 2002.(Draft Report).

GOAL 2 OBJECTIVE 2

FY 2008 Performance Measures:

- The Percentage of identified Class V motor vehicle waste disposal wells closed or permitted.
- Class I, II, and III wells that maintain mechanical integrity without a failure that releases contaminants to underground sources of drinking water.
- Percentage of prohibited Class IV and high-priority, identified, potentially endangering Class V wells closed or permitted in ground-water based source water areas.

Performance Database: The Underground Injection Control (UIC) program is authorized under Part C Sections 1422 -1426 of the Safe Drinking Water Act (SDWA). Regulations for the UIC program are in 40 CFR Parts 144 - 148. Basic program information is collected from states and EPA's regional offices (regions) with direct implementation (DI) responsibilities through the 7520 Federal Reporting forms 1, 2A, 2B, 3 and 4. In July 2005, EPA issued a measures reporting assistance memorandum, "Information to Assist Regions and States to Report on Underground Injection Control Program's National Water Program Guidance Performance Activity Measures." Starting in FY 2005, including annual updates thereafter, states report to EPA on the results of their UIC performance measures. In the initial 2005 reporting, states or the regions, if they have direct implementation of the program, report the following information: (1) The number of Class I, II, III, and V violations and significant violations that have been identified and addressed, (2) the number of Class I, II, III and V inspections, (3) The number of Class I, II and III salt solution mining wells that maintained mechanical integrity, (4) the number of Class V wells in Source Water Protection Areas (SWPAs) with surveys completed, and (5) the number of high priority wells in ground water based SWPAs that are closed or permitted. This information was reported to help determine the impact that the UIC program is having relative to public health protection. It also helps assess the progress being made to protect underground sources of drinking water (USDW).

In FY 2003, EPA maintained pilot state-level summary data for each of these reporting elements in a spreadsheet format. In FY 2005, states and/or regions reported summary measures information through a spreadsheet. In FY 2006, measures data was entered into a web-based reporting form which mirrored the spreadsheet from the previous year. The UIC program will

begin collecting program information in a UIC national database in 2007; this system will electronically transfer information from state databases to EPA's national database using EPA's Exchange Network. EPA is currently working with the regions and several states to complete development of the system and to begin populating it.

Data Source: Until the UIC national database is deployed for use, states or DI programs will report to EPA using the UIC Inventory/Performance Activity Measures System. This is a web-base data entry system. Starting in 2007, states and DI programs will transition to the UIC national data system for reporting of UIC data. - See section "New/Improved Data or Systems."

Methods, Assumptions and Suitability: For these measures, the states' reporting of progress is based on EPA's 2005 guidance, "Information to Assist Regions and States to Report on Underground Injection Control Program's National Water Program Guidance Performance Activity Measures." States will only report state-level summary information, much of which is contained in state databases. State reporting will be based on definitions and procedures found in the guidance. EPA believes that the data will be reliable for use in making management decisions.

QA/QC Procedures: QA/QC procedures include validation of information using states' 7520 reporting forms. Additionally, a series of data checks are built into the web entry system. EPA's regional offices also will work with individual states to verify information. Additional checks are performed by EPA headquarters on randomly selected states.

Data Quality Reviews: EPA's regional offices will conduct data quality reviews of state data using the QA/QC procedures and work with states to resolve data issues. EPA headquarters will communicate any additional concerns that may occur. The national data system includes software to reject erroneous data. As a result, EPA expects the quality of data on the results of the assessments and source water protection activities to improve over time.

Data Limitations: Current reporting only provides summary-level information. There is no standard protocol for EPA to verify and validate this summary data against well-level information contained in state databases. Some of the information used for calculation of the measures has not been collected historically reducing the availability of information, which may cause the data to be incomplete and inconsistent across states.

Error Estimate: There is no basis for making an error estimate for these performance measures given the data limitations of state-level summary reporting described above.

New/Improved Data or Systems: The UIC national data base is being developed though consultation with regions and states. It will give EPA the ability to access the data directly from states through the Exchange Network using the Central Data Exchange (CDX). The data system will not only include the data for the measures but all of the data necessary for EPA to effectively manage the national program.

References:

Guidance, Regulations and Data Forms

- Information to Assist Regions and States to Report on Underground Injection Control Program's National Water Program Guidance Performance Activity Measures (Reporting Assistance Memo)--7/06/06
- Code of Federal Regulations at 40 CFR Parts 144 through 148
- UIC Inventory/Performance Activity Measures System
- 7520 Federal Reporting Forms (OGWDW Homepage-UIC Program)
 - Form 7520-1 (summary of permit and non permit actions taken by state)
 - Form 7520-2A (summary of state compliance evaluation actions)
 - Form 7520- 2B (summary of significant non-compliance)
 - Form 7520-3(mechanical integrity test/remedial actions)
 - Form 7520-4 (Quarterly Exceptions List)

Web site addresses

- *Safe Drinking Water Act Amendments of 1996*. P.L. 104-182. (Washington: 6 August 1996). Available on the Internet at: <http://www.epa.gov/safewater/sdwa/sdwa.html>
- For more detailed information on Underground Injection topics, US EPA Office of Ground Water and Drinking Water/UIC Program. Available on website: <http://www.epa.gov/safewater/uic.html>

FY 2008 Performance Measure:

- **Percentage of waters assessed using statistically valid surveys**

Performance Database: Data generated from the national assessment will be housed in the EPA Office of Water's STORET (STOrage and RETrieval) data warehouse. Prior to entering the STORET warehouse, all datasets are housed in a temporary facility, such as ORD's SWIM database, where they are examined for QA purposes and undergo statistical analysis. Finalized datasets transferred to the STORET warehouse will include all water quality, physical and biological data and associated metadata for each survey. The STORET warehouse is available on the web at <http://www.epa.gov/STORET/index.html>. Once the data schema for biological and habitat data are developed and deployed for the Exchange Network-based water quality exchange (WQX) warehouse, these data will go directly to the WQX warehouse instead of STORET.

Data Source: Data are collected, processed and analyzed through EPA-State collaboration to assess and report on the condition of the nation's waters with documented confidence. Under this partnership, samples are collected across the country during a specified index period for each resource. Sites are sampled one time, with additional repeat samples collected at 10 percent of the sites to determine precision of methods. Surveys collect a suite of indicators relating to the biological, physical habitat and water quality of the resource in order to assess the resource condition and determine the percentage meeting the goals of the CWA. Surveys will collect information on biological and abiotic factors at 30-50 sites on an ecoregion level II scale for each

resource. Prior to sampling, field crews will undergo intensive training by EPA personnel on field sampling and collection techniques. Laboratory analysis will be conducted at either a state lab or contract lab following specified protocols for the survey. Data collection follows a Quality Assurance Project Plan (QAPP), with subsequent testing and auditing to ensure its application.

Methods, Assumptions and Suitability: The surveys are conducted using a probabilistic survey design, which allows extrapolation of results to the target population (specified water resource, e.g., wadeable streams, lakes, rivers, etc.). The collection design maximizes the spatial spread between sites, located by specific latitude and longitude combinations. The survey utilizes an indexed sampling period to increase the probability of accurately assessing condition and identifying any problems in water quality, physical or biological indices if they exist. Based on the QAPP and field protocol documents, a site is located by the sampling crew via Global Positioning System (GPS). Data are collected for each parameter following the protocols outlined in the field operations manual. Indices for the probabilistic surveys relate to the condition of the resource and the extent that the waters are supporting the fishable and swimmable goals of the Clean Water Act. Samples taken from the field are stored in accordance with field manual instructions and shipped to the processing laboratory. Laboratories will follow quality assurance (QA) plans and complete analysis and provide electronic information to the state or EPA. EPA and the state exchange data to ensure that each has a complete set. EPA and states analyze the data to assess regional and national condition of the water resource surveyed. Results of the analyses on a national and regional basis will be published in a publicly accessible peer reviewed report released within two years of sample collection. The overall change in condition of the water body type will be assessed on a five year cycle.

Assumptions: (1) The underlying target population (water resource sampled for the survey) has been correctly identified; (2) GPS is successful; (3) QAPP and field collection manuals are followed; (4) all samples are successfully collected; (5) all analyses are completed in accordance with the QAPP; and (6) a combination of data into indices is completed in a statistically rigorous manner.

Suitability: By design, all data are suitable to be aggregated up to the regional and national level to characterize the ecological condition of the waterbody resource and the associated stressors. Samples provide site specific point-in-time data and excellent representation of the entire resource (extrapolation to the entire resource supportable). Data will be used to characterize populations and subpopulations of waterbody resources through time and space. Data analysis and interpretation will be peer reviewed prior to completion of final report. The data are suitable for individual reports and to establish a baseline for subsequent surveys to evaluate trends.

QA/QC Procedures: Collection and processing of all samples are described in QAPP and Field Protocols documents associated with each survey. In addition, the QAPP will contain specific Data Quality Objectives (DQOs) and Measurement Quality Objectives (MQOs) associated with each survey. To ensure that the survey is obtaining the DQOs and MQOs, there are several QA steps built into each survey. Training for all crew members is required before sampling begins. Field evaluations are conducted for all crews to ensure methods are being followed. Each laboratory involved in the sample processing will adhere to the specified laboratory protocols

and undergo a thorough and documented quality assurance/quality control (QA/QC) process. Submitted data will undergo a final QC check before analysis begins.

Data Quality Reviews: A peer review and public comment period will be held for each survey. During this time, the draft report will be posted on the web for interested parties to review and submit comments. An independent group of experts will be selected to serve on a peer review panel for the report. In house audits will also be conducted over the course of the survey.

Data Limitations: Because the data are collected in a manner to permit calculations of uncertainty and designed to meet specific Data Quality Objectives (DQOs), the results at the regional level are within about 2-4% of true values dependent upon the specific sample type. Detailed QA/QC checks throughout the survey reduce the data limitations and errors in sampling. The scale of the reporting units is limited by the number of samples taken in a specific region. To make a statistically valid statement about the condition of the resource, sample size should minimally include 30-50 sites per region. Since samples are collected one time at each site per survey, trends analysis will depend on future survey work. Lag time between sample collection and reporting will be between 1-2 years.

Error Estimate: The estimation of condition will vary for the national condition and the regional condition for each survey. The condition estimates are determined from the survey data using cumulative distribution functions and statistically-based uncertainty estimates.

New/Improved Data or Systems: Additional indicators, addressing regional specific needs can be added to the survey over time. QA requirements will be met by all laboratories participating in the surveys. Probabilistic surveys repeated on the same water body type utilizing a similar sample design will show condition trends for the resource on a broad geographic scale.

References:

- Olsen, A. R. et al. 1999. *Statistical Issues for Monitoring Ecological and Natural Resources in the United States*. Environmental Monitoring and Assessment 54, 1-45
- Stevens Jr., D. L. & Urqhart, N. S. 2000. *Response Designs and Support Regions in Sampling Continuous Domains*. Environmetrics 11, 11-41
- Stevens Jr., D. L. 1997. *Variable Density Grid-based Sampling Designs for Continuous Spatial Populations*. Environmetrics 8, 167-195
- STORET database website. <http://www.epa.gov/STORET/index.html>.
- U.S. Environmental Protection Agency. 2001. *National Coastal Condition Report*. EPA-620/R-01/005
- U.S. Environmental Protection Agency. 2004. *National Coastal Condition Report II*. EPA-620/R-03/002

FY 2008 Performance Measures:

- **Number of water body segments identified by States in 2002 as not attaining standards, where water quality standards are now fully attained (PART measure for the surface water protection program and the section 106 grant program)**
- **Number of waterbodies identified by States (in 2000 or subsequent years) as being primarily NPS-impaired that are partially or fully restored (Part measure for the section 319 grant program)**
- **Cost per water segment restored (section 106 grant program PART efficiency measure)**
- **Section 319 funds (\$million) expended per partially or fully restored waterbody (section 319 grant program PART measure)**

Performance Database: The Watershed Assessment Tracking Environmental Results System (WATERS— found at <http://www.epa.gov/waters/>) is EPA’s approach for viewing water quality information related to these measures. WATERS can be used to view “303(d) Information,” compiled from, *States’ Listings of Impaired Waters as Required by Clean Water Act Section 303(d)* (referred to here in brief as “303(d) lists”), which are recorded in the National Total Maximum Daily Load (TMDL) Tracking System. This information (found at <http://www.epa.gov/owow/tmdl/status.html>) is used to generate reports that identify waters that are not meeting water quality standards (“impaired waters”). This information, combined with information and comment from EPA Regions and States, information stored in the National Assessment Database (found at <http://www.epa.gov/waters/305b/index.html>) and, for a small number of waters tracked by these measures, stand-alone databases, yield the baseline data for these measures. As discussed below under “New and Improved Data Systems,” EPA is creating a single database in 2007 that will track all the impaired waters in the baseline for these measures.

As TMDL and other watershed-related activities are developed and implemented, water bodies which were once impaired will meet water quality standards, and thus will be removed from the year 2002 impaired totals. Changes will be recorded in reports from States, scheduled every two years through 2012, as removals of water body impairments and impaired water bodies.

The measure regarding the restoration of primarily NPS-impaired waters is being verified through a laborious and careful process, in which EPA Headquarters staff review and help prepare a detailed 2-page Fact Sheet that includes a description of the impairment and the causes of that impairment; a description of the activities that were undertaken to remove the impairment; the effect of those activities; and the partners involved in solving the problem. Each of these stories is uploaded to the public web site of www.epa.gov/nps/success, and only after uploaded is it counted towards the (250 waterbodies) goal.

Data Source: The primary data source for these measures is State 303(d) lists of their impaired water bodies needing development of TMDLs and State Integrated Reports covering their required submittals of monitoring information pursuant to section 305(b) of the Clean Water Act. These lists/reports are submitted each biennial reporting cycle. The baseline for this measure is the 2002 list/2002 integrated reports. States prepare lists/reports using actual water quality monitoring data, probability-based monitoring information, and other existing and readily available information and knowledge the state has, in order to make comprehensive

determinations addressing the total extent of the state's water body impairments. Once EPA approves a state's 303(d) list, the information is entered into WATERS, as described above. Throughout 2006, EPA worked with States that did not submit Integrated Reports in 2002 to supplement their 2002 303(d) lists of impaired waters needing TMDLs with waters that were also impaired in 2002 but were not on 303(d) lists because all needed TMDLs were complete. Thus, EPA now has a more complete list of impaired waters for tracking under these measures.

The efficiency measure for the section 106 grant program is derived by dividing the actual expenditures or President Budget requests for the section 106 grant program, plus State funding matches for these grants (as reported to EPA by the States) by the cumulative number of water body segments restored.

The efficiency measures for the section 319 grant program is based on the assumption that \$100 million dollars annually of 319 dollars will be devoted annually, from 2000 through 2007, to remediate impaired waters. These funds are assumed to be accompanied by a State/Federal match required by Section 319 of 40% to EPA's 60% (although the match requirements apply to the entire grant only, not to the remediation component alone). Thus the State match for \$700 million dollars is \$466 million, bringing the total funds available to a total of \$1.166 billion. The efficiency measure for this measure is that 250 waterbodies would be remediated for \$1.166 billion, or an average of or approximately \$4.66 million per waterbody.

Methods, Assumptions, and Suitability: States employ various analytical methods of data collection, compilation, and reporting including: 1) Direct water samples of chemical, physical, and biological parameters; 2) Predictive models of water quality standards attainment; 3) Probabilistic models of pollutant sources; and 4) Compilation of data from volunteer groups, academic interests and others. EPA-supported models include BASINS, QUAL2E, AQUATOX, and CORMIX. Descriptions of these models and instructions for their use can be found at www.epa.gov/OST/wqm/. The standard operating procedures and deviations from standard methods for data sampling and prediction processes are stored by many States in the STORage and RETrieval (STORET) database.

States exercise considerable discretion in using monitoring data and other available information to make decisions about which waters meet their designated uses in accordance with state water quality standards. EPA then aggregates State data to generate national performance measures.

Delays are often encountered in state 303d lists and 305b submissions, and in EPA's approval of the 303(d) portion of these biennial submissions. EPA encourages States to effectively assess their waters and make all necessary efforts to ensure the timely submittal of required § 303(d) lists of impaired waters. EPA will work with States to facilitate State submission of accurate, georeferenced, and comprehensive data. Also, EPA is heightening efforts to ensure expeditious review of the 303(d) list submissions with national consistency.

QA/QC Procedures: QA/QC of data provided by States pursuant to individual State 303(d) lists (under CWA Section 303(d)) and/or Integrated 305(b)/303(d) Reports is dependent on individual state procedures. EPA regional staff interact with the States during the process of approval of the lists and before the information is entered into the database to ensure the integrity

of the data, consistent with the Office of Water Quality Management Plan (QMP). EPA requires that each organization prepare a document called a QMP that: documents the organization's quality policy; describes its quality system; and identifies the environmental programs to which the quality system applies (e.g., those programs involved in the collection or use of environmental data).

Data Quality Review: Recent independent reports have cited that weaknesses in monitoring and reporting of monitoring data undermine EPA's ability to depict the condition of the Nation's waters and to support scientifically sound water program decisions. The most recent reports include the 1998 *Report of the Federal Advisory Committee on the Total Maximum Daily Load (TMDL) Program*⁵, the March 15, 2000 Government Accounting Office report *Water Quality: Key Decisions Limited by Inconsistent and Incomplete Data*⁶, the 2001 National Academy of Sciences Report *Assessing the TMDL Approach to Water Quality Management*⁷ and EPA's *Draft Report on the Environment*.⁸

In response to these evaluations, EPA has been working with states and other stakeholders to improve: 1) data coverage, so that state reports reflect the condition of all waters of the state; 2) data consistency to facilitate comparison and aggregation of state data to the national level; and 3) documentation so that data limitations and discrepancies are fully understood by data users.

First, EPA enhanced two existing data management tools (STORET and the National Assessment Database) so that they include documentation of data quality information.

Second, EPA has developed a GIS tool called WATERS that integrates many databases including STORET, the National Assessment Database, and a new water quality standards database. These integrated databases facilitate comparison and understanding of differences among state standards, monitoring activities, and assessment results.

Third, EPA and states have developed guidance. The 2006 Integrated Report Guidance (released August 3, 2005 at <http://www.epa.gov/owow/tmdl/2006IRG>)⁹ provides comprehensive direction to states on fulfilling reporting requirements of Clean Water Act sections 305 (b) and 303(d). EPA also issued a 2008 Integrated Report clarification memo (released October 12, 2006;

⁵ USEPA, National Advisory Council for Environmental Policy and Technology, *Report of the Federal Advisory Committee on the Total Maximum Daily Load Program*. EPA 100-R-09-8006 (1998).

⁶ GAO. *Water Quality: Key EPA and State Decisions Limited by Inconsistent and Incomplete Data* (Washington, DC: 2000), RCED-00-54 and *Water Quality: Inconsistent State Approaches Complicate Nation's Efforts to Identify Its Most Polluted Waters*, GAO-02-186 (Washington, DC: 2002)

⁷ *Assessing the TMDL Approach to Water Quality Management*. 2001. Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction, Water Science and Technology Board, National Research Council

⁸ US EPA, *Draft Report on the Environment 2003*. EPA 260-R-02-006 (2003). Available at <http://www.epa.gov/indicators/roe/index.htm> (accessed 12 December 2005)

⁹ USEPA, Office of Water, *2006 Guidance for Assessment, Listing, and Reporting Requirements Pursuant to Sections, 303(d), 305(b), and 314 of the Clean Water Act* (2005). Available at <http://www.epa.gov/owow/tmdl/2006IRG> (accessed 12 December 2005)

available at http://www.epa.gov/owow/tmdl/2008_ir_memorandum.html)¹⁰ which includes best practices for timely development/submission of lists and expresses continued commitment to support and populate the Assessment Database (ADB) (State-level system which EPA compiles into the National Assessment Database available via WATERS) and/or compatible data management systems.

Also, the *Consolidated Assessment and Listing Methodology – Toward a Compendium of Best Practices*¹¹ (released on the Web July 31, 2002 at www.epa.gov/owow/monitoring/calm.html) intended to facilitate increased consistency in monitoring program design and the data and decision criteria used to support water quality assessments.

Fourth, the Office of Water (OW) and EPA's Regional Offices have developed the *Elements of a State Water Monitoring and Assessment Program*, (August 2002).¹² This guidance describes ten elements that each state water quality monitoring program should contain and directs states to develop monitoring strategies that propose time-frames for implementing all ten elements.

In addition, a recent evaluation by the EPA Office of the Inspector General¹³ recommended that EPA focus on improving its watershed approach by:

- Facilitating stakeholder involvement in this approach
- Better integrating the watershed approach into EPA core programs,
- Refining the Agency strategic plan to better evaluate key programs and activities, and
- Improving the measurement system by which watershed progress is assessed.

Data Limitations: Data may not precisely represent the extent of impaired waters because states do not employ a monitoring design that monitors all their waters. States, territories and tribes collect data and information on only a portion of their water bodies. States do not use a consistent suite of water quality indicators to assess attainment of water quality standards. For example, indicators of aquatic life use support range from biological community assessments to levels of dissolved oxygen to concentrations of toxic pollutants. These variations in state practices limit how the CWA Sections 305(b) reports and the 303(d) lists provided by states can be used to describe water quality at the national level. There are also differences among sampling techniques, and standards.

State assessments of water quality may include uncertainties associated with derived or modeled data. Differences in monitoring designs among and within states prevent the agency from aggregating water quality assessments at the national level with known statistical confidence.

¹⁰ USEPA, Office of Water, *Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions* (2006). Available at http://www.epa.gov/owow/tmdl/2008_ir_memorandum.html (accessed 21 December 2006)

¹¹ U.S. EPA, Office of Water, *Consolidated Assessment and Listing Methodology- Toward a Compendium of Best Practices*. (Washington, DC: 2002) Available at www.epa.gov/owow/monitoring/calm.html (accessed 12 December 2005)

¹² USEPA, Office of Water, *Elements of a State Water Monitoring and Assessment Program*, EPA 841-B-03-003 (Washington, DC: 2003). Available at <http://www.epa.gov/owow/monitoirng/repguide.html> (accessed 12 December 2005)

¹³ USEPA Office of the Inspector General, *Sustained Commitment Needed to Further Advance the Watershed Approach* (2005). Available at <http://www.epa.gov/oig/reports/2005/20050921-2005-P-00025.pdf>.

States, territories, and authorized tribes monitor to identify problems and typically lag times between data collection and reporting can vary by state.

Also, as noted above under Methods, Assumptions and Suitability, States exercise considerable discretion in using monitoring data and other available information to make decisions about which waters meet their designated uses in accordance with state water quality standards. EPA then aggregates these various State decisions to generate national performance measures.

Error Estimate: No error estimate is available for this data.

New/Improved Data Systems: The Office of Water has been working with states to improve the guidance under which 303(d) lists are prepared. EPA issued new listing guidance entitled *Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act* during summer 2005. The Guidance is a comprehensive compilation of relevant guidance EPA has issued to date regarding the Integrated Report. There are a few specific changes from the 2004 guidance. For example, the 2006 Integrated Report Guidance provides greater clarity on the content and format of those components of the Integrated Report that are recommended and required under Clean Water Act sections 303(d), 305(b), and 314. The guidance also gives additional clarity and flexibility on reporting alternatives to TMDLs for attaining water quality standards (e.g., utilization of reporting Category 4b).

EPA released *Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions* in October 2006 18 months in advance of the April 2008 Integrated Report due date. The primary goal of the 2008 memo is to help achieve 100 percent on-time submittals of the Integrated Reports (all 56 states and territories by April 1, 2008). Timely submittal and EPA review of Integrated Reports is important to demonstrate state and EPA success in accomplishing Strategic Plan goals for restoring and maintaining water quality.

EPA is also combining the National TMDL Tracking System and the National Assessment Database into one integrated system (the Assessment, TMDL Tracking, and Implementation System) that tracks the status of all assessed waters and waterbody impairments, including impaired waterbodies. EPA is also in the process of releasing the Water Quality Exchange (WQX) which provides data warehousing capability to any organization that generates data of documented quality and would like to contribute that data to the national WQX data warehouse so that their data may be used in combination with other sources of data to track improvements in individual watersheds. Currently data providers must transmit data and required documentation through their own Central Data Exchange (CDX) node. During 2007, EPA will make a web data entry tool available for users that have not invested in the CDX node.

References:

USEPA, Office of Water. 2006. Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions. Available at http://www.epa.gov/owow/tmdl/2008_ir_memorandum.html,

USEPA, Office of Water. 2005. Draft Handbook for Developing Watershed Plans to Restore and Protect Our Waters. Available at http://www.epa.gov/owow/nps/watershed_handbook/.

USEPA, Office of the Inspector General. 2005. *Sustained Commitment Needed to Further Advance the Watershed Approach*. Available at <http://www.epa.gov/oig/reports/2005/20050921-2005-P-00025.pdf>.

USEPA, Office of Water. 2005. *Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act*. Available at http://www.epa.gov/owow/tmdl/2006IRG_.

USEPA, Office of the Chief Financial Officer. 2003. *2003-2008 Strategic Plan: Direction for the Future*. Available at <http://www.epa.gov/ocfo/plan/2003sp.pdf>.

USEPA. 2003. *Draft Report on the Environment 2003*. EPA 260-R-02-006. Available at <http://www.epa.gov/indicators/roe/index.htm>.

USEPA, Office of Water. 2003. *Elements of a State Water Monitoring and Assessment Program*. EPA 841-B-03-003. Washington, DC. Available at <http://www.epa.gov/owow/monitoring/repguid.html>.

USEPA, National Advisory Council for Environmental Policy and Technology. 1998. *Report of the Federal Advisory Committee on the Total Maximum Daily Load Program*. EPA 100-R-8006.

USEPA. 2002. *Consolidated Assessment and Listing Methodology – Toward a Compendium of Best Practices*. Washington, DC. Available at <http://www.epa.gov/owow/monitoring/calm.html>.

Government Accountability Office. 2002. *Water Quality: Inconsistent State Approaches Complicate Nation's Efforts to Identify its Most Polluted Waters*. GAO-02-186. Washington, DC.

Government Accountability Office. 2000. *Water Quality: Key EPA and State Decisions Limited by Inconsistent and Incomplete Data*. GAO-RCED-00-54. Washington, DC.

National Research Council, Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction. 2001. *Assessing the TMDL Approach to Water Quality Management*. Washington, DC: National Academy Press.

FY 2008 Performance Measures:

- Number of TMDLs that are established or approved by EPA on schedule consistent with national policy (cumulative) (PART measure)
- Number of TMDLs that are established by States and approved by EPA on a schedule consistent with national policy (cumulative) (PART measure)

Performance Database: The National Total Maximum Daily Load (TMDL) Tracking System (NTTS) is a database which captures water quality information related to this measure. Watershed Assessment Tracking Environmental Results System (WATERS– found at <http://www.epa.gov/waters/>) is EPA’s approach for viewing water quality information related to this measure. TMDL information (found at http://oaspub.epa.gov/waters/national_rept.control) is used to generate reports that identify waters for which EPA has approved state-established TMDLs and for which EPA has established TMDLs. Annual TMDL totals, spanning 1996 to the present, are available from NTTS on a fiscal year basis. As TMDLs and other watershed-related activities are developed and implemented, water bodies which were once impaired will meet water quality standards. Thus these TMDL measures are closely tied to the PART measure, “Number of water body segments identified by States in 2002 as not attaining standards, where water quality standards are now fully attained.” Restored water bodies will be removed from the list of impaired water segments.

Data Source: State-submitted and EPA-approved TMDLs and EPA-established TMDLs are the underlying data for this measure. Electronic and hard copies are made available by states and often linked to EPA Web sites. More specifically, WATERS allows search for TMDL documents at http://www.epa.gov/waters/tmdl/tmdl_document_search.html.

Methods, Assumptions, and Suitability: State and EPA TMDLs are thoroughly and publicly reviewed during their development. Upon approval by EPA, relevant information from each TMDL is entered into the NTTS by EPA Regional staff.

QA/QC Procedures: QA/QC of data is provided by EPA Regional staff and through cross-checks of WATERS information regarding impaired water listings, consistent with the Water Quality Management Plan (QMP). EPA requires that organizations prepare a document called a QMP that: documents the organization's quality policy; describes its quality system; and identifies the environmental programs to which the quality system applies (e.g., those programs involved in the collection or use of environmental data).

Data Quality Review: Internal reviews of data quality have revealed some errors in data and issues associated with the definition of certain database fields. In 2005 and 2006, EPA convened a meeting of NTTS users to discuss how to improve the database. As a result, data field definitions were clarified, the users’ group was reinstituted, several training sessions were scheduled, and a new Assessment, TMDL Tracking, and Implementation System workgroup is currently strategizing to improve the database (see “Data Limitations,” below).

In addition, a recent EPA Office of the Inspector General report included comments on the TMDL Program (*Sustained Commitment Needed to Further Advance the Watershed Approach*). The report recognized “EPA has integrated principles of the watershed approach into the Total Maximum Daily Load (TMDL) Program by encouraging States to develop TMDLs on a watershed basis rather than by individual water segments. Stakeholder involvement with TMDLs is critical for both the conventional and watershed approaches, but the broader watershed approach may expand the number of stakeholders. Expanding both the geographic scale and the number of stakeholders may result in additional time and resources required to develop these

TMDLs.” This demand for resources is challenging to overcome in the current budget environment. The EPA Office of Water has formed a Sustainable Finance Team to increase the capacity of local watershed groups and increase awareness of funding possibilities for watershed work, both from within EPA and outside of the Agency. Finally, the evaluation report states, “regardless of the approach taken for development of TMDLs, the regulatory requirements of the Clean Water Act must be met.” Current realization of targets shows the TMDL Program continues to make sizable steps in meeting Clean Water Act goals despite the challenges. EPA plans to evaluate the sufficiency of NTTs in handling watershed-based TMDLs given the increase in the use of this approach.

Data Limitations: There are usually no gaps in the fields required to identify the TMDLs; however, a number of the fields in NTTs are optional, and population of these fields is erratic. To meet the increasing need for readily accessible CWA information, EPA established an Assessment, TMDL Tracking, and Implementation System workgroup. This workgroup is fashioning an integrated system capable of documenting and managing the connections between state assessment and listing decisions reported under sections 305(b) and 303(d) (i.e., integrated reporting) and completed TMDL information. This system will allow seamless access to all information about assessment decisions and restoration actions across reporting cycles and over time until water quality standards are attained. The integrated system will have streamlined data entry requirements and an understandable interface for both EPA and the public. The system will also be able to support automated transactions with State assessment tracking systems through the EPA Central Data Exchange.

Error Estimate: No error estimate is currently available for this data.

New/Improved Data Systems: See above.

References:

USEPA, Office of the Inspector General. 2005. *Sustained Commitment Needed to Further Advance the Watershed Approach*. Available at <http://www.epa.gov/oig/reports/2005/20050921-2005-P-00025.pdf>.

National Research Council, Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction. 2001. *Assessing the TMDL Approach to Water Quality Management*. Washington, DC: National Academy Press.

FY 2008 Performance Measures:

- **Percentage of major NPDES permittees in Significant Noncompliance at any time during the fiscal year (PART measure)**
- Percentage of all major publicly-owned treatment works (POTWs) that comply with their permitted wastewater discharge standards (PART measure)

Performance Databases: The Permit Compliance System, (PCS) tracks permit compliance and enforcement data for sources permitted under the Clean Water Act National Pollutant Discharge Elimination System (NPDES). Data in PCS include major permittee self reported data

contained in Discharge Monitoring Reports (DMR), data on permittee compliance status, data on state and EPA inspection and enforcement response.

Data Source: Permittee self reported DMR data are entered into PCS by either state or EPA Regional offices. PCS automatically compares the entered DMR data with the pollutant limit parameters specified in the facility NPDES permit. This automated process identifies those facilities which have emitted effluent in excess of permitted levels. Facilities are designated as being in Significant Noncompliance (SNC) when reported effluent exceedances are 20% or more above permitted levels for toxic pollutants and/or 40% or more above permitted levels of conventional pollutants. PCS contains additional data obtained through reports and on-site inspections, which are used to determine SNC, including: non-effluent limit violations such as unauthorized bypasses, unpermitted discharges, and pass through of pollutants which cause water quality or health problems; permit schedule violations; non-submission of DMRs; submission of DMRs 30 or more days late; and violation of state or federal enforcement orders.

Methods, Assumptions and Suitability: There are established computer algorithms to compare DMR effluent data against permitted effluent levels. The algorithms also calculate the degree of permitted effluent exceedance to determine whether toxic/conventional pollutant SNC thresholds have been reached.

QA/QC Procedures: Quality Assurance/Quality Control procedures [See references] are in place for PCS data entry. State and regional PCS data entry staff are required to take PCS training courses [See references]. Quality Management Plans (QMPs) are prepared for each Office within The Office of Enforcement and Compliance Assurance (OECA). The Office of Compliance (OC) has established extensive processes for ensuring timely input, review and certification of PCS information. OC's QMP, effective for 5 years, was approved July 29, 2003 by the Office of Environmental Information (OEI) and is required to be re-approved in 2008.

Data Quality Review: Information contained in PCS is required by policy to be reviewed by regional and headquarters staff for completeness and accuracy. SNC data in PCS are reviewed quarterly.

Data Limitations: Legal requirements for permittees to self report data on compliance with effluent parameters in permits generally results in consistent data quality and accuracy. EPA monitors and measures the timeliness of DMR submissions and data entry quality. National trends over the past several years show an average of 94% of DMRs are entered timely and complete. Where data entry problems are observed, OECA works directly with regions and states to improve performance, and in limited circumstances has dedicated supplemental grant resources to help regions and states correct problems. As part of ICIS-NPDES implementation OECA is working to deploy an electronic DMR process to save resources on data entry workload and reduce data input errors.

Error Estimate: Not available

New & Improved Data or Systems: PCS was developed during the 1980's and has undergone periodic revision and upgrade since then. OECA is currently developing a modernized data

system to replace PCS, utilizing modern data entry, storage, and analytical approaches. The replacement of PCS with ICIS-NPDES (Integrated Compliance Information System – NPDES), a modernized and user-friendly NPDES data system, began in June 2006 when eleven states began using the system; seven other states will be migrated to the new system in August. During phased implementation of ICIS-NPDES across the states a combination of PCS and ICIS-NPDES will be used to generate SNC data. Once fully implemented, ICIS-NPDES will be the sole source of NPDES SNC data.

FY 2008 Performance Measures:

- **Percentage of States and Territories that within the preceding three year period submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other sources not considered in the previous standards. (PART measure)**
- **Percentage of submissions of new or revised water quality standards from States and Territories that are approved by EPA (PART measure)**

Performance Database: The Water Quality Standards Action Tracking Application (WATA), an internal tracking application managed by the Office of Science and Technology described at <http://intranet.epa.gov/ost/div/shpd/wata-manual.pdf>, is the performance database for these measures. The information in this system provides the baseline and performance data for these measures.

Data Source: The underlying data sources for this measure are submissions from states and territories of water quality standards to EPA pursuant to the Clean Water Act and EPA's water quality standards regulation at 40 CFR Part 131. States and territories are required to review their water quality standards at least once every three years and submit any new or revised water quality standards to EPA for review and approval. Each submission is accompanied by a letter from an appropriate official, and includes a certification by the state or territorial attorney general that the standards were duly adopted pursuant to state or territorial law.

EPA Regional Office staff members compile information from each submission and enter it into the WATA system. The information includes identifying data (name of jurisdiction, date of submission), data concerning components of the submission, and data concerning EPA's action on the submission. EPA has delegated approval and disapproval decisions to the Regional Administrator; the Regional Administrator may re-delegate the decisions to the appropriate Division Director, but no further. Approval decisions are judicially reviewable, and are accompanied by an appropriate administrative record.

Methods, Assumptions, and Suitability:

The Office of Science and Technology has established computation metrics in the Water Quality Standards Action Tracking Application (WATA) system to produce the baselines and performance data for both measures. These metrics are as follows:

- Percentage of State and Territorial water quality standards submissions (received in the 12 month period ending April 30th of the fiscal year) that are approved by EPA. Partial approvals receive fractional credit.

This metric considers all new or revised submissions from May 1 of the previous year through April 30 of the current year. This reporting period provides regions at least five months to reach and document a valid approval decision. EPA management believes this is an adequate time for processing submissions. A “submission” is determined by the submitting jurisdiction, as described above. The metric then searches for whether the Regional Office has made any approval decision concerning the submission. If EPA approves the submission in full by the end of the reporting period, it will be counted with an approval value of 1. If EPA disapproves all provisions of the standards, it will be counted with an approval value of 0 (zero). In some cases the Regional decision official may decide to approve some portions of the standards provisions, disapprove some portions, or defer actions on some portions. To accommodate these possibilities, and to reflect the complex nature of some submissions, the WATA system allows Regional staff to track portions of a submission as separate parts with weights corresponding to the number of actual provisions involved. When different decisions are reached on different parts or provisions of a submission, the metric calculates a fractional approval value. The fractional approval value is a number between 0 and 1, equal to the number of provisions approved, divided by the total number of provisions in the original submission. For example, if a submission contains 10 provisions and EPA approves 8 and disapproves 2, then the metric would count this as 0.8 submissions. The final performance metric is the sum of full or fractional approval values divided by the total number of submissions during the reporting period.

- Number of States and Territories that within the preceding three year period submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other sources not considered in the previous standards

This measure utilizes a Regional Office entry in the WATA system which indicates whether a submission or submission part includes one or more new water quality criteria or revised criteria that reflect new scientific information from EPA or other sources not considered in the previous criteria. Biological criteria that are reflected explicitly in designated uses would count under this entry. If a state or territory has not adopted any such criteria, the jurisdiction can nevertheless be counted under this measure if (a) EPA has issued new or revised water quality criteria, including revisions to the published table of EPA recommended criteria at <http://www.epa.gov/waterscience/criteria/wqcriteria.html>, but the state has determined through a scientific assessment that such a change is not relevant for its waters, or (b) the jurisdiction could certify to EPA that it has completed a defensible scientific review of the new scientific information EPA has issued and has determined that no changes are needed to their existing water quality criteria. The metric searches for one or more qualifying submissions or submission parts for each jurisdiction during the three-year period ending five months before the end of the reporting period, and that have been approved by EPA by the end of the reporting period. For example, for FY 2008 any qualifying submissions from May 1, 2005, through April 30, 2008, that were approved by September 30, 2008, would enable the jurisdiction to be counted. Note

the overlap from one reporting year to the next: a state that last made such a submittal, in, say, February 2005, would be counted in FY 2005, FY 2006, and FY 2007 but not in FY 2008.

QA/QC Procedures: States and territories conduct QA/QC of water quality standards submissions pursuant to individual state procedures. Because such submissions are subject to judicial review, the attorney general's certification described above provides assurance of the content of each submission. EPA regional staffs provide support to and interact with the jurisdictions as they develop, review, and adopt water quality standards. Each Regional Office provides data quality review of its entries in the WATA system. For example, Regional Offices generally assure that each entry is reviewed by the water quality standards coordinator, usually a senior scientist or environmental protection specialist with extensive experience in water quality standards actions. Data validation algorithms built into each entry screen also help improve data quality. In addition, a sample of entries is spot-checked by Headquarters' Office of Science and Technology staff. The Regions and Headquarters have been able to conduct the data quality reviews fairly easily because the number of submissions has averaged about 50 submissions per year in recent years, well within their available resources to provide adequate review.

Data Quality Review: No external reviews of the data have been conducted.

Data Limitations: Submissions may vary considerably in size and complexity. For example, a submission may include statewide water quality standards revisions, use attainability analyses for specific water bodies, site-specific criteria applicable to specific types of waters, general statewide policies, antidegradation policies or procedures, and variances. Therefore, these measures – the number of submissions approved, and the number of jurisdictions with updated scientific information contained in adopted standards – do not provide an indicator of the scope, geographic coverage, policy importance, or other qualitative aspects of water quality standards. This information would need to be obtained in other ways, such as by reviewing the content of adopted and approved standards available at <http://www.epa.gov/waterscience/standards/wqslibrary/>, or contacting the appropriate Regional Office or state/territorial personnel.

Error Estimate: No error estimate is available for this data.

New/Improved Data Systems: The Office of Science and Technology has no immediate plans for developing a new data system or enhancing the existing WATA system, other than refining metrics for assessing and interpreting performance results, or for assessing data quality.

References:

USEPA. September 8, 2005. *Water Quality Standards Acting Tracking Application: Users Manual*. Available at <http://intranet.epa.gov/ost/div/shpd/wata-manual.pdf>.

USEPA. 2000. *Water Quality Standards Regulation*. Code of Federal Regulations, 40 CFR part 131. Available at http://www.access.gpo.gov/nara/cfr/waisidx_05/40cfr131_05.html.

USEPA. August 1994. *Water Quality Standards Handbook*, 2nd edition. <http://www.epa.gov/waterscience/standards/handbook/>.

FY 2008 Performance Measure:

- **Estimated annual reduction of nitrogen (reported in pounds), phosphorous (pounds), and sediment (tons) from nonpoint sources to waterbodies (Section 319 funded projects only).**

Performance Database: The Section 319 Grant Reporting and Tracking System (GRTS) is used by grant recipients (State agencies) to supply information about State NPS Management Programs and annual Section 319 funded work programs, which include watershed-based BMP implementation projects. GRTS includes information about Best Management Practices (BMPs) implemented under 319-funded watershed projects, and the NPS load reductions achieved as a result of implementation. EPA uses GRTS to compile and report information about state section 319 program projects, including load reductions for nitrogen, phosphorus, and sediment to waterbodies.

State reporting via GRTS in part fulfills requirements of the Clean Water Act (CWA) Sections 319(h)(11) and 319(m)(1); however, GRTS also provides EPA and other stakeholders greater and more efficient access to data, information, and program accomplishments than would otherwise be available. Besides load reduction information, GRTS, in conjunction with WATERS (see below) provides detailed georeferencing (i.e., National Hydrography Dataset – or “NHD”-- reach addresses) for 319-funded projects, project cost information, and a host of other elements.

GRTS is also part of the Watershed Assessment, Tracking, and Environmental Results System (WATERS), which is used to provide water program information and display it spatially using a geographic information system integrated with several existing databases. These databases include the STorage and RETrieval (STORET) database, the National Assessment Database (NAD), the TMDL Tracking System (NTTS), the Water Quality Standards Database (WQSDB), and GRTS.

Data Source: States enter load reduction data for individual 319-funded projects into GRTS. Various watershed models are used in the States to estimate the load reductions resulting from implementation of BMPs. Two models used by many states, and directly supported by EPA, are the Spreadsheet Tool for Estimating Pollutant Loads (STEPL) model, and the “Region 5” model. States, at their discretion, may use other models or methods (e.g., AGNPs, SWAT, GWLF, etc), or may use actual water monitoring data to generate estimates of pollutant load reduction resulting from BMP implementation. The load reduction data generated by modeling and/or monitoring efforts are entered by State staff directly into the appropriate GRTS data fields.

Methods, Assumptions and Suitability: States employ two main methods to make pollutant load reduction estimates for the purpose of entering information into GRTS: 1) watershed models to estimate load reductions after watershed project BMPs are implemented, and 2) direct sampling over time of pollutants using targeted site selection. Even direct sampling methods, however, usually involve some type of modeling to separate BMP effects from other variables when determining load reductions.

EPA aggregates the load reduction data entered into GRTS to generate the national load reduction number for each pollutant. With each successive time period – each of which includes load reduction estimates from projects funded under more than one fiscal year grant (since BMPs are still “working” for some time after initial installation) -- the total from the previous period is subtracted from the total of the current time period to get the incremental total. For example, our first report on national load reduction numbers in the PART included projects funded from FY 2002 and most of FY 2003 (FY 2002 was the first grant year for which load reduction information was mandated). For the next report in PART, we totaled load reductions for projects from FY 2002 through 2004, with a smattering of projects for FY 2005 for which information was available in GRTS. The total from the first time around was subtracted from this latter total to give us the increment. This increment is what we reported in OMB’s Program Assessment Rating Tool (PART) in November 2005.

This method of determining the increment has been necessary because of the particular structure and previous software used for GRTS, which houses projects by grant year. A project funded in a single grant year is usually implemented over several years. Within a single project form, the load reduction number (or numbers if more than one watershed is being addressed by the project) is updated at least annually, but there is no requirement to keep the “original” load reduction number in the system. Therefore, we did not always have a record of how load reductions have increased over time for a given project; hence, we use the method described above to estimate the national load reduction increment from one time period to the next.

QA/QC Procedures: QA/QC of load reduction estimates generated by states is dependent on individual state procedures, such as state Quality Management Plans (QMPs), which are periodically reviewed and approved by EPA Regions.

EPA provides user support and training to states in the use of the STEPL and Region 5 models. EPA emphasizes that Quality Assurance Project Plans (QAPPs) should be developed (in accordance with EPA approved State QMPs) for watershed projects, especially where water quality models are being used or where monitoring is being conducted. EPA also stresses that site-specific parameters be used whenever possible for input to water quality models, as opposed to default input values provided by some modeling tools.

States have continual access and opportunity to review the information in GRTS to ensure it accurately reflects the data they entered (according to their QA procedures). EPA periodically reviews GRTS and reminds states of the critical importance of their completing mandated data elements in a timely, high-quality manner.

Data Quality Review: Data entered in GRTS are periodically reviewed by EPA Regions and Headquarters. Regional personnel also maintain hardcopies of the states work programs, watershed project implementation plans, and Annual Progress Reports. Verification of data in GRTS can be cross-checked with these documents to ensure quality, consistency, and reliability in progress reporting on an incremental (such as, year-to-year) basis, or to note any problems in data quality in GRTS. EPA frequently reviews various aggregation(s) of all the data in GRTS by our use of “ad-hoc” and standard reports available in the GRTS reporting system.

In the past, Nonpoint Source Program reporting under Section 319 had been identified as an Agency-level weakness under the Federal Managers Financial Integrity Act. The Agency's establishment and subsequent enhancements of GRTS has served to mitigate this problem by requiring states to identify the activities and results of projects funded with Section 319(h). In response to the FMFIA evaluation, EPA has been working with states and other stakeholders to improve data input and quality. We sponsor national GRTS-users group meetings each year. These meetings serve not only to meet the training needs of the user community, but also provide a forum for discussing needed enhancements to GRTS. These enhancements range from better capturing environmental results to improving consistency of data entry to facilitate state-by-state comparisons.

The CWA Sections 319(h)(11) and 319(m)(1) require States to report their Nonpoint Source Management Program (NPSMP) milestones, nonpoint source pollutant load reductions, and water quality improvements. These sections provide the EPA Office of Water (OW) authority to require water quality monitoring and/or modeling, and to require reporting by states to demonstrate their success in reducing nonpoint source pollutant loads and improving water quality. OW has issued several guidance documents designed to improve state NPSMPs, watershed-based projects, and consistency in state progress reporting, including their use of GRTS. In September 2001, EPA issued "Modifications to Nonpoint Source Reporting Requirements for Section 319 Grants." This memorandum outlines the process for reporting in GRTS load reductions for nutrients and sediment (for applicable Section 319(h) funded projects). Our current "National Nonpoint Source Program and Grants Guidelines" (October, 2003) includes sections on all nonpoint source grant reporting requirements, including GRTS reporting. Furthermore, EPA, in consultation with the States, has established the nonpoint source program activity measures (PAMs) -- including nonpoint load reductions -- which are now part of EPA's Strategic Plan and the PART. We have also communicated (e.g., via email) to states further detailed explanations of the NPS program activity measures, expected reporting sources and dates, and results of our reviews of data input to GRTS by the States.

Data Limitations: State NPSMP work to model (and monitor) watersheds is often not integrated or coordinated with state water quality monitoring and assessment strategies, and therefore use of the data may be rather limited. Load reduction data are typically generated from the use of water quality models, and there is a great deal of uncertainty in model inputs and outputs. States generally do not apply model results to decision-making for implementing and/or revising their NPS Management Programs.

State assessments of load reductions and water quality typically include uncertainties associated with any measuring or modeling tools. Variability in the environment, as well as in state methods and application of tools limit the accuracy of data for describing load reductions and water quality at the project level. Aggregating the load reduction data up to the national measure compounds the level of uncertainty, thereby preventing the Agency from assigning a reasonable numerical confidence level to it.

Error Estimate: No error estimate is available for these data.

New/Improved Data or Systems: GRTS has recently been converted to an Oracle database. Oracle is the standard database used by Federal agencies. Conversion to Oracle will allow GRTS to seamlessly connect with WATERS, as well as facilitate potential linkages to a variety of other databases, models, and watershed planning tools. The Oracle-based GRTS will greatly improve reporting capabilities for all end users, and make it easier to quickly answer questions for stakeholders. Questions which will be easier to answer include, “Where are watershed projects being developed and implemented? Are they concurrent with impaired waters and established TMDLs? Do they pursue actions necessary to reduce pollutant loads and attain water quality standards?”

Oracle provides users the capability of customizing data entry screens to facilitate various reporting needs of the States and EPA. We can customize screens to reflect various programmatic needs of Regional offices and States, such as to view only the mandated elements, or a mix of mandated elements and other Regionally-required data fields.

Training on STEPL and the Region 5 model are ongoing in hopes of minimizing operational mistakes for State staff utilizing one or both of these models to estimate section 319 project load reductions.

FY 2008 Performance Measures:

- **Percentage of high priority EPA and State NPDES permits that are reissued as scheduled (PART Measure)**
- **Percentage of high priority state NPDES permits reissued as scheduled (PART Measure)**

Performance Database:

- U.S. EPA. Permit Compliance System (PCS). [database]. Washington, DC [Office of Enforcement and Compliance Assurance]
- U.S. EPA Integrated Compliance Information System (ICIS-NPDES). [database]. Washington, DC [Office of Enforcement and Compliance Assurance]
- Electronic Permit Issuance Forecasting Tool (E-PIFT) [database]. Washington, DC [Office of Water]
- Priority Permits Data Base. [web-based database]. Washington, DC [Office of Water]

EPA has carried out detailed permit renewal backlog tracking with PCS data since November 1998. The Permit Compliance System (PCS) and the Integrated Compliance Information System (ICIS-NPDES) are used to determine which individual permits are current through date fields for permit issuance and expiration. To supplement the individual permit data from PCS, EPA uses the Electronic Permit Issuance Forecasting Tool (E-PIFT) to track the current or expired status of facilities covered under non-storm water general permits. E-PIFT has been used to track non-storm water general permit facilities since January 2001.

In March 2004 a new priority permit issuance strategy was initiated under the Permitting for Environmental Results (PER) program. The priority permits issuance strategy focuses permitting activities on environmentally and administratively significant expired permits. The Priority Permits Database is a web-based system that tracks the specific permits that each State and Region has identified as priority. States and Regions enter the permits, and EPA HQ uses PCS/ICIS-NPDES to track permit issuance status of these permits.

Data Source: EPA=s Regional offices and NPDES authorized states enter data into PCS and/or ICIS-NPDES and EPA=s Regional offices are responsible for entering data to the E-PIFT. EPA=s Regional offices and States also enter permit identification information into the Priority Permits database.

Methods, Assumptions and Suitability: Annually, Office of Wastewater Management (OWM) provides State and Regional authorities with a list of candidate priority permits, defined as permits that have been expired for two years or more. States and Regions then use several programmatic and environmental criteria to select which of those candidate permits should be prioritized for issuance. They then commit to issue these permits over the next two fiscal years, with the goal of achieving a 95% issuance rate. Regions enter their commitments into the Priority Permits Data Base. Results are confirmed using PCS/ICIS-NPDES reports.

QA/QC Procedures: The PCS and ICIS-NPDES databases are managed by the Office of Enforcement and Compliance Assurance (OECA); E-PIFT and Priority Permits Database are web-based systems that are managed by the Office of Water (OW). EPA Headquarters (HQ) staff in OECA review data submitted by states as part of the QA/QC process. In addition, OW continues to work with States and Regions to improve the quality and completeness of the data. EPA generates state-by-state reports that list PCS/ICIS-NPDES Akey data@ fields, including permit issuance and expiration dates, as well as compliance and enforcement data, and provides these lists to NPDES states and Regions for review and cleanup. EPA also created a spread sheet comparing latitude/longitude (lat/long) data for municipal treatment systems collected by the Clean Water Needs Survey to the lat/long data in PCS. This spread sheet is provided to States and Regions so that, where discrepancies exist between state and PCS/ICIS-NPDES data, EPA and States can make corrections in PCS/ICIS-NPDES. EPA will continue to focus on improving the lat/long data in PCS/ICIS-NPDES, especially at the pipe level.

Additionally, where States maintain Akey@ permit data in separate state-level systems, EPA is providing support to upload these data to PCS.

Data Quality Review: The Office of Inspector General (OIG) has issued several findings regarding poor PCS data quality, and PCS has been listed as an Agency-Level Weakness under the Federal Managers Financial Integrity Act since 1999. This weakness affects EPA=s ability to obtain a true picture of the status of the NPDES program. Fortunately, permit event data such as the permit issuance and expiration data needed for this performance measure are generally better populated than other Akey@ data elements. As noted previously, OW is offering support to States for data upload, data entry, and, if necessary, data compilation to improve data quality. This has resulted in improved tracking of data, particularly industrial permits.

The replacement of PCS with ICIS-NPDES, a modernized and user-friendly NPDES data system, began in June 2006 and nineteen states and several territories have successfully migrated to the new system. Use of ICIS-NPDES should greatly increase state participation and data quality. Batch states (those states with their own data systems) will not be migrated to ICIS-NPDES until appropriate mechanisms are in place to transfer the data.

Data Limitations: Priority Permits data are verified and reliable. We are aware of data gaps in PCS in general, particularly for minor facilities, and of discrepancies between state databases and PCS; however, EPA's data clean-up over the past five years has significantly improved data quality. E-PIFT has enabled EPA to report on inventories and status of non-storm water facilities covered by NPDES general permits, but the data are not as comprehensive as those tracked in PCS. In addition, to date, there has been no national-level data system to track permit issuance and expiration status of facilities covered by *stormwater* general permits. In 2007, OWM is planning to improve E-PIFT to enable tracking of stormwater general permits and facilities covered under them.

Error Estimate: We believe that the permit renewal backlog data for major facilities is accurate within 2 percent based on input from EPA's Regional offices and states through a quarterly independent verification. For minor facilities, however, the confidence interval is less precise and probably overestimates the permit renewal backlog for minor facilities by 5 percent based on anecdotal information from EPA's Regional offices and states.

New/Improved Data or Systems: EPA headquarters has been providing contractor assistance to improve the data quality in PCS and will continue to do so. The new modernized ICIS-NPDES was rolled out in June 2006, with nineteen states and several territories now using the system. ICIS –NPDES will be easier to use and will improve the quality of data needed to manage the NPDES program.

References:

Information for PCS and ICIS-NPDES is publicly available at:
<http://www.epa.gov/compliance/data/systems/modernization/index.html>

FY 2008 Performance Measures:

- **Loading (pounds) of pollutants removed per program dollar expended (PART efficiency measure)**

Performance Database: Data for this measure are derived using different methods for industries subject to effluent guidelines, Publicly Owned Treatment Works (POTWs), municipal storm water and construction storm water (industrial storm water is not included nor are reductions from water quality based effluent limits). The values derived from these methods are summed to obtain the total pollutant load reductions achieved under the surface water program. To calculate the PART efficiency measure, the total cumulative pollutant reductions are divided by the total number of dollars devoted to the EPA Surface Water Program (SWP), grants to States under Clean Water Act (CWA) section 106, plus State 'match' dollars, annually. SWP

and CWA Section 106 budget is pulled from EPA's Integrated Financial Management System (IFMS). State 'match' dollars are reported to EPA by States.

Data Sources: For industry sectors subject to **effluent guidelines**, estimated loading reductions are taken from reductions estimated in the Technical Development Document (TDD) when the effluent guideline is developed. The common components for such analyses include wastewater sampling, data collection from the regulated industry, and some amount of estimation or modeling. TDDs are available for: Pulp & Paper, Pharmaceuticals, Landfills, Industrial Waste Combustors, Centralized Waste Treatment, Transportation Equipment Cleaning, Pesticide Manufacturing, Offshore Oil & Gas, Coastal Oil & Gas, Synthetic Based Drilling Fluid, Concentrated Animal Feeding Operations, Meat and Poultry, Metal Products and Machinery, Aquaculture. States and EPA's Regional offices enter data into PCS and ICIS.

For **Publicly Owned Treatment Works (POTWs)**, trend data is taken from a detailed analysis for BOD and TSS loadings from POTWs in *A Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment*, USEPA, June 2000, EPA-832-R-00-008. The report provides flow estimates, loading estimates and a distribution of treatment class for every 2 to 4 years from 1968 through 1996. In addition, the report uses data from the Clean Watershed Needs Survey (CWNS) to provide projections for 2016. EPA has also prepared a *2004 Update to Progress in Water Quality* that uses data from the 2004 CWNS to provide flow and loading estimates for the year 2000 and projections for 2025. The 2004 CWNS is currently at OMB for clearance.

For **Municipal Stormwater**, estimates were derived from EPA models of the volume of storm water discharged from municipal separate storm sewer systems (MS4s) developed as part of a 1997 EPA draft report. The methodology and results of the 1997 draft report are described in *An Economic Analysis of the Final Phase II Storm Water Rule*, EPA, October 1999.¹⁴

Estimates of the sediment load present in **Construction Stormwater** is derived using a model developed by the US Army Corps of Engineers. The model uses the construction site version of the Revised Universal Soil Loss Equation (RUSLE). Uncontrolled (i.e. prior to implementation of Best Management Practices (BMPs)) and controlled (i.e. after the implementation of BMPs) sediment loadings were estimated for 15 climatic regions with three site sizes (one, three, and five acres), three soil erodability levels (low, medium, and high), three slopes (3%, 7%, and 12%), and various BMP combinations. The methodology and results are described in "Economic Analysis of the Final Phase II Storm Water Rule."

Combined Sewer Overflow (CSO) loadings are estimated based on data obtained from the Clean Watershed Needs Survey and from the "Report to Congress on the Impacts and Control of Combined Sewer Overflows and Sanitary Sewer Overflows." States and EPA's Regional offices provide data for the CSO Report to Congress and the Clean Watershed Needs Survey.

¹⁴ Economic Analysis of the Final Phase II Storm Water Rule, Oct. 1, 1999, US EPA. Available at: <http://www.epa.gov/npdes> or http://cfpub.epa.gov/npdes/docs.cfm?program_id=6&view=allprog&sort=name

Data for the PART denominator, i.e. the total number of dollars devoted to the EPA Surface Water Program (SWP), are assembled and updated as new data becomes available. EPA Surface Water Program funds and CWA Section 106 budget are initially based on the President's Budget until a final budget is adopted; it is then pulled from EPA's Integrated Financial Management System (IFMS). State 'match' dollars are reported to EPA by States; where updated data is not available, the last year of confirmed data is carried forward.

Methods, Assumptions and Suitability: EPA uses the spreadsheet described above to estimate loadings. The data are aggregated across different sources to determine loading reductions at the national level. Loadings appear to be the best surrogate for determining the environmental impacts of point sources. Pollutant load reductions, along with some of the water quality improvement measures, tell the story about environmental outcomes. Pollutant reductions per dollar spent provides a snapshot of the effectiveness and efficiency of the surface water program, and comparing this over time helps to delineate a trend.

QA/QC Procedures: The loadings spreadsheets are based on information from rulemakings and policies that have undergone extensive review. The effluent guidelines follow EPA quality assurance/quality control (QA/QC) procedures.

Data Quality Reviews: The methodology for this measure was submitted to OMB for review during the PART process.

Data Limitations: Loadings data must be modeled rather than measured as there is inconsistent and poor data quality in the PCS data base with respect to flow and discharge monitoring, including missing data for minor facilities which has not been required to be entered. Neither monitoring nor flow data are required for certain categories of general permits. The Agency, therefore, is not able to measure actual loadings reductions for all of the approximately 550,000 facilities that fall under the NPDES program. As a result, loadings estimates are based upon models.

When the ICIS-NPDES Policy Statement is issued, the quality and quantity of Discharge Monitoring Report (DMR) data is expected to improve. This will enable development of improved methods for estimating and validating loading reductions.

Error Estimate: At this time we are unable to estimate error due to the lack of actual national level data to compare to estimates based on models.

New/Improved Data or Systems: EPA continues to evaluate and explore improved methods for calculating loadings reductions nation-wide from all sources.

References:

Clean Watershed Needs Survey 2000 [Electronic data base]. (2000). Washington, D.C. U.S. Environmental Protection Agency [Office of Wastewater Management].

Effluent guidelines development documents are available at:
<http://www.epa.gov/waterscience/guide>.

Modeling databases and software being used by the Office of Water are available at:
<http://www.epa.gov/water/soft.html>

SWP PART Efficiency Measure Spreadsheet [Excel Spreadsheet]. Washington, D.C. U.S. Environmental Protection Agency [Office of Wastewater Management].

Report to Congress: Impacts and Control of CSOs and SSOs, EPA 8330R-04-001, August 2004; available at
http://cfpub.epa.gov/npdes/cso/cpolicy_reort2004.cfm

Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment, USEPA, June 2000, EPA-832-R-00-008; available at: <http://www.epa.gov/OW-OWM.html/wquality/benefits.htm>

Report to Congress: National Pretreatment Program, EPA 1991; available at:
<http://www.epa.gov/npdes/pubs/owm0244.pdf>

FY 2008 Performance Measure:

- **Fund utilization rate for the CWSRF**
- CWSRF Long-Term Revolving Level (\$billions/yr)

Performance Database: Clean Water State Revolving Fund National Information Management System (NIMS.)

Data Sources: Data are from reporting by municipal and other facility operators, state regulatory agency personnel and by EPA's regional staff. Data are collected and reported once yearly.

Methods, Assumptions and Suitability: Data entered into NIMS are the units of performance. These data are suitable for year-to-year comparison and trend indication.

QA/QC Procedures: EPA's headquarters and regional offices are responsible for compiling the data and querying states as needed to assure data validity and conformance with expected trends. States receive data entry guidance from EPA headquarters in the form of annual memoranda. A generic memorandum would be titled: "Request for Annual Update of Data for the Clean Water State Revolving Fund National Information Management System, July 1, 200X through June 30, 200X."

Data Quality Reviews: EPA's headquarters and regional offices annually review the data submitted by the states. These state data are publicly available at <http://www.epa.gov/owm/cwfinance/cwsrf> in individual state reports. EPA's headquarters addresses significant data variability issues directly with states or through the appropriate EPA regional office. An annual EPA headquarters' "NIMS Analysis" provides detailed data

categorization and comparison. This analysis is used during annual EPA regional office and state reviews to identify potential problems which might affect the performance measure, biennial reviews by EPA's headquarters of regional oversight of state revolving funds and, annual reviews by EPA's regional offices of their states' revolving funds operations.

State data quality is also evaluated during annual audits performed by independent auditors or by the appropriate regional office of the EPA Inspector General. These audits are incorporated into EPA headquarters' financial management system.

Data Limitations: There are no known limitations in the performance data, which states submit voluntarily. Erroneous data can be introduced into the NIMS database by typographic or definitional error. Typographic errors are controlled and corrected through data testing performed by EPA's contractor. Definitional errors due to varying interpretations of information requested for specific data fields have been virtually eliminated in the past two years as a result of EPA headquarters' clarification of definitions. These definitions are publicly available at: <http://www.epa.gov/owm/cwfinance/cwsrf>. There is typically a lag of approximately two months from the date EPA asks states to enter their data into the NIMS database, and when the data are quality-checked and available for public use.

Error Estimate: Due to the rapid growth of this program, past estimates of annual performance (relative to a target), compared to actual performance data received two years later, have been accurate to an average of approximately plus or minus 2 percentage points.

New/Improved Data or Systems: This system has been operative since 1996. It is updated annually, and data fields are changed or added as needed.

References:

State performance data as shown in NIMS are available by state at:

<http://www.epa.gov/owm/cwfinance/cwsrf>

Definitions of data requested for each data field in NIMS is available at:

<http://www.epa.gov/owm/cwfinance/cwsrf>

The Office of Water Quality Management Plan, July 2001 (approved September 28, 2001) addresses the quality of data in NIMS. Not publicly available.

FY 2008 Performance Measures:

- Number of waterbodies restored or improved per million dollars of CWSRF assistance provided. (PART measure)
- Number of waterbodies protected per million dollars of CWSRF assistance provided. (PART measure)

Performance Databases: Clean Water State Revolving Fund Benefits Reporting (CBR) Database

CBR contains state-by-state data on the environmental benefits achieved by each loan made by the 51 state CWSRFs. CBR is a new database and therefore does not contain data on all CWSRF

loans since the inception of the program. CBR contains complete data on all loans made from capitalization grants received after January 1, 2005. Some states have chosen to report the environmental benefits of loans made from earlier capitalization grants. Data is entered into CBR by states on a rolling basis; however, states must enter all loans for a given fiscal year by the end of the state fiscal year. As of July 2006, the environmental benefits of \$9.5 billion in CWSRF assistance had been reported in the CBR.

CBR contains general information about each loan, including borrower, loan execution date, loan amount, repayment period and interest rate. Data on the environmental benefits of each loan include population served, wastewater volume, needs categories addressed, discharge information (i.e. ocean, surface water, groundwater, etc), permit type/number (if applicable), affected waterbody name and ID number, and affected waterbody status (impaired or meeting standards). CBR also collects information on whether each loan helps a system to achieve or maintain compliance, and whether it contributes to water quality improvement or maintenance. The designated uses of the waterbody are identified, as well as whether the loan contributes to protection or restoration of each designated use.

Data Sources: State regulatory agency personnel report and enter data into the CBR database on a rolling basis, based on state fiscal year.

Methods, Assumptions and Suitability: Data entered into CBR directly represent the units of performance for the performance measure. Data collected in the CBR database is suitable for calculating these performance and efficiency measures.

QA/QC Procedures: EPA regional offices are responsible for assuring state personnel enter all data by the end of the state fiscal year. States receive data entry guidance from EPA headquarters in the form of data definitions, available online at: <http://12.170.50.10/cwbenefits/login.aspx> by clicking on the “help” menu in the top right corner of the screen.

Data Quality Review: Quarterly checks of the data are performed by EPA’s contractor to ensure that states are entering data in a manner consistent with data definitions. Headquarters addresses significant data variability issues directly with states.

Data Limitations: Erroneous data can be introduced into the CBR database by typographic or definitional error. Typographic errors are controlled and corrected through data testing performed by EPA’s contractor. Definitional errors due to varying interpretations of information requested for specific data fields are minimized as a result of EPA headquarters’ clarification of definitions. Data is entered into the system on a rolling basis due to variations in state fiscal years. This new database has been in operation for approximately one year. As a result, comprehensive data is not available for all states for years prior to 2005.

Error Estimate: As this is a new database, an error estimate is not available at this time.

New & Improved Data or Systems: This system has been operative since 2005. Data fields are changed or added as needed.

References:

Definitions of data requested for each data field in the CBR database is available at: <http://12.170.50.10/cwbenefits/login.aspx> by clicking on the “help” menu in the top right corner of the screen.

FY 2008 Performance Measures:

- Percent of serviceable rural Alaska homes with access to drinking water supply and wastewater disposal. [PART annual measure]
- Number of homes that received improved service per \$1,000,000 of State and Federal funding. [PART efficiency measure]

Performance Database: Sanitation Tracking and Reporting System (STARS), the Indian Health Service (IHS), Office of Environmental Health and Engineering (OEHE), Division of Sanitation Facilities Construction (DSFC). This database has been modified to include rural Alaska communities and Alaska Native Villages (ANVs).

Data Sources: The STARS includes data on sanitation deficiencies, Indian homes and construction projects. STARS is currently comprised of two sub-data systems, the Sanitation Deficiency System (SDS) and the Project Data System (PDS).

Methods, Assumptions and Sustainability: The SDS is an inventory of sanitation deficiencies for Indian and rural Alaska homes, ANVs and communities. It is updated annually. The identification of sanitation deficiencies can be made several ways, the most common of which follow:

- Consultation with Tribal members, community members and other Agencies
- Field visits by engineers, sanitarians, Community Health Representatives (CHRs) nurses, State of Alaska IHS or tribal health staff
- PWSS Sanitary Surveys
- Tribal Master Plans for Development
- Telephone Surveys
- Feasibility Studies

The most reliable and preferred method is a field visit to each community to identify and obtain accurate numbers of homes with sanitation deficiencies. The number of Indian homes within the communities must be consistent among the various methods cited above. If a field visit cannot be made, it is highly recommended that more than one method be used to determine sanitation deficiencies to increase the accuracy and establish greater credibility for the data.

The PDS is a listing of funded construction projects and is used as a management and reporting tool. The PDS supports the annual calculation of the program efficiency measure.

QA/QC Procedures: Quality assurance for the Indian country water quality performance measure depends on the quality of the data in the STARS. The STARS data undergo a series of quality control reviews at various levels within the IHS and the State of Alaska.

Data Quality Reviews: The SDS data undergo a series of highly organized reviews by experienced tribal, IHS field, IHS district, State of Alaska and IHS area personnel. The data quality review consists of performing a number of established data queries and reports, which identify errors and/or inconsistencies. In addition, the top SDS projects and corresponding community deficiency profiles for each area are reviewed against their budgets. Detailed cost estimates are required for the review.

Data Limitations: The data are limited by the accuracy of reported data in STARS.

Error Estimate: The higher-level projects (those with the possibility of funding prior to the next update) must be developed to allow for program implementation in an organized, effective and efficient manner. Those SDS projects (top 20%) must have cost estimates within 10% of the actual costs.

New/Improved Data or Systems: The STARS is a web-based application and therefore allows data to be continuously updated by personnel at various levels and modified as program requirements are identified. PDS has been modified to meet 40CFR31.40 reporting requirements. In 2007 the STARS application will be modified so that STARS' administrators can allow specific users to access their relevant portions of the STARS database.

References:

1. Indian Health Service (IHS), Division of Sanitation Facilities (DSFC). Criteria for the Sanitation Facilities Construction Program, June 1999, Version 1.02, 3/13/2003.
http://www.dsfc.ihs.gov/Documents/Criteria_March_2003.cfm
2. Indian Health Service (IHS), Division of Sanitation Facilities (DSFC). Sanitation Deficiency System (SDS), Working Draft, "Guide for Reporting Sanitation Deficiencies for Indian Homes and Communities", May 2003.
<http://www.dsfc.ihs.gov/Documents/SDSWorkingDraft2003.pdf>

FY 2008 Performance Measures:

- **National Coastal Condition Report (NCCR) score for overall aquatic ecosystem health of coastal waters nationally (1-5 scale)**

Performance Database: EMAP/NCA [Environmental Monitoring and Assessment Program/National Coastal Assessment] database (housed EPA/ORD/NHEERL/AED, Narragansett, RI)(Environmental Protection Agency/Office of Research and Development/National Health and Environmental Effects Research Laboratory/Gulf Ecology Division); pre-database information housed in ORD/NHEERL facility in Gulf Breeze, FL (Gulf Ecology Division) (pre-database refers to a temporary storage site for data where they are examined for QA purposes, have appropriate metadata attached and undergo initial statistical analyses); data upon QA acceptance and metadata completion are transferred to EMAP/NCA database and are web available at www.epa.gov/emap/nca. The final data are then migrated to

the STORET data warehouse for integration with other water quality data with metadata documenting its quality.

Data Source: Probabilistic surveys of ecological condition completed throughout the Mid-Atlantic and Gulf of Mexico by EPA's Office of Research and Development (ORD) in 1991-1994, in southern Florida in 1995, in the Southeast in 1995-1997, in the Mid-Atlantic in 1997-1998, in each coastal state in 2000-2004 (except Alaska and Hawaii), in Alaska in 2002 and 2004, in Hawaii in 2002 and 2004, and in Puerto Rico in 2000 and 2004, and in other island territories (Guam, American Samoa and U.S. Virgin Islands) in 2004. Surveys collect condition information regarding water quality, sediment quality and biotic condition at 70-100 sites/region (e.g., mid-Atlantic) each year of collection prior to 1999 and at 35-150 sites in each state or territory/year (site number dependent upon state) after 1999. Additional sampling by the National Estuary Program (NEP) included all individual national estuaries; the total number of sites within NEP boundaries was 30 for the two-year period 2000-2002.

These data are collected through a joint EPA-State cooperative agreement and the States follow a rigid sampling and collection protocol following intensive training by EPA personnel. Laboratory processing is completed at either a state laboratory or through a national EPA contract. Data collection follows a Quality Assurance Project Plan (QAPP) (either the National Coastal QAPP or a variant of it) and QA testing and auditing by EPA.

Methods, Assumptions and Suitability: The surveys are conducted using a probabilistic survey design which allows extrapolation of results to the target population (in this case - all estuarine resources of the specific state.) The collection design maximizes the spatial spread between sites, located by specific latitude-longitude combinations. The survey utilizes an indexed sampling period (generally late summer) to increase the probability of encountering water quality, sediment quality and biotic condition problems, if they exist. Based on the QAPP and field collection manual, a site in a specific state is located by sampling vessel via Global Positioning System (GPS) and water quality is measured on board at multiple depths. Water samples are taken for chemistry; sediment samples are taken for chemistry, toxicity testing and benthic community assessment; and fish trawls are conducted to collect community fish data and provide selected fish (target species) for analysis of whole body and/or fillet contaminant concentrations. Samples are stored in accordance with field manual instructions and shipped to the processing laboratory. Laboratories follow QA plans and complete analyses and provide electronic information to the state or EPA. EPA and the state exchange data to ensure that each has a complete set. EPA analyzes the data to assess regional conditions, whereas the states analyze the data to assess conditions of state-specific waters. Results of analyses on a national and regional basis are reported as chapters in the National Coastal Condition Report (NCCR) series. The overall regional condition index is the simple mean of the five indicators' scores used in the Coastal Condition Report (in the NCCR2 a recalculation method was provided for direct comparison of the successive reports). An improvement for one of the indicators by a full category unit over the eight year period will be necessary for the regional estimate to meet the performance measurement goal (+0.2 over an eight year period).

Assumptions: (1) The underlying target population (estuarine resources of the United States) has been correctly identified; (2) GPS is successful; (3) QAPP and field collection

manuals are followed; (4) all samples are successfully collected; (5) all analyses are completed in accordance with the QAPP; and (6) all combinations of data into indices are completed in a statistically rigorous manner.

Suitability: By design all data are suitable to be aggregated to the state and regional level to characterize water quality, sediment quality, and biotic condition. Samples represent “reasonable”, site-specific point-in-time data (not primary intention of data use) and an excellent representation of the entire resource (extrapolation to entire resource supportable). The intended use of the data is the characterization of populations and subpopulations of estuarine resources through time. The data meet this expectation and the sampling, response, analysis and reporting designs have been peer reviewed successfully multiple times. The data are suitable for individual calendar year characterization of condition, comparison of condition across years, and assessment of long-term trends once sufficient data are collected (7-10 years). Data are suitable for use in National Coastal Condition calculations for the United States and its regions to provide performance measurement information. The first long-term trends analysis will appear in the next NCCR (NCCRIII) representing trends between 1990-2002.

QA/QC Procedures: The sampling collection and analysis of samples are controlled by a Quality Assurance Project Plan (QAPP) [EPA 2001] and the National Coastal Assessment Information Management Plan (IMP)[EPA 2001]. These plans are followed by all twenty-three coastal states and 5 island territories. Adherence to the plans are determined by field training (conducted by EPA ORD), field audits (conducted by EPA/ORD), round robin testing of chemistry laboratories (conducted by EPA/ORD), overall systems audits of state programs and national laboratory practices (conducted by EPA), sample splits (sent to reference laboratories), blind samples (using reference materials) and overall information systems audits (conducted by EPA/ORD). Batch sample processing for laboratory analyses requires the inclusion of QA samples in each batch. All states are subject to audits at least once every two years. All participants received training in year 2000 and retraining sessions are scheduled every two years.

Data Quality Reviews: Data quality reviews have been completed in-house by EPA ORD at the regional and national level in 2000-2003 (National Coastal Assessment 2000-2003) and by the Office of Environmental Information (OEI) in 2003 (assessment completed in June, 2003 and written report not yet available; oral debriefing revealed no deficiencies). No deficiencies were found in the program. A national laboratory used in the program (University of Connecticut) for nutrient chemistry, sediment chemistry and fish tissue chemistry is being evaluated by the Inspector General 's Office for potential falsification of laboratory results in connection with other programs not related to NCA. The NCA has conducted its own audit assessment and only one incorrect use of a chemical digestion method for inorganic chemistry samples (metals) was found. This error was corrected and all samples “digested” incorrectly were reanalyzed at no cost.

Data Limitations: Data limitations are few. Because the data are collected in a manner to permit calculation of uncertainty and designed to meet a specific Data Quality Objective (DQO) (<10% error in spatial calculation for each annual state estimate), the results at the regional level (appropriate for this performance measure) are within about 2- 4% of true values dependent upon the specific sample type. Other limitations as follows: (a) Even though methodology errors are

minimized by audits, in the first year of the NCA program (2000) some errors occurred resulting in loss of some data. These problems were corrected in 2001 and no problems have been observed since. (b) In some instances, (<5%) of sample results, QA investigation found irregularities regarding the precision of measurement (e.g., mortality toxicity testing of controls exceeded detection limit, etc.). In these cases, the data were "flagged" so that users are aware of the potential limitations. (c) Because of the sampling/ analysis design, the loss of data at a small scale (~ 10%) does not result in a significant increase in uncertainty in the estimate of condition. Wholesale data losses of multiple indicators throughout the U.S. coastal states and territories would be necessary to invalidate the performance measure. (d) The only major source of external variability is year-to-year climatic variation (drought vs. wet, major climatic event, etc.) and the only source of internal variation is modification of reporting indicators (e.g., new indices, not a change in data collected and analyzed). This internal reporting modification requires a re-analysis of earlier information to permit direct comparison. (e) There is generally a 2-3 year lag from the time of collection until reporting. Sample analysis generally takes one year and data analysis another. Add another year for report production and peer review. (f) Data collections are completed annually; The EPA/ORD data collection collaboration will continue through 2004. Beginning in 2005, ORD began assisting OW, as requested, with expert advice, but discontinued its financial support of the program.

Error Estimate: The estimate of condition (upon which the performance measure is determined) has an annual uncertainty rate of about 2-3% for national condition, about 5-7% for individual regional indicators (composite of all five states data into a regional estimate), and about 9-10% for individual state indicators. These condition estimates are determined from the survey data using cumulative distribution functions and the uncertainty estimates are calculated using the Horvitz-Thompson estimator.

New/Improved Data or Systems:

- (1) Changes have occurred in the data underlying the performance measure based on scientific review and development. A change in some reporting indicators has occurred in order to more accurately represent the intended ecological process or function. For example, a new eutrophication index was determined for the 2000 data. In order to compare this new index to the 1991-1994 data, the earlier data results must be recomputed using the new technique. This recalculation is possible because the underlying data collection procedures have not changed.
- (2) New national contract laboratories have been added every year based on competition. QA requirements are met by the new facilities and rigorous testing at these facilities is completed before sample analysis is initiated. QA adherence and cross-laboratory sample analysis has minimized data variability resulting from new laboratories entering the program.
- (3) The only reason for the discontinuation of the National performance goal would be the elimination of the surveys after 2004 or any other year thereafter.

In order to continue to utilize the 2001 National Coastal Condition report as the baseline for this performance measure, the original scores reported in 2001 have been re-calculated in the 2004 report using the index modifications described above (#1). These “new” results for the baseline (re-calculated scores) are reported in Appendix C of the 2005 report.

References:

1. Environmental Monitoring and Assessment Database (1990-1998) and National Coastal Assessment Database (2000- 2004) websites: www.epa.gov/emap and www.epa.gov/emap/nca (NCA data for 2000 is only data available at present)
2. National Coastal Assessment. 2000-2003. Various internal memoranda regarding results of QA audits. (Available through John Macauley, National QA Coordinator NCA, USEPA, ORD/NHEERL/GED, 1 Sabine Island, Gulf Breeze, FL 32561)
3. National Coastal Assessment. 2001. Quality Assurance Project Plan. EPA/620/R-01/002.(Available through John Macauley above)
4. National Coastal Assessment. 2001. Information Management Plan. EPA/620/R-01/003 (Available through Stephen Hale, NCA IM Coordinator, ORD/NHEERL/AED, 27 Tarzwell Drive, Narragansett, RI)
5. U.S. Environmental Protection Agency. 2001. National Coastal Condition Report. EPA-620/R- 01/005.
6. U.S. Environmental Protection Agency. 2004. National Coastal Condition Report II. In review Assigned Report Number EPA-620/R-03/002.

FY 2008 Performance Measure:

- **Percent of active dredged material ocean dumping sites achieving environmentally acceptable conditions (as reflected in each site’s Site Management Plan)**

Performance Database: Data for this measure are entered into EPA’s Annual Commitment System (ACS) database by those EPA Regional offices (Regions) responsible for the management and oversight of dredged material ocean dumping sites. This performance measure, which is a target in the 2006-2011 Strategic Plan, will be tracked on an annual basis as a management tool for the ocean dumping program. The baseline year for the measure is 2005.

Data Source: EPA’s Regional offices are responsible for data collection and management. Under section 102 of the Marine Protection, Research, and Sanctuaries Act (MPRSA), EPA Regions may designate ocean sites for the disposal of dredged material. The Act requires that each site have a Site Management and Monitoring Plan (SMMP), which includes, but is not limited to, a baseline assessment of the conditions at the site, a program for monitoring the site, and management practices at the site to protect the aquatic environment. Each SMMP is unique to the dump site and is developed in conjunction with all relevant stakeholders. The SMMP generally defines monitoring requirements, the conditions under which a site is deemed to be environmentally acceptable, and triggers for corrective action. Based on the requirements of each SMMP, the responsible Regions may conduct monitoring surveys of the dump sites to determine benthic impacts, spatial distribution of dredged material, characterize physical changes to the seafloor resulting from disposal, pH, turbidity, and other water quality indicators.

Utilizing sampling results (as necessary), EPA Regions determine if a site is achieving environmentally acceptable conditions.

Methods, Assumptions and Suitability: As each SMMP defines the required monitoring and environmentally acceptable conditions for an ocean dumping site, any survey/sampling methodologies and assumptions will be site-specific. However, if a Region utilizes EPA's Ocean Survey Vessel (OSV) *Bold*, established procedures for use of the equipment and handling samples on the OSV *Bold* must be followed. In addition, for each survey the Region is required to submit to Headquarters a survey plan that presents types of sampling techniques, including equipment used, and how data are recorded. These data are highly suitable for tracking the performance of this measure, as they are collected for the specific purpose of determining the environmental conditions of the dredged material ocean dump sites. The periodicity of monitoring is determined by the SMMP, and is suitable for tracking this measure.

QA/QC Procedures: Regions must develop a Quality Assurance Project Plan (QAPP), as prescribed by their regional quality assurance procedures, when collecting data at an ocean dumping site. These QAPPs are also submitted to Headquarters when a Region utilizes the OSV *Bold* for a sampling survey. The QAPP outlines the procedures for collection methods, use of analytical equipment, analytical methods, quality control, and documentation and records.

Data Quality Reviews: Regions must conduct data quality reviews as determined by their quality assurance procedures and included in their QAPPs.

Data Limitations: It is still early to determine the full extent of data limitations.

Error Estimate: No error estimate is available for this data.

New/Improved Data or Systems: This is a new program activity measure for FY 2007; therefore, any improvements to the collection and/or evaluation of data to support the measure will be determined following the initial tracking performance.

References: The Annual Commitment System is an internal EPA database that is a component of the Agency's Budget Automation System (BAS). EPA's Oceans and Coastal Protection Division has prepared a template for the Regions to use when preparing survey plans. QAPPs for those Regions responsible for ocean dumping sites may be found at the following internet sites:

EPA Region 1 - <http://www.epa.gov/ne/lab/qa/pdfs/QAPPPProgram.pdf>

EPA Region 2 - <http://www.epa.gov/region2/qa/documents.htm#qag>

EPA Region 3 - http://www.epa.gov/region3/esc/QA/docs_qapp.htm

EPA Region 4 - <http://www.epa.gov/region4/sesd/oqa/r4qmp.html>

EPA Region 6 - <http://www.epa.gov/earth1r6/6pd/qa/qatools.htm>

EPA Region 9 - http://www.epa.gov/region9/qa/pdfs/qaprp_guidance3.pdf

EPA Region 10 - <http://www.epa.gov/quality/qs-docs/g5-final.pdf>

GOAL 2 OBJECTIVE 3

FY 2008 Performance Measures:

- **Percentage of planned outputs delivered in support of Six Year Review decisions (PART Measure)**
- **Percentage of planned outputs delivered in support of Contaminated Candidate List decisions (PART Measure)**
- **Percentage of planned outputs (in support of WQRP long-term goal #1) delivered on time (PART Measure)**
- **Percentage of planned outputs (in support of WQRP long-term goal #2) delivered on time (PART Measure)**
- **Percentage of planned outputs (in support of WQRP long-term goal #3) delivered on time (PART Measure)**

Performance Database: Integrated Resources Management System (internal database)

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: To provide an indication of progress towards achievement of a program's long-term goals, each program annually develops a list of key research outputs scheduled for completion by the end of each fiscal year. This list is finalized by the start of the fiscal year, and no changes are made after this point. The program then tracks quarterly the progress towards completion of these key outputs against pre-determined schedules and milestones. The final score is the percent of key outputs from the original list that are successfully completed on-time.

QA/QC Procedures: Procedures are now in place to require that all annual milestones and outputs be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research milestones and outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Drinking Water Multi-Year Plan, available at: <http://epa.gov/osp/mydp/dw.pdf> (last accessed January 3, 2007).

Water Quality Multi-Year Plan, available at: <http://epa.gov/osp/mydp/wq.pdf> (last accessed January 3, 2007).

FY 2008 Performance Measure:

- Peer-reviewed publications over FTE (Efficiency Measure)

Performance Database: No internal tracking system.

Data Source: Data are derived from a self-produced list of program publications and financial records for FTE employees.

Methods, Assumptions and Suitability: The universe of peer-reviewed publications includes 1) journal articles, 2) books and book chapters, and 3) EPA reports, where at least one EPA author is listed or where the publication is the result of an EPA grant. If a publication includes more than one EPA author, that publication is counted only once. Materials submitted for publication but not yet published are not included. FTE are actual program full time equivalents.

QA/QC Procedures: N/A

Data Quality Reviews: All publications included in the data are peer reviewed according to EPA's Peer Review Handbook (3rd Edition).

Data Limitations: FTE data do not include extramurally-funded contributors. Additionally, data do not capture the quality or impact of the research publications. However, long-term performance measures and independent program reviews are used to measure research quality and impact.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: EPA's Peer Review Handbook, available at: <http://www.epa.gov/peerreview/pdfs/Peer%20Review%20HandbookMay06.pdf> (last accessed on January 3, 2007)

GOAL 3 OBJECTIVE 1

FY 2008 Performance Measures:

- **Daily per capita generation of municipal solid waste** [PART performance]
- **Millions of tons municipal solid waste diverted** [PART performance]

Performance Database: Data are provided by the Department of Commerce. EPA does not maintain a database for this information.

Data Source: The baseline numbers for municipal solid waste (MSW) source reduction and recycling are developed using a materials flow methodology employing data largely from the Department of Commerce and described in the EPA report titled “Characterization of Municipal Solid Waste in the United States.” The Department of Commerce collects materials production and consumption data from various industries.

Methods, Assumptions and Suitability: Data on domestic production of materials and products are compiled using published data series. U.S. Department of Commerce sources are used, where available; but in several instances more detailed information on production of goods by end-use is available from trade associations. The goal is to obtain a consistent historical data series for each product and/or material. Data on average product lifetimes are used to adjust the data series. These estimates and calculations result in material-by-material and product-by-product estimates of MSW generation, recovery, and discards. To strategically support attainment of the 35% recycling goal, EPA has identified specific components of the MSW stream on which to focus: paper and paperboard, organics (yard and food waste), and packaging and containers. For these targeted efforts EPA will examine data on these waste components.

There are various assumptions factored into the analysis to develop estimates of MSW generation, recovery and discards. Example assumptions (from pages 141-142 of year 2000 “Characterization Report”) include: Textiles used as rags are assumed to enter the waste stream the same year the textiles are discarded. Some products (e.g., newspapers and packaging) normally have short lifetimes and products are assumed to be discarded in the year they are produced.

QA/QC Procedures: Quality assurance and quality control are provided by the Department of Commerce’s internal procedures and systems. The report prepared by the Agency, “Characterization of Municipal Solid Waste in the United States,” is reviewed by a number of experts for accuracy and soundness.

Data Quality Review: The report, including the baseline numbers and annual rates of recycling and per capita municipal solid waste generation, is widely accepted among experts.

Data Limitations: Data limitations stem from the fact that the baseline statistics and annual rates of recycling and per capita municipal solid waste generation are based on a series of models, assumptions, and extrapolations and, as such, are not an empirical accounting of municipal solid waste generated or recycled.

Error Estimate: N/A. Currently, the Office of Solid Waste (OSW) does not collect data on estimated error rates.

New/Improved Data or Systems: Because the statistics on MSW generation and recycling are widely reported and accepted by experts, no new efforts to improve the data or the methodology have been identified or are necessary.

References: *Municipal Solid Waste in the United States: 2003 Facts and Figures*, EPA, April 2005 (EPA530-F-05-003), <http://www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm>

FY 2008 Performance Measures:

- **Percent of RCRA hazardous waste management facilities with permits or other approved controls in place [PART performance]**
- **Update controls for preventing releases at facilities that are due for permit renewals [PART performance]**

Performance Database: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database which supports EPA's RCRA program.

Data Source: Data are entered by the states. Supporting documentation and reference materials are maintained in Regional and state files. EPA's Regional offices and authorized states enter data on a rolling basis.

Methods, Assumptions and Suitability: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database which supports EPA's RCRA program. RCRAInfo contains information on entities (generically referred to as "handlers") engaged in hazardous waste generation and management activities regulated under the portion of RCRA that provides for regulation of hazardous waste. RCRAInfo has several different modules, including status of RCRA facilities in the RCRA permitting universe.

QA/QC Procedures: States and EPA's Regional offices generate the data and manage data quality related to timeliness and accuracy. Within RCRAInfo, the application software contains structural controls that promote the correct entry of the high-priority national components. RCRAInfo documentation, which is available to all users on-line at <http://www.epa.gov/rcrainfo/>, provides guidance to facilitate the generation and interpretation of data. Training on use of RCRAInfo is provided on a regular basis, usually annually, depending on the nature of system changes and user needs. Even with the increasing emphasis on data quality, with roughly 10,000 units in the baseline (e.g., a facility can have more than one unit), we hear of data problems with some facilities every year, particularly with the older inactive facilities. When we hear of these issues, we work with the EPA Regional offices to see that they get resolved. It may be necessary to make a few adjustments to the permitting baseline as data issues are identified. Determination of whether or not the GPRA annual goal #1 (listed above) is met is based on the legal and operating status codes for each unit. Each year since 1999, in discussions with Regional offices and states, EPA has highlighted the need to keep the data that support the GPRA permitting goal current. RCRAInfo is the sole repository for this information and is a focal point for planning from the local to national level. Accomplishment of goal # 2 (listed above) is based on the permit expiration date code. This is a new code for the new goal

and we have made changes to the database to make this code a high priority code. We have discussed the need for correct entry with the Regions. Since tracking this information is new, we anticipate that we will have to work out some reporting bugs, review the accuracy of tracking when it begins in October 1, 2005, and make adjustments if necessary.

Note: Access to RCRAInfo is open only to EPA Headquarters, Regional, and authorized state personnel. It is not available to the general public because the system contains enforcement sensitive data. The general public is referred to EPA's Envirofacts Data Warehouse to obtain filtered information on RCRA-regulated hazardous waste sites.

Data Quality Review: The 1995 GAO report *Hazardous Waste: Benefits of EPA's Information System Are Limited* (AIMD-95-167, August 22, 1995, <http://www.gao.gov/archive/1995/ai95167.pdf>) on EPA's Hazardous Waste Information System reviewed whether national RCRA information systems support EPA and the states in managing their hazardous waste programs. Recommendations coincide with ongoing internal efforts to improve the definitions of data collected, ensure that data collected provide critical information and minimize the burden on states. RCRAInfo, the current national database has evolved in part as a response to this report.

Data Limitations: The authorized states have ownership of their data and EPA has to rely on them to make changes. The data that determine if a facility has met its permit requirements are prioritized in update efforts. Basic site identification data may become out-of-date because RCRA does not mandate annual or other periodic notification by the regulated entity when site name, ownership and contact information changes. Nevertheless, EPA tracks the facilities by their IDs and those should not change even during ownership changes. The baselines are composed of facilities that can have multiple units. These units may consolidate, split or undergo other activities that cause the number of units to change. We aim to have static baselines, but there may be occasions where we would need to make minor baseline modifications. The baseline of facilities that are currently tracked for goal #2 are "due for permit renewals," but we anticipate that there will be some facilities that cease to be "due for permit renewals" due to a change in facility status.

Error Estimate: N/A. Currently OSW does not collect data on estimated error rates.

New/Improved Data or Systems: EPA has successfully implemented new tools in RCRAInfo for managing environmental information to support Federal and state programs, particularly for permit renewals. RCRAInfo allows for tracking of information on the regulated universe of RCRA hazardous waste handlers, such as facility status, regulated activities, and compliance history. The system also captures detailed data on the generation of hazardous waste by large quantity generators and on waste management practices from treatment, storage, and disposal facilities. RCRAInfo is web accessible, providing a convenient user interface for Federal, state and local managers, encouraging development of in-house expertise for controlled cost, and using commercial off-the-shelf software to develop reports from database tables.

References: RCRAInfo documentation and data (<http://www.epa.gov/rcrainfo/>). The 1995 GAO report *Hazardous Waste: Benefits of EPA's Information System Are Limited* (AIMD-95-

167, August 22, 1995, <http://www.gao.gov/archive/1995/ai95167.pdf>).

per capita municipal solid waste generation are based on a series of models, assumptions, and extrapolations and, as such, are not an empirical accounting of municipal solid waste generated or recycled.

FY 2008 Performance Measures:

- **No more than 10,000 confirmed releases per year**
- **Increase the rate of significant operational compliance by 1% over the previous year's rate (target)**

Performance Database: The Office of Underground Storage Tanks (OUST) does not maintain a national database. States individually maintain records for reporting state program accomplishments.

Data Source: Designated State agencies submit semi-annual progress reports to the EPA regional offices.

Methods, Assumptions and Suitability: N/A

QA/QC Procedures: EPA's regional offices verify and then forward the data in an Excel spreadsheet to OUST. OUST staff examine the data and resolve any discrepancies with the regional offices. The data are displayed in an Excel spreadsheet on a region-by-region basis, which is a way regional staff can check their data.

Data Quality Review: None.

Data Limitations: Percentages reported are sometimes based on estimates and extrapolations from sample data. Data quality depends on the accuracy and completeness of state records.

Error Estimate: N/A

New/Improved Data or Systems: None.

References: FY 2006 Mid-Year Activity Report, June 20, 2006 (updated semiannually); *FY 2006 End-of-Year Activity Report*, from Cliff Rothenstein, Director, Office of Underground Storage Tanks to UST/LUST Regional Division Directors, Regions 1-10, dated November 14, 2006, http://www.epa.gov/swrust1/cat/ca_06_34.pdf

FY 2008 Performance Measure:

- **Percentage of Construction and Demolition debris that is reused or recycled**

Performance Database: EPA does not maintain a database for this information.

Data Sources: The baseline numbers for construction and demolition (C&D) debris generation and recycling in the United States rely on data from two recent draft EPA studies characterizing generation and management of building-related and road-related C&D debris: (1) “Characterization of Building-Related Construction and Demolition Debris in the United States,” and (2) “Characterization of Road and Bridge-Related Construction and Demolition Debris in the United States.” The building-related report is an update of EPA’s 1998 report by the same name. It includes additional sampling data published after 1998 to strengthen the source category database. The purpose of the reports is to characterize the various components of the C&D waste stream and estimate the total amount of debris generated and recycled nationally. It is important to note that the data and information provided in these reports are preliminary and are currently undergoing review.

Methods, Assumptions and Suitability: *Building-Related C&D:* The methodology used to estimate the amount of building-related C&D debris generated nationally combines national Census Bureau data on construction industry activities (e.g., construction permits and the value of new private and public residential construction from the Department of Commerce Current Construction Reports) with point source waste assessment data (i.e., waste sampling and weighing at a variety of construction and demolition sites). Recycling estimates are based on data from national industry surveys and local communities.

Road- and Bridge-Related C&D: A model is used to estimate the amount of road-related C&D generation. The model is a series of steps applied to road statistics published by the Federal Highway Administration to determine, in 12-foot lane widths, the number of lane-miles in the U.S. This area measurement is then combined with assumptions on pavement type, maintenance time frames, reconstruction and resurfacing depths, and weight factors to estimate road C&D generation on a tons per year basis. Assumptions pertaining to asphalt and cement concrete debris generation include: “Asphalt roads are reconstructed on the average every 30 years,” and “the cement concrete layer on reconstructed roads averages eight inches.” Recycling estimates are based on limited data obtained from state highway departments as well as industry surveys.

To support attainment of the 65% C&D recycling goal, EPA is currently developing program objectives and strategic tasks focused on increasing the recycling rate of five materials that comprise the majority of the C&D waste stream: concrete pavement, asphalt pavement, gypsum wallboard, wood, and asphalt shingles.

QA/QC Procedures: Quality Assurance and Quality Control are provided by internal procedures and systems of the Department of Commerce and the Federal Highway Administration, the sources of data on which the EPA reports are based. The reports prepared by the Agency are reviewed by industry experts for accuracy and soundness.

Data Quality Review: The 1998 edition of the building-related report underwent extensive review. Due to the general acceptance of this methodology and data sources by the reviewers, the 2005 report follows the original study to the extent possible. However, comments received on the latest revision raised concerns about the validity of the data and repeatability of the methodology. EPA is interacting with reviewers to address their concerns.

Data Limitations: The limited point source waste assessment data used in the building-related C&D analysis is a source of uncertainty. Additional limitations stem from the fact that in both studies, the baseline statistics and annual rates of C&D debris generation and recycling are based

on a series of assumptions and extrapolations and, as such, are not an empirical accounting of national C&D debris generated or recycled.

Error Estimate: N/A. Currently, the Office of Solid Waste does not collect data on estimated error rates.

New/Improved Data or Systems: The need for further efforts to improve the data and the methodology has been expressed by peer reviewers. The agency is undertaking action to secure additional sources of information to bolster the data and fill identified data gaps, including trade associations from specific industry sectors and additional governmental entities.

References: *Characterization of Building-Related Construction and Demolition Debris in the United States*, EPA, June 1998 (EPA530-R-98-010), <http://www.epa.gov/epaoswer/hazwaste/sqg/c&d-rpt.pdf>

Characterization of Building-Related Construction and Demolition Debris in the United States, Franklin Associates, draft dated December 2005.

Characterization of Road and Bridge-Related Construction and Demolition Debris in the United States, EPA, draft dated December 2005.

FY 2008 Performance Measure:

- Percentage of coal combustion product ash that is used rather than disposed

Performance Database: Data to support this measure are provided by the Department of Energy and American Coal Ash Association (ACAA). EPA collects data on generation of materials (Toxic Release Inventory), but it does not maintain a database for utilization.

Data Source: The baseline numbers for coal combustion product (CCP) generation are tracked by the DOE Energy Information Agency. Limited beneficial use numbers are reported on EIA Form 767 (which is planned to be discontinued in 2007) and through TRI reporting. The ACAA conducts a voluntary survey on coal ash generation and recycling practices of its membership, which comprises approximately 35% of the electricity generating capacity of the United States. The ACAA survey information is compared to the other sources of utilization data, including data from EIA, the Portland Cement Association and other publicly available trade association data.

Methods, Assumptions and Suitability: The CCP recycling rate is defined as the tonnage of coal ash recycled divided by the tonnage of coal ash generated nationally by coal-fired electric utilities. Data on domestic production of materials and products are compiled using published data series. U.S. Department of Energy sources are used, where available; but for specific utilization data more detailed information on the production of CCPs is available from trade associations. The goal is to obtain a consistent historical data series for products and materials. Data on average production as compared to utilization may provide estimates as to the effectiveness of beneficial use outreach.

QA/QC Procedures: Quality assurance and quality control for production numbers reported on EIA 767 are provided by the Department of Energy's internal procedures and systems. Data on utilization are reviewed by CCP industry experts for accuracy.

Data Quality Review: The reporting of utilization data is voluntary and requires extrapolation and integration with several sources of data. TRI data does not track end-use and does not require reporting of materials by their utilization

Data Limitations: Data limitations stem from the fact that the baseline statistics and annual rates of utilization are collected from different sources and are not mandated by statute or regulation. New data sources may be compared to historic data to determine if trends are reasonable and expected.

Error Estimate: N/A. Currently, the Office of Solid Waste (OSW) does not collect data on estimated error rates.

New/Improved Data or Systems: Because the survey on production data conducted by EIA is going to be discontinued effective 2007, other measurement techniques will be required to accurately track production and utilization.

References: The American Coal Ash Annual Survey is located at <http://www.acaa-usa.org/>.

FY 2008 Performance Measure:

- **Tons of MSW recycled over total net costs of recovery [PART efficiency-under development]**

Performance Database: Data are provided by the Department of Commerce and Waste News Survey. EPA does not maintain a database for this information.

Data Source: The baseline numbers for municipal solid waste (MSW) recycling are developed using a materials flow methodology employing data largely from the Department of Commerce and described in the EPA report titled "Characterization of Municipal Solid Waste in the United States." The Department of Commerce collects materials production and consumption data from various industries.

In addition, data on the costs of MSW recycling are reported in the Waste News "Municipal Recycling Survey." The data is based on an annual survey of 30 most populous cities and reports budgets for MSW recycling and disposal, not actual expenditures. Waste News provides the only study of recycling and disposal costs that is annually updated and includes a range of cities (based on largest cities by population). The costs also reflect a range of recycling programs (i.e., curbside, drop-off, etc.). The cost data will be supplemented by a survey of up to nine cities for disposal and recycling cost information.

Methods, Assumptions and Suitability: Data on domestic production of materials and products are compiled using published data series. U.S. Department of Commerce sources are used,

where available; but in several instances more detailed information on production of goods by end-use is available from trade associations. The goal is to obtain a consistent historical data series for each product and/or material. Data on average product lifetimes are used to adjust the data series. These estimates and calculations result in material-by-material and product-by-product estimates of MSW generation, recovery, and discards.

The total *net* cost of MSW recycling is calculated by multiplying the net cost of recycling per ton by the total tons of MSW recycled in a given year. The net cost of recycling per ton is estimated by subtracting the total cost per ton for solid waste disposal from the total cost per ton for recycling, based on the Waste News survey. Several sources, including Waste News, indicate that the cost of recycling is *less* expensive than solid waste disposal. Therefore, net costs reflect cost savings associated with recycling. Other sources, such as EPA's *Cutting the Waste Stream in Half: Community Record Setter Show How* (EPA-530-R-99-013), EPA's *Evaluation of Diversion and Costs for Selected Drop-Off Recycling Programs* (EPA-600-R-95-109), and Carnegie Mellon University's *Evaluating the Environmental Effectiveness of Recycling in Pittsburgh* all show similar results.

Recycling costs per ton are based on the median cost per ton reported in the Waste News Survey. The survey reports the total tonnage recycled and the total recycling budget for each city. Therefore, to estimate the unit recycling costs, the total recycling budget for each city is divided by the total tons recycled for each city.

Total disposal costs per ton are based on the median cost per ton as reported in the Waste News survey. The disposal cost per ton for each city is estimated by dividing the total disposal cost by the total tonnage of solid waste disposed. The disposal costs are obtained by subtracting the total MSW budget from the recycling budget. The total tonnage of solid waste disposed by each city is estimated by subtracting the recycling tonnage from the quotient of recycling tonnage divided by recycling rate.

There are various assumptions factored into the analysis to develop estimates of MSW generation, recovery and discards. Example assumptions (from pages 141-142 of year 2000 "Characterization Report") include: Textiles used as rags are assumed to enter the waste stream the same year the textiles are discarded. Some products (e.g., newspapers and packaging) normally have short lifetimes and products are assumed to be discarded in the year they are produced.

In addition, Waste News reports municipal budget data, not realized costs. Ideally, realized costs would be used for the performance measure. Furthermore, Waste News' method of selecting cities, based on largest total population, means that the sample changes from year to year in a non-random pattern. For example, growing cities which enter the top 30 will be added to the survey, while those dropping off the top 30 list will be removed from the survey. The frequency of these changes depends on how often the U.S. Census updates city population figures and rates of change in these cities. Accordingly, a survey of up to nine cities for recycling and disposal cost data will be useful in supplementing the Waste News data.

QA/QC Procedures: Quality assurance and quality control are provided by the Department of

Commerce's internal procedures and systems. The report prepared by the Agency, "Characterization of Municipal Solid Waste in the United States," is reviewed by a number of experts for accuracy and soundness. In addition, Waste News is a widely recognized source for MSW recycling and disposal costs for the 30 most populous cities. The survey of up to nine additional cities for recycling and disposal cost data will also help to provide support for the Waste News data or highlight potential limitations.

Data Quality Review: The report, including the baseline numbers and annual rates of recycling and per capita municipal solid waste generation, is widely accepted among experts. Waste News is also widely recognized among the MSW industry.

Data Limitations: Data limitations stem from the fact that the baseline statistics and annual rates of recycling and per capita municipal solid waste generation are based on a series of models, assumptions, and extrapolations and, as such, are not an empirical accounting of municipal solid waste generated or recycled.

In addition, Waste News reports municipal budget data, not realized costs. Ideally, realized costs would be used for the performance measure. Furthermore, Waste News' method of selecting cities, based on largest total population, means that the sample changes from year to year in a non-random pattern. For example, growing cities which enter the top 30 will be added to the survey, while those dropping off the top 30 list will be removed from the survey. The frequency of these changes depends on how often the U.S. Census updates city population figures and rates of change in these cities. Accordingly, a survey of up to nine cities for recycling and disposal cost data will be useful in supplementing the Waste News data.

Error Estimate: N/A. Currently, the Office of Solid Waste (OSW) does not collect data on estimated error rates.

New/Improved Data or Systems: Because the statistics on MSW generation and recycling are widely reported and accepted by experts, no new efforts to improve the data or the methodology have been identified or are necessary.

References:

Municipal Solid Waste in the United States: 2003 Facts and Figures, EPA, April 2005 (EPA530-F-05-003), <http://www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm>.

Waste News, "Municipal Recycling Survey," (available annually).

Cutting the Waste Stream in Half: Community Record-Setters Show How, EPA-530-R-99-013 June 1999.

Evaluation of Diversion and Costs for Select Drop-Off Recycling Programs, EPA-600-R-95-109, June 1995.

Evaluating the Environmental Effectiveness of Recycling in Pittsburgh, Carnegie Mellon University, May 2002.

FY 2008 Performance Measure:

- Facilities under control per dollar of program cost (**program cost=permit Costs + base Program Appropriations**) [PART efficiency-under development]

Database: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database which supports EPA's RCRA program and provides information on facilities under control.

Costs by the permittee are estimated through the annual cost estimates contained in the Information Collection Requests (ICR) supporting statements relevant to the RCRA Base Program. ICRs are contained in the Federal Docket Management System. Base program appropriation information is maintained in the Budget Automation System (BAS).

Data Source: The Office of Solid Waste develops ICRs and ensures they have active ICRs approved by the OMB for all of their RCRA permitting and base program information collection activities. The Budget Automation System (BAS) automates EPA's budget processes, including planning, budgeting, execution, and reporting. Budget data is entered at a general level by offices and regions or by the Office of the Chief Financial Officer (OCFO).

Methods, Assumptions and Suitability:

Numerator – Facilities under control is an outcome based measure as permits or similar mechanisms are not issued until facilities have met standards or permit conditions that are based on human health or environmental standards. Under the corresponding performance measure, 95% of facilities are to be under control by 2008.

Denominator – The denominator is the sum of two costs. The first is permitting costs based on Information Collection Requests for the base RCRA program. The costs will take into account recent rulemakings, including the Burden Reduction Rulemaking (published April 2006), which will impact program expenditures. The costs will also take into account one time costs associated with first year implementation.

The second program cost in the denominator is the input of a three year rolling average appropriation for Environmental Programs and Management (EPM) and State Tribal and Grant (STAG) program. Corrective action programs costs will not be included but will be addressed in a separate efficiency measure. A rolling average of appropriations is more appropriate since some of the facility controls depend upon past resources. Issuance time for a permit, for example, can exceed one year with public hearings and appeals. The cumulative number of facilities with controls in place is appropriate (rather than a single year's increment) because the appropriations are used to maintain facilities that already have controls in place (e.g. inspections and permit renewals) as well as to extend the number of facilities with controls.

QA/QC Procedures: QA/QC of the ICR costs is based on internal and external review of the data. BAS data undergoes quality assurance and data quality review through the Chief Financial Officer.

Data Quality Review: None.

Data Limitations: The data sources for the program costs identified in the denominator of the measure include all of the RCRA base program appropriations (e.g. RCRA Subtitle D program implementation) and not just costs for permitting. Accordingly, the measure cannot be compared with other similar government programs. After the 2008 facilities under control goal is attained, EPA will recalculate the efficiency measure taking into account the new long-term 2011 goal which includes both new permits and permit renewals.

Error Estimate: N/A. Currently OSW does not collect data on estimated error rates.

New/Improved Data or Systems: As the measure is short term and likely to be applied only for the next two years, no new efforts to improve the data or methodology have been identified.

References: Federal Document Management System www.regulations.gov; Budget Automation Management System

FY 2008 Performance Measures:

- Number of tribes covered by an adequate and recently-approved integrated solid waste management plan
- Number of closed, cleaned-up or upgraded open dumps in Indian Country and on other Tribal lands

Performance Database: The Indian Health Service, in partnership with EPA's regional offices and the Office of Solid Waste, reports the annual data to support these measures.

Data Source: OSW and the Indian Health Service are co-sponsors of the Tribal Solid Waste Interagency Workgroup. The formation of this workgroup resulted from the 1998 *Report to Congress* on open dumps on Indian Lands. The Indian Health Service was tasked to identify the high threat sites in need of upgrade or closure, and report the information to the WSTARS Database. The member tribal data are extrapolated to generate a national statistic.

Methods, Assumptions and Suitability: The Tribal Solid Waste Interagency Workgroup's Tribal Solid Waste Management Assistance Project is a national program that began in 1999 to increase the number of tribes covered by an adequate and recently-approved integrated waste management plan, and to close, clean -up, or upgrade open dumps in Indian country and on other tribal lands.

The latest EPA and IHS annual data show that an annual, incremental rate will allow the tribes to reach the goals established by 2011.

QA/QC Procedures: The IHS WSTARS data are reported voluntarily by federally recognized tribal members. Quality assurance and quality control are provided by internal procedures of the IHS WSTARS reporting process.

Data Quality Review: The data are reviewed by the EPA and IHS for data quality. The data are considered to be accurate on a national scale.

Data Limitations: The WSTARS contains data pertaining to the open dumps and solid waste management plans of the federal recognized tribal members. The WSTARS membership comprises all of the 562 federally recognized tribes of the United States. Because the data may be limited in certain regions of the country, extrapolations to a national statistic may be inaccurate.

Error Estimate: N/A. Currently, the Office of Solid Waste (OSW) does not collect data on estimated error rates.

New/Improved Data or Systems: No new efforts to gather different or additional data are contemplated at this time.

References: The IHS, WSTARS data are available from the HIS website at www.ihs.gov.

GOAL 3 OBJECTIVE 2

FY 2008 Performance Measures:

- **Number of inspections and exercises conducted at oil storage facilities required to have Facility Response Plans**
- Gallons of oil spilled to navigable waters per million program dollars spent annually on prevention and preparedness at FRP facilities [PART efficiency]
- Percentage of inspected facilities subject to SPCC regulations found to be in compliance. [PART performance]
- Percentage of inspected facilities subject to FRP regulations found to be in compliance. [PART performance]

Performance Database: The EPA Annual Commitment System (ACS) in BAS is the database for the number of inspections/exercises at SPCC and FRP facilities. Using data submitted directly by Regional staff as well as data in ACS, Office of Emergency Management (OEM) tracks in a spreadsheet national information about Regional activities at FRP facilities. Data about gallons of oil spilled are maintained in a National Response Center (NRC) database that reflects information reported to the NRC by those responsible for individual oil spills.

Data Source: Data concerning inspections/exercises at FRP and SPCC facilities are provided by Regional staff. Data concerning gallons of oil spilled to navigable waters are gathered from the publicly available National Response Center database. Data about program expenditures are provided by EPA HQ and Regional staff.

Methods, Assumptions and Suitability: The spill/exercise data are entered by Regional staff experienced in data entry. In every case, direct data (rather than surrogates open to interpretation) are entered.

QA/QC Procedures: Data are regularly compared to similar data from the past to identify potential errors.

Data Quality Reviews: EPA regularly reviews recent data, comparing them to data gathered in the past at similar times of year and in the same Regions. Any questionable data are verified by direct contact with the Regional staff responsible for providing the data.

Data Limitations: The NRC data will reflect the extent to which those responsible for oil spills accurately report them to the NRC.

Error Estimate: Data reported by the Regions should be relatively free of error. There may be some error in the NRC data, due to the fact that some spills might not be reported and/or some spills might be reported by more than one person. NRC and EPA procedures should identify multiple reports of the same spill, but it is not usually possible to identify an unreported spill.

New/Improved Data or Systems: There are no current plans to develop a dedicated system, to manage the various data.

References: For additional information on the Oil program, see www.epa.gov/oilspill

FY 2008 Performance Measure:

- Average state of emergency response readiness as determined by readiness criteria

Performance Database: No specific database has been developed. Data from evaluations from each of the 10 Regions are tabulated and stored using standard software (WordPerfect, spreadsheets, etc.).

Data Source: Data are collected through detailed surveys of all Regional programs, and interviews with personnel and managers in each program office. The score represents a composite based upon data from each unique Regional and headquarters organization. Annual increments represent annual improvements. The survey instrument was developed based upon Core Emergency Response (ER) elements, and has been approved by EPA Headquarters and Regional managers. Core ER elements cover all aspects of the Core ER program, including Regional Response Centers, transportation, coordination with backup Regions, health and safety, delegation and warrant authorities, response readiness, response equipment, identification clothing, training and exercises, and outreach.

While EPA is currently prepared to respond to chemical, biological, and radiological incidents, improvement in the emergency response and homeland security readiness measure will demonstrate an increased ability to respond quickly and effectively to national-scale events. The

FY 2008 Core ER target is to improve emergency response and homeland security readiness by 10 points from the FY 2007 baseline performance.

Methods, Assumptions and Suitability: The Core ER elements were developed over the last several years by the EPA Removal Program to identify and clarify what is needed to ensure an excellent emergency response program. The elements, definitions, and rationales were developed by staff and managers and have been presented to the Administrator and other high level Agency managers. Based on the Core ER standards, evaluation forms and criteria were established for EPA's Regional programs, the Environmental Response Team (ERT), and Headquarters. These evaluation criteria identify what data need to be collected, and how that data translate into an appropriate score for each Core ER element. The elements and evaluation criteria will be reviewed each year for relevance to ensure that the programs have the highest standards of excellence and that the measurement clearly reflects the level of readiness. The data are collected from each Regional office, ERT, and Headquarters using a systematic, objective process. Each evaluation team consists of managers and staff, from Headquarters and possibly from another EPA Regional office, with some portion of the team involved in all reviews for consistency and some portion varying to ensure independence and objectivity. For instance, a team evaluating Region A might include some or all of the following: a staff person from Headquarters who is participating in all reviews, a staff person from Headquarters who is very familiar with Region A activities, a manager from Headquarters, and a staff person and/or manager from Region B. One staff or group will be responsible for gathering and analyzing all the data to determine the overall score for each Regional office, ERT, and Headquarters, and for determining an overall National score.

QA/QC Procedures: See "Methods, Assumptions and Suitability".

Data Quality Review: The evaluation team will review the data (see Methods, Assumptions and Suitability) during the data collection and analysis process. Additional data review will be conducted after the data have been analyzed to ensure that the scores are consistent with the data and program information. There currently is no specific database that has been developed to collect, store, and manage the data.

Data Limitations: One key limitation of the data is the lack of a dedicated database system to collect and manage the data. Standard software packages (word processing, spreadsheets) are used to develop the evaluation criteria, collect the data, and develop the accompanying readiness scores. There is also the possibility of subjective interpretation of data.

Error Estimate: It is likely that the error estimate for this measure will be small for the following reasons: the standards and evaluation criteria have been developed and reviewed extensively by Headquarters and EPA's Regional managers and staff; the data will be collected by a combination of managers and staff to provide consistency across all reviews plus an important element of objectivity in each review; the scores will be developed by a team looking across all ten Regions, ERT, and Headquarters; and only twelve sets of data will be collected, allowing for easier cross-checking and ensuring better consistency of data analysis and identification of data quality gaps.

New/Improved Data or Systems: There are no current plans to develop a dedicated system to manage the data.

References: FY 2004/2005 Superfund Program Implementation Manual (SPIM), <http://www.epa.gov/superfund/action/process/pdfs/appdxb3p1.pdf>.

FY 2008 Performance Measures:

- **Number of final Superfund site assessment decisions** [PART performance]
- **Superfund sites with human health protection achieved** [PART performance]
- **Superfund sites with contaminated groundwater migration under control** [PART performance]
- **Annual number of Superfund sites with remedy construction completed** [PART performance]
- **Number of Superfund sites that are site wide ready for reuse**
- **Human exposures under control per million dollars obligated** [PART efficiency]
- **Superfund Federal Facilities Response dollars obligated annually per operable units completing construction** [PART efficiency]
- **Voluntary removal actions overseen by EPA and completed annually** [PART performance]
- **Superfund-lead removal actions completed annually** [PART performance]
- **Superfund-lead removal actions completed annually per million dollars** [PART efficiency]
- **Number of Federal Facility Superfund sites where all remedies have completed construction** [PART]
- **Number of Federal Facility Superfund sites where the final remedial decision for contaminants at the site has been determined** [PART]
- **Program dollars expended annually per operable unit completing clean-up activities** [PART efficiency]

Performance Database: The Comprehensive Environmental Response, Compensation, and Liability System (CERCLIS) is the database used by the Agency to track, store, and report Superfund site information.

Data Source: CERCLIS is an automated EPA system; headquarters and EPA's Regional offices enter data into CERCLIS on a rolling basis. The Integrated Financial Management System (IFMS) is EPA's financial management system and the official system of record for budget and financial data.

Methods, Assumptions and Suitability: Each performance measure is a specific variable within CERCLIS, except for the financial information.

IFMS contains records of all financial transactions (e.g., personnel, contracts, grants, other) of Superfund appropriation resources, as distinguished by U.S. Treasury schedule codes. Procurement data are entered manually into IFMS by Funds Control Officers throughout the

Agency. Site-specific obligations are distinguished through the Site/Project field of the IFMS account number that is assigned to every financial transaction.

Total annual obligations include current and prior year appropriated resources, excluding Office of Inspector General (OIG) and Science and Technology transfers. Obligation data are generated using the OCFO Reporting and Business Intelligence Tool (ORBIT), the Agency's system for evaluating IFMS data. Site-specific obligation data are derived using query logic that evaluates the Site/Project field of the IFMS account number. For a given fiscal year, the percentage of appropriated resources that is obligated site-specifically is the result of dividing site-specific annual obligations by total annual obligations.

QA/QC Procedures: To ensure data accuracy and control, the following administrative controls are in place: 1) Superfund Program Implementation Manual (SPIM), the program management manual that details what data must be reported; 2) Report Specifications, which are published for each report detailing how reported data are calculated; 3) Coding Guide, which contains technical instructions to such data users as Regional Information Management Coordinators (IMCs), program personnel, report owners, and data input personnel; 4) Quick Reference Guides (QRG), which are available in the CERCLIS Documents Database and provide detailed instructions on data entry for nearly every module in CERCLIS; 5) Superfund Comprehensive Accomplishment (SCAP) Reports within CERCLIS, which serve as a means to track, budget, plan, and evaluate progress towards meeting Superfund targets and measures; (6) a historical lockout feature in CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a Change Log report. Specific direction for these controls is contained in the Superfund Program Implementation Manual (SPIM) Fiscal Year 2006/2007 (<http://www.epa.gov/superfund/action/process/spim06.htm>).

CERCLIS operation and further development is taking place under the following administrative control quality assurance procedures: 1) Office of Environmental Information Interim Agency Life Cycle Management Policy Agency Directive 2100.4 (<http://cfint1.rtpnc.epa.gov/ntsdweb/otop/policies/infoman.cfm>); 2) the Office of Superfund Remediation and Technology Innovation Quality Management Plan (http://www.epa.gov/swerffrr/pdf/oswer_qmp.pdf) 3) Agency platform, software and hardware standards (<http://basin.rtpnc.epa.gov/ntsd/itroadmap.nsf>); 4) Quality Assurance Requirements in all contract vehicles under which CERCLIS is being developed and maintained (<http://www.epa.gov/quality/informationguidelines>); and 5) Agency security procedures (<http://basin.rtpnc.epa.gov/ntsd/ITRoadMap.nsf/Security?OpenView>). In addition, specific controls are in place for system design, data conversion and data capture, and CERCLIS outputs.

The financial data are compliant with the Federal Managers Financial Integrity Act (FMFIA) of 1982 and received FY 2005 FMFIA certification

Data Quality Reviews: Two audits, one by the Office Inspector General (OIG) and the other by Government Accountability Office (GAO), were conducted to assess the validity of the data in CERCLIS. The OIG audit report, *Superfund Construction Completion Reporting* (No. E1SGF7_05_0102_8100030), dated December 30, 1997, was prepared to verify the accuracy of the information that the Agency was providing to Congress and the public. The OIG report

concluded that the Agency “has good management controls to ensure accuracy of the information that is reported,” and “Congress and the public can rely upon the information EPA provides regarding construction completions.” Further information on this report is available at <http://www.epa.gov/oigearth/eroom.htm>. The GAO’s report, *Superfund: Information on the Status of Sites* (GAO/RCED-98-241), dated August 28, 1998, was prepared to verify the accuracy of the information in CERCLIS on sites’ cleanup progress. The report estimates that the cleanup status of National Priority List (NPL) sites reported by CERCLIS as of September 30, 1997, is accurate for 95 percent of the sites. Additional information on the *Status of Sites* may be obtained at <http://www.gao.gov/archive/1998/rc98241.pdf>. Another OIG audit, *Information Technology - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Data Quality* (Report No. 2002-P-00016), dated September 30, 2002, evaluated the accuracy, completeness, timeliness, and consistency of the data entered into CERCLIS. The report provided 11 recommendations to improve controls for CERCLIS data quality. EPA concurred with the recommendations contained in the audit, and many of the identified problems have been corrected or long-term actions that would address these recommendations continue to be underway. Additional information about this report is available at <http://www.epa.gov/oigearth/eroom.htm>.

The IG reviews annually the end-of-year Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) data, in an informal process, to verify the data supporting the performance measures. Typically, there are no published results.

The Quality Management Plan (QMP) for the Office of Solid Waste and Emergency Response (OSWER) was signed in August 2003 (http://www.epa.gov/swerffrr/pdf/oswer_qmp.pdf).

EPA received an unqualified audit opinion by the OIG for the annual financial statements, and the auditor recommended several corrective actions. All recommendations have been implemented by Office of the Chief Financial Officer in IFMS.

Data Limitations: Weaknesses were identified in the OIG audit, *Information Technology Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Data Quality* (Report No. 2002-P-00016), dated September 30, 2002. The Agency disagreed with the study design and report conclusions; however, the report provided 11 recommendations with which EPA concurred and either implemented or continues to implement. These include: 1) FY 02/03 SPIM Chapter 2 update was improved to define the Headquarters’ and Regional roles and responsibilities for maintaining planning and accomplishment data in ERCLIS; 2) language was added to the FY 04/05 SPIM Appendix A, Section A.A.5 ‘Site Status Indicators’ to clarify the use of the non-NPL status code of “SX”; 3) a data quality section was added to the FY 04/05 SPIM Appendix A, Section A.A.6 ‘Data Quality’; 4) FY 04/05 SPIM Appendix E, Section E.A.5 “Data Owners/Sponsorship” was revised to reflect what data quality checks (focus data studies) will be done by designated Regional and headquarters staff; 5) a data quality objectives supplement for GPRA measures was added in Change 6 to this SPIM. For changes implemented due to this OIG audit, see the Change Log for this SPIM at <http://www.epa.gov/superfund/action/process/pdfs/changelog6.pdf>; The development and implementation of a quality assurance process for CERCLIS data continues. This process

includes delineating data quality objectives for GPRA targets, program measures, and regional data. The Agency has begun reporting compliance with the current data quality objectives.

Error Estimate: The GAO's report, *Superfund: Information on the Status of Sites* (GAO/RECD-98-241), dated August 28, 1998, estimates that the cleanup status of National Priority List sites reported by CERCLIS is accurate for 95 percent of the sites. The OIG report, *Information Technology - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Data Quality* (Report No. 2002-P-00016), dated September 30, 2002, states that over 40 percent of CERCLIS data on site actions reviewed was inaccurate or not adequately supported. Although the 11 recommendations were helpful and improved some controls over CERCLIS data, the Agency disagreed and strongly objected to the study design and report conclusions.

New/Improved Data or Systems: A CERCLIS modernization effort, initiated in 2002, is complete. As a result of the modernization effort, CERCLIS has standards for data quality and each EPA Region's CERCLIS Data Entry Control Plan, which identifies policies and procedures for data entry, is reviewed annually. Data quality audit fields have been added to CERCLIS. EPA Headquarters has developed data quality audit reports and provided these reports to the Regions. These reports document data quality for timeliness, completeness, and accuracy as determined by the Superfund data sponsors to encourage and ensure high quality. The modernization effort has increased the availability of CERCLIS data via Superfund eFacts, a Superfund data mart which serves program managers in Headquarters and the Regions. In FY 2008, the program will continue its effort to improve its management of the program through the increased availability of timely and accurate technical information to Superfund's managers. In 2008, the Agency will work to increase utilization of CERCLIS data by incorporating additional remedy selection, risk, removal response, and community involvement data into CERCLIS.

The Business Process Reevaluation task in the modernization project has provided CERCLIS managers with a first step in an implementation evaluation. The document, which resulted from the evaluation, is being used as a valuable resource for scoping the future redesign of CERCLIS as well as the realignment of the database that will remove unnecessary data and add the new data fields that are necessary to manage the Superfund program today. The redesign is mandated to bring CERCLIS into the Agency's Enterprise Architecture. As part of OSRTI's effort to bring CERCLIS into the Agency's Enterprise Architecture all Regional databases have been moved to the National Computing Center in RTP. This is the first step in folding the Headquarters and Regional databases into one database. This move of the databases to RTP is being done without changing the application, by using a commercial off the shelf (COTS) software program to enable the Regional data entry staff to input data over the Agency's Wide Area Network. The initial step of moving the databases to RTP and moving all users to the COTS software has been completed. The move to a single database will be completed during FY 2006 and implemented in FY 2007. The Superfund Document Management System (SDMS) will be linked to CERCLIS. This linkage will enable users to easily transition between programmatic accomplishments reporting and the actual document that defines and describes the accomplishment reported in CERCLIS. The effort to link SDMS and CERCLIS and to consolidate the systems will lead to common reporting (same events and data) in CERCLIS and SDMS. This will be done by electronically extracting data from the documents in SDMS to fill

the data fields in CERCLIS - eliminating the manual data entry/human error impacts.

In an effort to better facilitate and capture important Superfund data, a new Five-Year Review Module was released in CERCLIS in June 2006. In addition, a new Reuse/Acreage Module is currently planned on being released in CERCLIS in June of 2007.

EPA plans to replace IFMS with a new system in FY 2008.

References: OIG audit *Superfund Construction Completion Reporting*, (No. E1SGF7_05_0102_8100030) and *Information Technology - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Data Quality*, (No. 2002-P-00016, <http://www.epa.gov/oigearth/erom.htm>); and the GAO report, *Superfund Information on the Status of Sites* (GAO/RCED-98-241, <http://www.gao.gov/archive/1998/rc98241.pdf>). The Superfund Program Implementation Manuals for the fiscal years 1987 to the current manual (<http://www.epa.gov/superfund/action/guidance/index.htm>). The Quality Management Plan (QMP) for the Office of Solid Waste and Emergency Response (August 2003, http://www.epa.gov/swerffrr/pdf/oswer_qmp.pdf). Office of Environmental Information Interim Agency Life Cycle Management Policy Agency Directive 2100.4 (<http://cfint1.rtpnc.epa.gov/ntsdweb/otop/policies/infoman.cfm>). The Office of Superfund Remediation and Technology Innovation Quality Management Plan (http://www.epa.gov/swerffrr/pdf/oswer_qmp.pdf). EPA platform, software and hardware standards (<http://basin.rtpnc.epa.gov/ntsd/itroadmap.nsf>). Quality Assurance Requirements in all contract vehicles under which CERCLIS are being developed and maintained (<http://www.epa.gov/quality/informationguidelines>). EPA security procedures (<http://basin.rtpnc.epa.gov/ntsd/ITRoadMap.nsf/Security?OpenView>).

FY 2005 FMFIA Certification

2004 Audited Financial Statements, see <http://www.epa.gov/oig/reports/financial.htm>

OIG Audit "EPA Needs to Improve Change Controls for Integrated Financial Management System" dated August 24, 2004 (2004-P-00026)

FY 2008 Performance Measures:

- **Percentage of RCRA CA facilities with current human exposures under control** [PART performance]
- **Percentage of RCRA CA facilities with migration of contaminated groundwater under control** [PART performance]
- Percentage of RCRA construction completions
- Percent increase of final remedy components constructed at RCRA CA facilities per federal, state, and private sector dollars per year [PART efficiency]

Performance Database: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database that supports EPA's RCRA program.

Data Source: The states and Regions enter data. A “High”, “Medium”, or “Low” entry is made in the database with respect to final assessment decision. A “yes” or “no” entry is made in the database with respect to meeting the human exposures to toxins controlled and releases to groundwater controlled indicators. An entry will be made in the database to indicate the date when a remedy is selected and the complete construction of a remedy is made. Supporting documentation and reference materials are maintained in the Regional and state files. EPA’s Regional offices and authorized states enter data on a continual basis. For the efficiency measure, federal and state cost data are assembled from their respective budgets. Private sector costs are derived from data published in the Environmental Business Journal.

Methods, Assumptions and Suitability: RCRAInfo contains information on entities (generically referred to as “handlers”) engaged in hazardous waste (HW) generation and management activities regulated under the portion of RCRA that provides for regulation of hazardous waste. Within RCRAInfo, the Corrective Action Module tracks the status of facilities that require, or may require, corrective actions, including information related to the four measures outlined above. Performance measures are used to summarize and report on the facility-wide environmental conditions at the RCRA Corrective Action Program’s highest-priority facilities. The environmental indicators are used to track the RCRA Corrective Action Program’s progress in getting highest-priority contaminated facilities under control. Known and suspected facility-wide conditions are evaluated using a series of simple questions and flow-chart logic to arrive at a reasonable, defensible determination. These questions were issued as a memorandum titled: *Interim Final Guidance for RCRA Corrective Action Environmental Indicators, Office of Solid Waste, February 5, 1999*. Lead regulators for the facility (authorized state or EPA) make the environmental indicator determination, but facilities or their consultants may assist EPA in the evaluation by providing information on the current environmental conditions. The complete constructions of remedies measure is used to track the RCRA program’s progress in getting its highest-priority contaminated facilities moving towards final cleanup. Like with the environmental indicators determination, the lead regulators for the facility select the remedy and determine when the facility has completed construction of that remedy. Construction completions are collected on both an area-wide and site-wide basis for sake of the efficiency measure.

QA/QC Procedures: States and Regions generate the data and manage data quality related to timeliness and accuracy (i.e., the environmental conditions and determinations are correctly reflected by the data). Within RCRAInfo, the application software enforces structural controls that ensure that high-priority national components of the data are properly entered. RCRAInfo documentation, which is available to all users on-line, provides guidance to facilitate the generation and interpretation of data. Training on use of RCRAInfo is provided on a regular basis, usually annually, depending on the nature of systems changes and user needs.

Note: Access to RCRAInfo is open only to EPA Headquarters, Regional, and authorized state personnel. It is not available to the general public because the system contains enforcement sensitive data. The general public is referred to EPA’s Envirofacts Data Warehouse to obtain filtered information on RCRA-regulated hazardous waste facilities.

Data Quality Review: GAO’s 1995 Report on EPA’s Hazardous Waste Information System

(http://www.access.gpo.gov/su_docs/fdlp/pubs/study/studyhtm.html) reviewed whether national RCRA information systems support EPA and the states in managing their hazardous waste programs. Recommendations coincide with ongoing internal efforts (WIN/Informed) to improve the definitions of data collected, ensure that data collected provide critical information and minimize the burden on states. EPA's Quality Staff of the Office of Environmental Information conducted a quality systems audit in December 2003. The audit found the corrective action program satisfactory.

Data Limitations: No data limitations have been identified for the performance measures. As discussed above, the performance measure determinations are made by the authorized states and EPA Regions based on a series of standard questions and entered directly into RCRAInfo. EPA has provided guidance and training to states and Regions to help ensure consistency in those determinations. High priority facilities are monitored on a facility-by-facility basis and the QA/QC procedures identified above are in place to help ensure data validity. For the efficiency measure, private sector costs are not publicly available. Estimates of these costs are derived from Environmental Business Journal data.

Error Estimate: N/A. Currently, the Office of Solid Waste does not collect data on estimated error rates.

New/Improved Data or Systems: EPA has successfully implemented new tools for managing environmental information to support federal and state programs, replacing the old data systems (the Resource Conservation and Recovery Information System and the Biennial Reporting System) with RCRAInfo. RCRAInfo allows for tracking of information on the regulated universe of RCRA hazardous waste handlers, such as facility status, regulated activities, and compliance history. The system also captures detailed data on the generation of hazardous waste from large quantity generators and on the waste management practices of treatment, storage, and disposal facilities. RCRAInfo is web-accessible, providing a convenient user interface for federal, state and local managers, encouraging development of in-house expertise for controlled cost, and using commercial off-the-shelf software to develop reports from database tables.

References: GAO's 1995 Report on EPA's Hazardous Waste Information System reviewed whether national RCRA information systems support EPA and the states in managing their hazardous waste programs. This historical document is available on the Government Printing Office Website (http://www.access.gpo.gov/su_docs/fdlp/pubs/study/studyhtm.html).

FY 2008 Performance Measures:

- **Number of cleanups that meet state risk-based standards for human exposure and groundwater migration.** (Tracked as: Number of leaking underground storage tank cleanups completed.) [PART performance]
- **Number of cleanups that meet risk-based standards for human exposure and groundwater migration in Indian country.** (Tracked as: Number of leaking underground storage tank cleanups completed in Indian Country.) [PART performance]

- **Cleanups complete (3-year rolling average) per total cleanup dollars.** (from public and private sector) [PART efficiency-under development]

Performance Database: The Office of Underground Storage Tanks (OUST) does not maintain a national database. States individually maintain records for reporting state program accomplishments.

Data Source: Designated State agencies submit semi-annual progress reports to the EPA regional offices. The Agency is working to evaluate and update its current LUST efficiency measure with its state partners.

Methods, Assumptions and Suitability: The cumulative number of confirmed releases where cleanup has been initiated and where the state has determined that no further actions are currently necessary to protect human health and the environment, includes sites where post-closure monitoring is not necessary as long as site specific (e.g., risk based) cleanup goals have been met. Site characterization, monitoring plans and site-specific cleanup goals must be established and cleanup goals must be attained for sites being remediated by natural attenuation to be counted in this category. (See <http://www.epa.gov/OUST/cat/pm032603.pdf>.)

QA/QC Procedures: EPA's regional offices verify and then forward the data in an Excel spreadsheet to OUST. OUST staff examine the data and resolve any discrepancies with the regional offices. The data are displayed in an Excel spreadsheet on a region-by-region basis, which is a way regional staff can check their data.

Data Quality Review: None.

Data Limitations: Data quality depends on the accuracy and completeness of state records.

Error Estimate: N/A

New/Improved Data or Systems: None

References: FY 2006 Mid-Year Activity Report, June 20, 2006 (updated semiannually); *FY 2006 End-of-Year Activity Report*, from Cliff Rothenstein, Director, Office of Underground Storage Tanks to UST/LUST Regional Division Directors, Regions 1-10, dated November 14, 2006, http://www.epa.gov/swerust1/cat/ca_06_34.pdf

GOAL 3 OBJECTIVE 3

FY 2008 Performance Measures:

- **Refer to DOJ, settle, or writeoff 100% of Statute of Limitations (SOLs) cases for Superfund sites with total unaddressed past costs equal to or greater than \$200,000 and report value of costs recovered**
- **Percentage of Superfund sites at which settlement or enforcement action taken before the start of a remedial action (RA)**

Performance Database: The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database contains information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation. The database includes sites that are on the National Priorities List (NPL) or being considered for the NPL.

Data Source: Automated EPA system; Headquarters and EPA's Regional Offices enter data into CERCLIS

Methods, Assumptions and Suitability: There are no analytical or statistical methods used to collect the information. The performance data collected on a fiscal year basis only. Enforcement reports are run at the end of the fiscal year, and the data that support this measure are extracted from the report.

QA/QC Procedures: To ensure data accuracy and control, the following administrative controls are in place: 1) Superfund Program Implementation Manual (SPIM), the program management manual that details what data must be reported; 2) Report Specifications, which are published for each report detailing how reported data are calculated; 3) Coding Guide, which contains technical instructions to such data users as Regional Information Management Coordinators (IMCs), program personnel, report owners, and data input personnel; 4) Quick Reference Guides (QRG), which are available in the CERCLIS Documents Database and provide detailed instructions on data entry for nearly every module in CERCLIS; 5) Superfund Comprehensive Accomplishment (SCAP) Reports within CERCLIS, which serve as a means to track, budget, plan, and evaluate progress towards meeting Superfund targets and measures; (6) a historical lockout feature in CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a Change Log report. Specific direction for these controls is contained in the Superfund Program Implementation Manual (SPIM) Fiscal Year 2006/2007 (<http://www.epa.gov/superfund/action/process/spim06.htm>).

CERCLIS operation and further development is taking place under the following administrative control quality assurance procedures: 1) Office of Environmental Information Interim Agency Life Cycle Management Policy Agency Directive 2100.4 (<http://cfint1.rtpnc.epa.gov/ntsdweb/otop/policies/infoman.cfm>); 2) the Office of Superfund Remediation and Technology Innovation Quality Management Plan (http://www.epa.gov/swerffrr/pdf/oswer_qmp.pdf) 3) Agency platform, software and hardware standards (<http://basin.rtpnc.epa.gov/ntsd/itroadmap.nsf>); 4) Quality Assurance Requirements in all contract vehicles under which CERCLIS is being developed and maintained (<http://www.epa.gov/quality/informationguidelines>); and 5) Agency security procedures (<http://basin.rtpnc.epa.gov/ntsd/ITRoadMap.nsf/Security?OpenView>). In addition, specific controls are in place for system design, data conversion and data capture, and CERCLIS outputs.

Data Quality Review: The IG annually reviews the end-of-year CERCLIS data, in an informal process, to verify the data supporting the performance measure. Typically, there are no published results.

Data Limitations: None

Error Estimate: NA

New/Improved Data or Systems: None

References: Office of Site Remediation Enforcement (OSRE) Quality Management Plan, approved April 11, 2001. [Revised QMP submitted in August 2006, but not yet approved.]

FY 2008 Performance Measures:

- **Percentage of planned outputs delivered in support of the manage material streams, conserve resources and appropriately manage waste long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support of the mitigation, management and long-term stewardship of contaminated sites long-term goal (PART Measure)**

Performance Database: Integrated Resources Management System (internal database).

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: To provide an indication of progress towards achievement of the Land Preservation and Restoration Research Program's long-term goals, the Land program annually develops a list of key research outputs scheduled for completion by the end of each fiscal year. This list is finalized by the start of the fiscal year, and no changes are made after this point. The program then tracks quarterly the progress towards completion of these key outputs against pre-determined schedules and milestones. The final score is the percent of key outputs from the original list that are successfully completed on-time.

QA/QC Procedures: Procedures are now in place to require that all annual outputs be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Contaminated Sites Multi-Year Plan, available at: <http://www.epa.gov/osp/myc/csites.pdf> (last accessed on January 3, 2007)

Resource Conservation and Recovery Act (RCRA) Multi-Year Plan, available at: <http://www.epa.gov/osp/myc/rcra.pdf> (last accessed on January 3, 2007)

FY 2008 Performance Measure:

- **Average time (in days) for technical support centers to process and respond to requests for technical document review, statistical analysis and evaluation of characterization and treatability study plans. (Efficiency Measure)**

Performance Database: No internal tracking system.

Data Source: Data are generated based on self-assessments of progress in meeting customer needs.

Methods, Assumptions and Suitability: The dates of requests, due dates, response time, and customer outcome feedback will be tabulated for the Engineering, Ground Water, and Site Characterization Technical Support Centers.

QA/QC Procedures: N/A

Data Quality Reviews: N/A

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: N/A

GOAL 4 OBJECTIVE 1

FY 2008 Performance Measure:

- **Cumulative number of assays that have been validated. (PART Measure)**

Performance Database: Performance is measured by the cumulative number of assays validated. The completion of the validation process for an assay can take several years. Excel spreadsheets are used to capture and track various steps within the validation process in order to better show progress. As a result, in the FY 2006 PART review of EPA's Endocrine Disruptor Program, these steps within the validation process became individual PART measures: Detailed

Review Papers Completed, Prevalidation Studies Completed, Validation by Multiple Labs Completed, Peer Reviews, Assays Ready for Use.

Data Source: Data are generated to support all stages of validation of endocrine test methods through contracts, grants and interagency agreements, and the cooperative support of the Organization of Economic Cooperation and Development (OECD), and EPA's Office of Research and Development (ORD). The scope of the effort includes the conduct of laboratory studies and associated analyses to validate the assays proposed for the Endocrine Disruptor Screening Program (EDSP).

Methods, Assumptions and Suitability: The measures are program outputs which when finalized, help to ensure that EPA meets The Food Quality Protection Act of 1996 (FQPA) requirement that EPA validate assays to screen chemicals for their potential to affect the endocrine system.

QA/QC Procedures: EDSP's contractors operate independent quality assurance units (QAUs) to ensure that all studies are conducted under appropriate QA/QC programs. Two levels of QA/QC are employed. First, the contractors operate under a Quality Management Plan designed to ensure overall quality of performance under the contracts. Second, prevalidation and validation studies are conducted under a project-specific Quality Assurance Project Plans (QAPPs) developed by the contractor and approved by EPA. These QAPPs are specific to the study being conducted. Most validation studies are conducted according to Good Laboratory Practices (GLPs). In addition, EPA or its agent conducts an independent lab/QA audit of facilities participating in the validation program.

Data Quality Review: All of the documentation and data generated by the contractor, OECD and ORD, as it pertains to the EDSP, are reviewed for quality and scientific applicability. The contractor maintains a Data Coordination Center which manages information/data generated under EDSP. The contractor also conducts statistical analyses related to lab studies, chemical repository, and quality control studies.

Data Limitations: There is a data lag of approximately 9-24 months due to the variation in length and complexity of the lab studies, and for time required for review, analysis and reporting of data.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: EPA Website; EPA Annual Report; Endocrine Disruptor Screening Program Proposed Statement of Policy, Dec. 28, 1998; Endocrine Disruptor Screening and Testing Advisory Committee (EDSTAC) Final Report (EPA/743/R-98/003); EPA Contract # 68-W-01-023.

FY 2008 Performance Measure:

- **Million of dollars in termite structural damage avoided annually by ensuring safe and effective pesticides are registered/reregistered and available for termite treatment (PART measure)**

Performance Database: Baseline data on the number of owner-occupied structures is available from US Census Housing data. Estimates of the extent of termiticide use and termite-related damage are available from several industry and academic sources.

Data Source: Baseline data are derived from several sources, including U.S. Census data, surveys conducted by the pest control industry, and academic publications.

Methods, Assumptions and Suitability: This measure is representative of the explicit statutory mandate of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to ensure the availability of pesticides to permit their societal benefits. An important role of the National Pesticide Program is to prevent harm and preserve a level of public protection.

Pesticides are the primary means to treat or prevent termite infestation. These pesticides are not available for use to treat or prevent this problem unless the National Pesticide Program evaluates their safety and allows them into the marketplace through the Registration or Registration Review programs. Timely and effective licensing actions are required for homeowners to have access to the benefits of these pesticides and avoid the significant economic loss from termite structural damage.

Termites are one of the most economically important insect pests in the United States. More than 600,000 U.S. homes suffer termite damage every year. Homeowners insurance can help recover losses from fires, storms, and earthquakes, but it is almost impossible to carry insurance against termite infestation and damage. This measure will utilize data that estimate the number of homes that suffer termite-related damage on an annual basis, the value of this damage, the number and frequency of termiticide treatments, and an estimate of the number of treated homes that would have received termite damage absent the use of pesticide control measures.

Through this measure, the Agency will evaluate the extent of termiticide use to protect owner-occupied housing units, average termite damage on a per housing unit basis, and an estimate of the termite structural damage avoided as a result of having safe and effective termite control products available for use.

QA/QC Procedures: EPA adheres to its approved Quality Management Plan in ensuring the quality of the data used in this measure. Academic research undergoes strict peer-review prior to publication. The Agency will work with non-governmental providers of data to ensure that quality data are used in developing this measure.

Data Quality Reviews: Staff and management of the Office of Pesticide Programs will perform the data quality reviews under the leadership of our QA/QC officers.

Data Limitations: This measure continues to be refined. Currently available data were not collected for performance accountability purposes and may lack precision. Non-pesticide treatment actions may account for some structural damage avoided.

Error Estimate: Error estimates for established surveys are documented by these organizations in their survey reports.

New/Improved Data or Systems: This measure will utilize existing data as well as new data developed from industry and academic research.

References: U.S. Census Bureau data (www.census.gov/compendia/statab/files/house.html); Univ. of GA Entomology Dept, (www.ent.uga.edu/IPM/s100/household.htm); Natl. Pest Management Association. (www.pestworld.org/Database/Article.asp?ArticleID=34&UserType=]; “Arizona Termites of Economic Importance”, *Better Pest Control*, p.11, June 2005, University of Arizona, College of Agriculture and Life Sciences; “Termites: Are They Chewing Up Your Home?”, National Pest Management Association; Ipsos-Insight 2005 Survey for Dow Agro (www.dowagro.com/sentricon/termite-risk/facts.htm).

FY 2008 Performance Measure:

- **Billions of dollars in crop loss avoided by ensuring that effective pesticides are available to address pest infestations. (PART measure)**

Performance Database: To determine the value of potential crop loss avoided from the use of pesticides, baseline and future data are collected on crop market prices, crop production, total acres grown, acres treated with pesticides, and the percentage of crop yield loss avoided as a result of the use of pesticides.

Data Source: Baseline data on crop market prices, crop production, and total acres grown are from United States Department of Agriculture (USDA) databases, while the percentage of potential yield loss without pesticides is estimated by Biological and Economic Analysis Division (BEAD) scientists based on published and unpublished studies. The number of acres treated with the pesticides are based on data submitted by State Departments of Agriculture.

Methods, Assumptions and Suitability: The Agency will provide an estimate of the value of the potential crop loss avoided by growers from the use of registered pesticides. The method for estimating this value involves calculating the potential crop loss avoided based on the acres treated with the pesticides, per acre crop production and prices received, and potential yield without the pesticides. In an attempt to measure the magnitude of this potential crop loss avoided, the value is measured as a percent of state production in value and national production in value.

The pesticides selected for this measure will be the registered Section 3 pesticides which were previously Section 18 emergency use registrations. The data used in the analysis of the number of acres treated with the pesticides will be based on USDA databases and data submitted by the

State Agricultural Departments. The percentage of potential yield loss without the pesticides will be based on the review of published and unpublished efficacy studies by BEAD scientists.

The United States (U.S.) has a large cropland, productive soils, and a variety of favorable agricultural climates. These factors contribute to and enable the U.S. to be a uniquely large and productive agricultural producer. The value of agricultural crop production in the U.S. totaled \$200 billion¹⁵ in 2003. Major field crops in value are corn (\$21 billion), soybeans (\$15 billion), wheat (\$6 billion), and cotton (\$3.6 billion), while tomatoes (\$1.9 billion), apples (\$1.6 billion), and strawberries (\$1.2 billion) are major fruit/vegetable crops in value.

American agricultural production far outweighs domestic consumption and the U.S. is one of the World's largest agricultural exporters, worth approximately \$50 billion annually (one quarter of total U.S. agricultural crop production). In order to be competitive in the world market and to provide sufficient market supply for American consumers, U.S. farmers need to be able to use pesticides for pest control as long as they do not present significant risks to human health or the environment (USDA/ERS, 2004).

The goal for this measure is to develop long-term consistent and comparable information on the benefits of pesticide usage.

QA/QC Procedures: EPA adheres to its approved Quality Management Plan in ensuring the quality of the data derived from States, and USDA. The data used for the outcome measure is based on well-established QA/QC procedures found in [*Data Quality Assessment: A Reviewer's Guide*](#)² (QA/G-9R)² (PDF 61pp, 225K), <http://www.epa.gov/quality/dqa.html>, which provides guidance on assessing data quality criteria and performance specifications.

Data Quality Review: The measure will utilize USDA/NASS methods of collecting and analyzing data.

Data Limitations: This measure is under development. Data limitations will be characterized during developmental stages of the measure and a complete evaluation will be provided in the Agency's annual Performance and Accountability Report.

Error Estimate: USDA provides discussion of analytical methods and associated variability estimates in its chemical use publications. For example, see the Agricultural Chemical Distribution Tables section, Survey and Estimation Procedure section and Reliability section of the USDA publication Agricultural Chemical Usage 2005 Field Crops Summary (<http://usda.mannlib.cornell.edu/usda/nass/AgriChemUsFC//2000s/2006/AgriChemUsFC-05-17-2006.pdf>).

New/Improved Data or Systems: This measure will utilize existing data and data systems.

References:

USDA data sources include:

¹⁵ The value received by farmers was \$200 billion.

United States Department of Agriculture (USDA), National Agricultural Statistics Service (NASS). Agricultural Chemical Usage.

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1001>

United States Department of Agriculture (USDA), National Agricultural Statistics Service (NASS). Agricultural Statistics. <http://www.usda.gov/nass/pubs/agstats.htm>

FY 2008 Performance Measure:

- **Percent of urban watersheds that exceeds the National Pesticide Program aquatic life benchmarks for 3 pesticides of concern. (PART measure)**

Performance Database: Baseline data are obtained from the United States Geological Survey (USGS) National Water-Quality Assessment (NAWQA) program's 2006 report: Pesticides in the Nation's Streams and Ground Water, 1992-2001 (<http://ca.water.usgs.gov/pnsp/>). Future data will be compiled from future reports.

Data Source: Baseline data are derived from the USGS National Water-Quality Assessment (NAWQA) program's 2006 report: Pesticides in the Nation's Streams and Ground Water, 1992-2001. USGS is currently developing sampling plans for 2008 – 2017. Future data will be available from USGS as it is made available on public websites.

Methods, Assumptions and Suitability: Water quality is a critical endpoint for measuring exposure and risk to the environment. It is a high-level measure of our ability to reduce exposure from key pesticides of concern. This measure evaluates the reduction in water concentrations of pesticides as a means to protect aquatic life. Reduced water column concentration is a major indicator of the efficacy of risk assessment, risk management, risk mitigation and risk communication actions. It will illuminate program progress in meeting the Agency's strategic pesticide and water quality goals.

The goal is to develop long-term consistent and comparable information on the amount of pesticides in streams, ground water, and aquatic ecosystems to support sound management and policy decisions. USGS-NAWQA data can help inform EPA of the long-term results of its risk management decisions based on trends in pesticide concentrations. Recent USGS information indicates exceedences of aquatic life benchmarks in 18 to 40% of the urban and agricultural watersheds sampled. USGS is currently developing sampling plans for 2008 – 2017. Draft plans call for yearly monitoring in 8 agricultural watersheds; bi-yearly sampling in 3 agricultural dominated watersheds; and sampling every four years in a second set of 25 agricultural watersheds. The sampling frequency for these 36 agricultural sites will range from approximately 15 to 35 sites samples per year based on the watershed landuse class. The USGS has no plans in this time period for similar sampling in urban watersheds. Intermediate (2008 – 2010) goals will be refined when the USGS plan is finalized in late FY07.

QA/QC Procedures: EPA adheres to its approved Quality Management Plan in ensuring the quality of the data obtained from USGS. The data that will be used for the outcome measure is based on well-established QA-QC procedures in the USGS-NAWQA program

(<http://ca.water.usgs.gov/pnsp/rep/qcsummary/> and <http://water.usgs.gov/owq/FieldManual/index.html>).

Data Quality Review: The measure will utilize USGS NAWQA data. USGS is preeminent in the field of water quality sampling. Since 1991, the USGS NAWQA program has been collecting and analyzing data and information in major river basins and aquifers across the Nation. The program has undergone periodic external peer-review (<http://dels.nas.edu/water/monitoring.php>).

Data Limitations: This measure is under development. Data limitations will be characterized during developmental stages of the measure and a complete evaluation will be provided in the NAWQA 2011 “Cycle II” Study Report. EPA will request that USGS add additional insecticides to their sampling protocols to establish base line information for newer products that have been replacing the organophosphates (e.g., the synthetic pyrethroids).

Error Estimate: The USGS database provides estimates of analytical methods and associated variability estimates (<http://ga.water.usgs.gov/nawqa/data.qa.html>).

New/Improved Data or Systems: This measure will utilize existing data and data systems.

References: USGS National Water-Quality Assessment (NAWQA) program’s 2006 report: Pesticides in the Nation’s Streams and Ground Water, 1992-2001.

The NAWQA 2011 “Cycle II” Study Report does not exist at this time – the sampling is in progress, thus there is no citation at this time. USGS has not published their sampling plan. There will be a USGS report in the 2011 timeframe.

FY 2008 Performance Measure:

- **Percent reduction in moderate to severe incidents for six acutely toxic agricultural pesticides with the highest incident rate (PART measure)**

Performance Database: Most of the nation’s Poison Control Centers (PCCs) participate in a national data collection system known as the Toxic Exposure Surveillance System (TESS). Among the types of exposures reported are pesticide related exposures. The data collected include date of call, age, gender, location of exposure, route of exposure, substance exposed to, route of exposure, initial symptom assessment, treatment received and an evaluation of the medical outcome. Symptoms are categorized as minor, moderate, or major with criteria for each category.

Data Source: PCCs provide telephone consultation to individuals and health care providers. Most PPCs are operated by a hospital or university and in aggregate serve 70-80% of the U.S. population. Each case is a separate file that needs to be manually loaded into an EPA database prior to performing statistical analysis. Trend analysis of the reported incidents could reveal problem chemicals and the effects of previous actions taken.

Methods, Assumptions and Suitability: We assume resources will continue to be available for the Agency to purchase the data and that adequate resources will be available at the local level to continue to fund the centers. The reduction in poisoning incidents is expected to result from mitigation measures made during the reregistration, from greater availability of lower risk alternative products resulting from the Agency's reduce risk registration process, from the continued implementation of worker protection enforcement and training.

QA/QC Procedures: PCCs must be certified by the American Association of Poison Control Centers (AAPCC). To be certified a PPC must have a board certified physician on call at all times, have AAPCC certified specialists available to handle all calls, have a comprehensive file of toxicology information readily available, maintain Standard Operating Procedures (SOPs), keep records on all cases and have an ongoing quality assurance program. In addition, EPA staff screen each case before analyzing the data set.

Data Quality Review: EPA conducts regular case reviews and audits to assure quality assurance of data collected. Also, as mentioned above, EPA staff reviews each case before entering into its database.

Data Limitations: Because PCC participation is voluntary and the available resources vary from year to year, the data contains uncertainty.

Error Estimate: Because the incidents are self-reported, there is a potential bias in the data. However, there is no reason to believe that the bias will change from year to year

New/Improved Data or Systems: Not known at this time.

References: Poison Control Centers TESS (Toxic Exposure Surveillance System)
<http://www.aapcc.org/poison1.htm>

FY 2008 Performance Measure:

- **Incidents per 100,000 potential risk events in population occupationally exposed to pesticides (PART measure)**

Performance Database: Most of the nation's Poison Control Centers (PCCs) participate in a national data collection system known as the Toxic Exposure Surveillance System (TESS). Among the types of exposures reported are pesticide related exposures in both residential and occupational settings. The data collected include date of call, age, gender, location of exposure, route of exposure, substance exposed to, initial symptom assessment, treatment received and an evaluation of the medical outcome. Symptoms are categorized as minor, moderate, or major with standard criteria for each category.

Data Sources:

Health Incident Data:

Poison Control Centers' Toxic Exposure Surveillance System (PCC/TESS)

The Association of American Poison Control Centers (AAPCC) began collecting data for the purpose of identifying the leading hazards to humans from poisoning and to provide resources for the management of these exposures. Currently, the PCCs service approximately 98% of the nation.

Poison Control Centers are usually run by a hospital or university. Approximately 99% of the nation's Poison Control Centers (PCCs) send incident data to the Toxic Exposure Surveillance System (TESS). The national data collection system started in 1983. Each PCC receives a minimum of 10,000 calls annually. About 13% of calls are from health care providers treating patients and 87% of calls are from individuals who need assistance in managing an exposure to poison. From 1993-1996, 92% of reported exposures occurred in a residential setting. PCC collects data on exposures to any substance and pesticide poisonings make up about 3% of all cases. PCCs submit data to TESS 2 to 4 times per year.

Data from the PCC/TESS database will be used for the numerator.

The denominator number is calculated from several sources: Department of Labor's Bureau of Labor Statistics, which captures employment characteristics for the national workforce. The estimate of agricultural field workers is from the Department of Labor's National Agricultural Workers Survey; The denominator also uses EPA/OPP's annual report of Certified Applicators, and an estimate for the number of field entries by farmworkers from the 1992 Regulatory Impact Analysis for the Agricultural Worker Protection Standard.

Methods, Assumptions and Suitability: Trend analysis of the reported incidents could reveal problem chemicals and the effects of previous actions taken.

Calculation Description:

For the Numerator :

Universe of Occupationally Exposed Individuals:

- | | |
|--|------------|
| 1. Certified Applicators = | 1,100,000 |
| 2. "Under the Supervision" Applicators (Assume 4 X CA) = | 4,000,000 |
| 3. Other Occupational Pesticide Users = | 2,500,000* |

* = Bureau of Labor Statistics calculates there are 50,000,000 employees in non-agricultural fields that we believe utilize pesticides as part of their business (e.g., healthcare support; food preparation; building & grounds cleaning & maintenance; production; etc.). We assume that 5% of those employees apply pesticides.

- | | |
|-------------------------------|-----------|
| 4. Agricultural Farmworkers = | 1,800,000 |
|-------------------------------|-----------|

Potential Pesticide Risk Events:

For occupational users (Groups #1 - 3 above), we assume every pesticide application has the potential to create a pesticide incident with adverse health effects. We conservatively estimate each individual in those groups makes 4 pesticide applications per year. Therefore,

7,600,000 occupational users X 4 applications/year = 30,400,000 Potential Pesticide Risk Events/Year

Agricultural Farmworkers spend an average of 105 days/year in the field (1992 Regulatory Impact Analysis for the Agricultural Worker Protection Standard). We assume that 5% of field entries present potential risk from pesticide exposure. Therefore,

105 days per/year X 5% = 5.25 Potential Pesticide Risk Events/Year/Farmworker
5.25 X 1,800,000 Ag Farmworkers = 9,450,000 Potential Pesticide Risk Events/Year

30,400,000 + 9,450,000 = 39,850,000 Total Potential Pesticide Risk Events/Year

Occupational Pesticide Incidents:

The Poison Control Centers' Toxic Exposure Surveillance System recorded there were an average of 1388 occupational pesticide incidents with adverse health impacts in 2001 – 2003, the most recent data available.

RATE OF INCIDENTS PER POTENTIAL PESTICIDE RISK EVENTS PER YEAR

$\frac{1388 \text{ occupational pesticide incidents per}}{39,850,000 \text{ potential pesticide risk events/year}}$	=	$\frac{3.5 \text{ incidents per } 100,000}{\text{potential pesticide risk events/year}}$
---	---	--

QA/QC Procedures: PCCs must be certified by the American Association of Poison Control Centers (AAPCC). To be certified a PPC must have a board certified physician on call at all times, have AAPCC certified specialists available to handle all calls, have a comprehensive file of toxicology information readily available, maintain SOPs, keep records on all cases and have an ongoing quality assurance program.

Data Quality Review: For the incident data, regular case reviews and audits are scheduled to assure quality assurance of data collected by the Poison Centers. All data in the TESS system is subject to quality assurance requirements, including occupational incidents.

Data Limitations: The data in PCC/TESS originates from the public or health-care providers voluntary communications to the PCCs. Some number of pesticide-induced illnesses go unreported due to difficulty in diagnosis, symptoms that are non-specific to pesticides, and the fact that the public may not report. The under-reporting is considered a self-reporting bias.

The denominator data for non-agricultural workers is from 2004; more recent BLS data are not available.

Error Estimate: The number of potential risk events/year is most likely underestimated, because we used conservative estimates in estimating the potential number of events. For example, we estimated only 4 applications per year per individual which is likely to be a very low estimate.

New/Improved Data or Systems: Not known at this time.

References:

American Association of Poison Control centers: <http://www.aapcc.org/poison1.htm>

Department of Labor's National Agricultural Workers Survey:

<http://www.dol.gov/asp/programs/agworker/naws.htm>

Department of Labor's Bureau of Labor Statistics: Occupational Employment and Wages, November 2004: http://www.bls.gov/news.release/archives/ocwage_11092005.pdf

EPA/OPP's annual report of Certified Applicators:

<http://www.epa.gov/oppfead1/safety/applicators/data.htm>

1992 Regulatory Impact Analysis for the Agricultural Worker Protection Standard

FY 2008 Performance Measure:

- **Reduced cost per pesticide occupational incident avoided (PART efficiency)**

Performance Database:

Health Incident Data

Poison Control Centers' Toxic Exposure Surveillance System (PCC/TESS)

The Association of American Poison Control Centers (AAPCC) began collecting data for the purpose of identifying the leading hazards to humans from poisoning and to provide resources for the management of these exposures.

Poison Control Centers are usually run by a hospital or university. Approximately 99% of the nation's Poison Control Centers (PCCs) send incident data to the Toxic Exposure Surveillance System (TESS), the national data collection system started in 1983. Each PCC receives a minimum of 10,000 calls annually. About 13% of calls are from health care providers treating patients and 87% of calls are from individuals who need assistance in managing an exposure to poison. From 1993-1996, 92% of reported exposures occurred in a residential setting. PCC collects data on exposures to any substance and pesticide poisonings make up about 3% of all cases. PCCs submit data to TESS 2 to 4 times per year.

Cost Data

Cost estimates are based on the President's budget and State and Regional Assistance Grants funding documents.

Data Source:

Health Incident Data

Poison Control Centers' Toxic Exposure Surveillance System (PCC/TESS)

Most cases in TESS are submitted by certified PCCs through their staff, and are received from the public.

Methods, Assumptions and Suitability: This efficiency measure is based on the annual number of occupational pesticide incidents. A critical assumption is that EPA's pesticide program's efforts have a direct impact on the decline of pesticide incidents and that additional external factors have no effect on the number of pesticide incidents (e.g., all influences on occupational incidents arise from the program's efforts). From recent assessments, we do believe that occupational poisonings are declining and that OPP's action contribute significantly to the reduction.

Calculation:

$$\frac{\text{Worker Safety Resources (\$)}}{\text{Pesticide Occupational Incidents Avoided}} = \text{Cost /Pesticide Occupational Incident Avoided}$$

Worker Safety Resources = Value of extramural and Full Time Employee (FTE) Resources from the President's Budget request identified as supporting EPA Headquarters worker protection activities; and State and Regional Assistance Grants (STAG) monies. Does not include headquarters resources for worker protection in the Registration/Re-Registration/Registration Review programs, because would result in double-counting. Regional resources for field programs are in the form of FTEs, which are parsed differently into worker protection, water quality, and strategic agricultural initiatives by the Regions depending on their priority objectives. These data are not currently available. An additional complication is the fact that states provide substantial funding for these programs as well, and their contribution is not included here.

For recent years, annual STAG funds for worker safety (C&T and WP) total \$6.6M. The President's Budget has remained relatively constant at \$2.7M for Agricultural Worker Protection and \$2.7M for Pesticide Applicator per year, for an average of \$12M as the numerator in the baseline calculation.

Pesticide Occupational Incidents Avoided = Using pesticide incident data from Poison Control Centers' Toxic Exposure Surveillance System, OPP established a baseline for average incidents per year. Use of an average of three years is appropriate to account for inconsequential fluctuations in the counts.

This measure will be tracked as follows: we will review annual occupational incident data and compare it with the rolling average for the baseline. If the average number of incidents from the most recent three years is below the baseline, the difference will be the incidents avoided for use in the calculation.

QA/QC Procedures: Most cases in TESS are submitted by certified PCC. Certification of the PCC requires that there be board certified physicians with expertise in toxicology on-call at all times, poison information specialists available to handle calls, access to a major medical library, guidelines for follow-up of each case to determine the patient's final disposition or medical outcome. Taken together these criteria help to assure the quality of the data.

Each Poison Control Center uses standard format for data collection. Standard data elements include location of victim at the time of exposure, substance exposed to, route of exposure, initial symptom assessment, and evaluation of medical outcome after case follow up. Cases with symptoms are categorized by severity as minor, moderate, or major.

Data Quality Review: Trained PCC specialists review the case data and, based on the information provided and their knowledge of toxicology, doses, and timing of exposure, ascertain whether the incident was caused by pesticides.

Data Limitations: Experts believe pesticide poisonings are under-reported to surveillance sources, for reasons, including the symptoms of pesticide poisoning generally are difficult to identify; there are few biomarkers for pesticides; and because the exposed individual may not seek medical care or report their illness. Additionally, not all states require mandatory physician reporting, and those that do may have difficulty enforcing that requirement.

Error Estimate: As mentioned above, under-reporting is believed to be a problem in all pesticide incident data sets. There are a number of widely-ranging estimates for the amount of under-reporting, ranging from 25% to as much as a factor of a thousand.

New/Improved Data or Systems: OPP collects pesticide incident data under FIFRA section 6(a)2. FIFRA is the Federal Insecticide, Fungicide and Rodenticide Act; the statute which governs the program functions. Section 6(a)2 is mandatory reporting required of the registrants (registrants are those who have or seek registration of their pesticide products). However, details important to this measure are not routinely captured in this data set. We hope to improve the internal data systems that capture incidents reported by the regulated community. Currently, data are difficult to use and may not have needed detail. If these data were available, they could potentially be used to complement or replace the PCC/TESS data, depending on their quality.

References: none

FY 2008 Performance Measure:

- **Percent reduction in concentrations of pesticides detected in general population (PART measure)**

Performance Database: The Agency will use the Centers for Disease Control's (CDC's) National Health and Nutrition Examination Survey (NHANES) data from 1999-2002 as the baseline. For this measure, the Agency intends to report on the changes in levels of organophosphate pesticides at the 50th percentile (or median.) This group of chemicals was

selected for a number of reasons. A large proportion of data collected from the general population are detectable residues (or their metabolites) for the organophosphate pesticides. In addition, the metabolites for which the analyses are performed are derived exclusively from the OP pesticides. The Agency selected a measure based on central tendency because it provides an overall picture of trends and is not distorted by anomalies in the data. However, the Agency intends to follow a range of metrics to more fully understand trends in the data. The annual targets will change every two years because each survey is performed over a two year period.

Data Sources: NHANES (see above)

Methods, Assumptions and Suitability: The NHANES data were selected because the surveys provide a statistically representative data set for the entire U.S. population. It is an ongoing program, with funding from numerous cooperating Federal agencies. The data are based on measurement of chemical levels in blood and urine.

QA/QC Procedures: This large scale survey is performed in strict compliance with CDC QA/QC procedures.

Data Quality Review: The measure will utilize NHANES data. NHANES is a major program of the National Center for Health Statistics (NCHS). NCHS is part of the Centers for Disease Control and Prevention (CDC), U.S. Public Health Service, and has the responsibility for producing vital and health statistics for the Nation. The National Center for Health Statistics (NCHS) is one of the Federal statistical agencies belonging to the Interagency Council on Statistical Policy (ICSP). The ICSP, which is led by the Office of Management and Budget (OMB), is composed of the heads of the Nation's 10 principal statistical agencies plus the heads of the statistical units of 4 nonstatistical agencies. The ICSP coordinates statistical work across organizations, enabling the exchange of information about organization programs and activities, and provides advice and counsel to OMB on statistical activities. The statistical activities of these agencies are predominantly the collection, compilation, processing or analysis of information for statistical purposes. Within this framework, NCHS functions as the Federal agency responsible for the collection and dissemination of the Nation's vital and health statistics. Its mission is to provide statistical information that will guide actions and policies to improve the health of the American people.

To carry out its mission, NCHS conducts a wide range of annual, periodic, and longitudinal sample surveys and administers the national vital statistics systems.

As the Nation's principal health statistics agency, NCHS leads the way with accurate, relevant, and timely data. To assure the accuracy, relevance, and timeliness of its statistical products, NCHS assumes responsibility for determining sources of data, measurement methods, methods of data collection and processing while minimizing respondent burden; employing appropriate methods of analysis, and ensuring the public availability of the data and documentation of the methods used to obtain the data. Within the constraints of resource availability, NCHS continually works to improve its data systems to provide information necessary for the formulation of sound public policy. As appropriate, NCHS seeks advice on its statistical program as a whole, including the setting of statistical priorities and on the statistical methodologies it

uses. NCHS strives to meet the needs for access to its data while maintaining appropriate safeguards for the confidentiality of individual responses.

Three web links to background on data quality are below:

<http://www.cdc.gov/nchs/about/quality.htm>

http://www.cdc.gov/nchs/data/nhanes/nhanes_01_02/lab_b_generaldoc.pdf#search=%22quality%20control%20NHANES%22

http://www.cdc.gov/nchs/data/nhanes/nhanes_03_04/lab_c_generaldoc.pdf#search=%22quality%20NHANES%22

Data Limitations: Some limitations include that not all pesticides are included, it is a measure of exposure instead of risk, and there is a time-lag between EPA actions and the CDC's analysis of the data.

Error Estimate: There is the potential of identifying metabolites that comes from both a pesticide and another source.

New/Improved Data or Systems: Not known at this time.

References: Third National Report on Human Exposure to Environmental Chemicals 2005, CDC/National Center for Environmental Health/Environmental Health Laboratory
<http://www.cdc.gov/nchs/about/nhanes>

FY 2008 Performance Measure:

- **Average cost and average time to produce or update an Endangered Species Bulletin (PART efficiency)**

Performance Database: The Bulletins Live! application is enabled by a multi-user relational database system that maintains a permanent archive with dates of the draft and final content for each endangered species protection Bulletin that is created or updated in the system. When the Bulletins Live! application is made available to the public, EPA will take over the complete Bulletin production process, which is currently carried out by the United States Geological Survey (USGS) staff through an Interagency Agreement (see below). Additionally, tracking and summary reporting of all endangered species mitigation actions including the time between which a decision is made to issue a Bulletin and its availability to the public will be made available as a part of the OPP "PRISM" information system that is planned for development in FY 2007. This system will track the staff working on mitigation development and bulletin production, and the time spent on these activities, allowing for a calculation of the cost per bulletin issued with Bulletins Live!

Data Source: The data necessary to track progress towards the targets for this measure are currently being collected by EPA. The Bulletins are being developed for EPA by the U.S. Geological Survey (USGS) Cartography and Publishing Program under an Interagency Agreement (IAG) with OPP. The data will be collected annually through the end-of-year report

under the Interagency Agreement (IAG). The baseline year will be 2004 cost and time averages (\$4000.00 and 100 hours per Endangered Species Bulletin production or update).

Methods, Assumptions and Suitability: These Bulletins are a critical mechanism for ensuring protection of endangered and threatened species from pesticide applications. Bulletins are legally enforceable extensions to pesticide labels that include geographically specific use limitations for the protection of endangered species. The faster the Bulletins can be developed, the earlier the protections are available to endangered and threatened species. Similarly, the less it costs to produce the Bulletins, the more Bulletins can be produced within available budget and the greater the impact on saving endangered and threatened species.

This measure is calculated as follows:

$100 - [(\text{Sum of the costs to produce or update Endangered Species Bulletins in current 12 month period} / \text{number of bulletins produced or updated in the same 12 month period}) / (\text{Sum of the costs to produce or update Endangered Species Bulletins in previous 12 month period}) \times 100]$ This is intended to be a measure that captures improvements in current year cost per bulletin vs. previous year cost per bulletin.

$100 - [(\text{Sum of the time in hours to produce or update Endangered Species Bulletins in current 12 month period} / \text{number of bulletins produced or updated in the same 12 month period}) / (\text{Sum of the time in hours to produce or update Endangered Species Bulletins in previous 12 month period} / \text{number of bulletins produced or updated in the previous 12 month period}) \times 100]$

QA/QC Procedures: EPA adheres to its approved Quality Management Plan to ensure the overall quality of data in the Bulletins Live! system. Bulletins pass through a multi-level quality control and review process before being released to the public. After the initial Bulletin is created by trained staff in the Endangered Species Protection Program, the draft is automatically routed in the system to a senior staff member who reviews the information in the Bulletin as a quality control check. After this Agency review, Bulletins are then subject to review and comment by Regional and State regulatory partners responsible for different aspects of the field implementation program and Bulletin enforcement.

Data Quality Reviews: Data quality reviews for the Bulletins themselves are ongoing through the QA/QC methodology described above. Data quality reviews for components of the measure (time per bulletin and cost per bulletin) will be carried out by the Project Officers who manage the Bulletins Live! and PRISM systems.

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: The web-based Bulletins Live! system will facilitate the expedited production and delivery of endangered species protection Bulletins as compared to the 2004 baseline.

References:

Endangered Species Protection Program website and Bulletins Live!: <http://www.epa.gov/espp>;
QMP: Quality Management Plan for the Office of Pesticides Program, February 2006;
Endangered Species Act.

FY 2008 Performance Measure:

- **Cost per acre using reduced risk pest management practices compared to the grant and/or contract funds expended on environmental stewardship (PART efficiency)**

Performance Database: Strategic Agricultural Initiative (SAI) database contains the SAI grants funds and acreage data. We are going to track the number of acres, by particular crop, under reduced risk pest management that were part of a grant and/or contract. This database is currently on the web site of our cooperator, the American Farmland Trust. We are working to migrate this database to the EPA web site and then add the Pesticide Environmental Stewardship Program (PESP) data. The PESP data are those reported to EPA in grant reports. We look at the adoption rate of reduced risk pesticides and compare it to the cost of the grant. The data then are the acres impacted by the grant verses the amount of money spent.

Data Source: Reports from grantees and contractors will be used as well as available databases to track the adoption of safer pest management practices. Such data sources include the USDA National Agricultural Statistics Service's surveys, Doane Marketing Research data, and pesticide usage records provided by user groups. Agricultural pesticide user groups who are members of PESP frequently report their use of safer pest management practices as part of their annual reports

Methods, Assumptions and Suitability: Each grantee or contractor is required to provide reports on their project including the success of adoption of safer pest management practices. For SAI grants, the SAI Coordinator in each of the 10 EPA Regional Offices enters the results from the SAI grants into the SAI database. The SAI Coordinator at EPA Headquarters encourages the Regional Coordinators to do this in a timely fashion. EPA Headquarters' Project Officer of the PESP grant serves the same function, making sure interim and final reports are provided to EPA without delay. EPA will track the adoption of new practices using publicly and commercially available databases, such as those described above. At times, data also are available on the adoption of a particular biopesticide or other reduced risk pesticide from the registrant of that product or from a user group that is adopting the new technology. This data can be very useful in tracking adoption in the early stages or in cases where little data is available, such as for minor crops. Data supplied by registrants can be compared to information supplied to EPA under Section 7 of FIFRA to identify major errors, but it would be hard to identify minor errors or flaws in the data.

QA/QC Procedures: EPA QA/QC procedures are followed for each grant and/or contract where environmental data is being collected. Part of the Agency's Quality Management Plan requires that grantees and/or contractors have a QA/QC program in place before the grant/contract is awarded. A staff member, typically the project officer for the grant or contract,

typically often conducts onsite visits every year to ensure QA/QC procedures is being followed. Typically, field trials and demonstrations are visited by the Regional SAI Coordinators or the EPA grantee for PESP work. Data from other internal and external sources, where available, will be used to determine the validity of the information provided by registrants and grower groups.

Data Quality Reviews: Staff and management of the Environmental Stewardship Branch and the Regional SAI Coordinators will perform data quality reviews under the leadership of program QA/QC officers.

Data Limitations: Major pesticide usage surveys will miss minor usages. Voluntary reporting by grantees and grower groups on the use of their reduced risk pest management practices introduces more error/bias than if a statistically valid sample were taken. However, there aren't funds for this kind of sample survey.

Error Estimate: Error estimates for established databases such as Doane and NASS surveys are documented by these organizations in their survey reports. Audits of grants is intended to reduce errors, but best estimates may be relied upon when statistically valid samples are not available.

New/Improved Data or Systems: EPA will improve the existing SAI database by including PESP data or will create a comparable database to track the PESP data.

References: <http://www.epa.gov/oppbppd1/PESP/> and <http://www.aftresearch.org/sai/collaborations>

FY 2008 Performance Measures:

- **Register reduced risk pesticides including biopesticides (annual measure)**
- **Number of new (active ingredients) conventional pesticides registered (New Chemicals)(annual measure)**
- **Number of conventional new uses registered (New Uses)(annual measure)**
- **Percent reduction in review time for registration of conventional pesticides (PART efficiency measure)**
- **Maintain timeliness of Section 18 Emergency Exemption Decisions**
- **Reduce registration decision times for reduced risk chemicals**

Performance Database: The OPPIN (Office of Pesticide Programs Information Network) consolidates various pesticides program databases. It is maintained by the EPA and tracks regulatory data submissions and studies, organized by scientific discipline, which are submitted by the registrant in support of a pesticide's registration. In addition to tracking decisions in OPPIN, manual counts are also maintained by the office on the registrations of reduced risk pesticides. Results for reduced risk pesticides, new active conventional ingredients, and new uses have been reported since 1996. The results are calculated on a fiscal year (FY) basis. For antimicrobial new uses, results have been reported since FY 2004 on a FY basis. Both S18 timeliness and reduced risk decision times were reported on a FY basis for the first time in FY 2005.

Data Source: Pesticide program reviewers update the status of the submissions and studies as they are received and as work is completed by the reviewers. The status indicates whether the application is ready for review, the application is in the process of review, or the review has been completed.

Methods, Assumptions and Suitability: The measures are program outputs which when finalized, represent the program's statutory requirements to ensure that pesticides entering the marketplace are safe for human health and the environment, and when used in accordance with the packaging label present a reasonable certainty of no harm. While program outputs are not the best measures of risk reduction, registration outputs do provide a means for reducing risk by ensuring that pesticides entering the marketplace meet the latest health standards, and as long as used according to the label are safe.

QA/QC Procedures: A reduced risk pesticide must meet the criteria set forth in Pesticide Registration Notice 97-3, September 4, 1997. Reduced risk pesticides include those which reduce the risks to human health; reduce the risks to non-target organisms; reduce the potential for contamination of groundwater, surface water or other valued environmental resources; and/or broaden the adoption of integrated pest management strategies, or make such strategies more available or more effective. In addition, biopesticides are generally considered safer (and thus reduced risk). All registration actions must employ sound science and meet the Food Quality Protection Act (FQPA) new safety standards. All risk assessments are subject to public and scientific peer review. The office adheres to its Quality Management Plan (May 2000) in ensuring data quality and that procedures are properly applied.

Data Quality Review: These are program outputs. EPA staff and management review the program outputs in accordance with established policy for the registration of reduced-risk pesticides as set forth in Pesticide Regulation Notice 97-3, September 4, 1997.

Data Limitations: None. All required data must be submitted for the risk assessments before the pesticide is registered. If data are not submitted, the pesticide is not registered. As stated above, a reduced risk pesticide must meet the criteria set forth in PRN 97-3 and all registrations must meet FQPA safety requirements. If a pesticide does not meet these criteria, it is not registered. If an application for a reduced risk pesticide does not meet the reduced risk criteria, it is reviewed as a conventional active ingredient.

Error Estimate: N/A

New/Improved Data or Systems: The OPPIN (Office of Pesticide Programs Information Network), which consolidates various pesticides program databases, will reduce the processing time for registration actions.

References: FIFRA Sec 3(c)(5); FFDCA Sec 408(a)(2); EPA Pesticide Registration Notice 97-3, September 4, 1997; Food Quality Protection Act (FQPA) 1996; OPP Quality Management Plan, May 2000); Endangered Species Act.

FY 2008 Performance Measures:

- **Cumulative percent of Reregistration Eligibility Decisions (REDs) completed (PART measure)**
- **Number of Product Reregistration decisions issued (annual measure)**
- **Reduction in time required to issue Reregistration Eligibility Decisions (PART efficiency measure)**

Performance Database: The OPPIN (Office of Pesticide Programs Information Network) consolidates various EPA program databases. It is maintained by the EPA and tracks regulatory data submissions and studies, organized by scientific discipline, which are submitted by the registrant in support of a pesticide's reregistration. In addition to tracking decisions in OPPIN, manual counts are also maintained by the office on the reregistrations decisions. Decisions are logged in as the action is completed, both for final decisions and interim decisions. REDs and product reregistration decisions have been reported on a FY basis since FY 1996. Reduction in decision times for REDs will be reported on an FY basis in FY 2005. Reduction in cost per RED will be reported in FY 2008.

For this measure, the number of FTEs is the surrogate for cost. The baseline is 11.5 FTEs per reregistration decision completed. The measure is derived by taking the total FTE devoted to reregistration activities, as reported in OPP's Time Accounting Information System (TAIS), divided by the number of reregistration decisions completed.

Data Source: EPA's Pesticides Program staff and managers.

Methods, Assumptions and Suitability: The measures are program outputs which represent the program's statutory requirements to ensure that pesticides entering the marketplace are safe for human health and the environment and when used in accordance with the packaging label present a reasonable certainty of no harm. While program outputs are not the best measures of risk reduction, they do provide a means for reducing risk in that the program's safety review prevents dangerous pesticides from entering the marketplace.

QA/QC Procedures: All registration actions must employ sound science and meet the Food Quality Protection Act (FQPA) new safety standards. All risk assessments are subject to public and scientific peer review. The office adheres to the procedures for quality management of data as outlined in its QMP approved May 2000.

Data Quality Review: Management reviews the program counts and signs off on the decision document.

Data Limitations: None known.

Error Estimate: N/A. There are no errors associated with count data.

New/Improved Data or Systems: The OPPIN, which consolidates various pesticides program databases, will contribute to reducing the processing time for reregistration actions.

References: EPA Website <http://www.epa.gov/pesticides> EPA Annual Report 2002 EPA Number 735-R-03-001; 2003 Annual Performance Plan OPP Quality Management Plan, May 2000; Endangered Species Act.

FY 2008 Performance Measure:

- **Percentage of Acre Treatments with Reduced Risk Pesticides (PART measure)**

Performance Database: EPA uses an external database, Doane Marketing Research data, for this measure. The data have been reported for trend data since FY 2001 on an FY basis.

Data Source: Primary source is Doane Marketing Research, Inc. (a private sector research database). The database contains pesticide usage information by pesticide, year, crop use, acreage and sector.

Methods, Assumptions and Suitability: A reduced-risk pesticide must meet the criteria set forth in Pesticide Registration Notice 97-3, September 4, 1997. Reduced-risk pesticides include those which reduce the risks to human health; reduce the risks to non-target organisms; reduce the potential for contamination of groundwater, surface water, or other valued environmental resources; and/or broaden the adoption of integrated pest management strategies or make such strategies more available or more effective. In addition, biopesticides are generally considered safer (and thus reduced-risk). EPA's statistical and economics staff review data from Doane. Information is also compared to prior years for variations and trends as well as to determine the reasons for the variability.

Doane sampling plans and QA/QC procedures are available to the public at their website. More specific information about the data is proprietary and a subscription fee is required. Data are weighted and a multiple regression procedure is used to adjust for known disproportionalities (known disproportionality refers to a non proportional sample, which means individual respondents have different weights) and ensure consistency with USDA and state acreage estimates.

QA/QC Procedures: All registration actions must employ sound science and meet the Food Quality Protection Act (FQPA) new safety standard. All risk assessments are subject to public and scientific peer review. Doane data are subject to extensive QA/QC procedures, documented at their websites. In ensuring the quality of the data, EPA's pesticide program adheres to its Quality Management Plan (QMP), approved May 2000.

The main customers for Doane pesticide usage data are the pesticide registrants. Since those registrants know about sales of their own products, they have an easy way to judge the quality of Doane provided data. If they considered the quality of the data to be poor, they would not continue to purchase the data.

Data Quality Review: Doane data are subject to extensive internal quality review, documented at the website. EPA's statistical and economics staff review data from Doane. Information is also compared to prior years for variations and trends as well as to determine the reasons for the variability. For some crops and states, comparisons are also made with a more limited pesticide usage database from the National Agricultural Statistics of USDA.

Data Limitations: Doane data are proprietary; thus in order to release any detailed information, the Agency must obtain approval. There is a data lag of approximately 12-18 months, due to the collection of data on a calendar year (CY) basis, time required for Doane to process data, lead time for EPA to purchase and obtain data, plus the time it takes to review and analyze the data within the office's workload.

Error Estimate: Error estimates differ according to the data/database and year of sampling. This measure is compiled by aggregating information for many crops and pesticides. While considerable uncertainty may exist for a single pesticide on a single crop, pesticide use data at such a highly aggregated level are considered quite accurate. Doane sampling plans and QA/QC procedures are available to the public at their website. More specific information about the data is proprietary and a subscription fee is required. Data are weighted and multiple regression procedure is used to adjust for known disproportionalities and ensure consistency with USDA and state acreage estimates

New/Improved Data or Systems: These are not EPA databases; thus improvements are not known in any detail at this time.

References: EPA Website; EPA Annual Report; Annual Performance Plan and Annual Performance Report, <http://www.ams.usda.gov/science/pdp/download.htm>; Doane Marketing Research, Inc.: <http://www.doanemr.com>; <http://www.usda.gov/nass/pubs> and <http://www.usda.nass/nass/nassinfo>; FFDCA Sec 408(a)(2); EPA Pesticide Registration Notice 97-3, September 4, 1997; Endangered Species Act.

FY 2008 Performance Measure:

- **Cumulative number of chemicals with proposed, interim and/or final values for Acute Exposure Guideline Levels (AEGLs). (PART measure)**

Performance Database: There is no database. Performance is measured by the cumulative number of chemicals with "Proposed", "Interim", and/or "Final" AEGL values as published by the National Academy of Sciences (NAS). The results are calculated on a fiscal year basis.

Data Source: EPA manages a Federal Advisory Committee Act (FACA) committee that reviews short term exposure values for extremely hazardous chemicals. The supporting data, from both published and unpublished sources and from which the AEGL values are derived, are collected, evaluated, and summarized by FACA Chemical Managers and Oak Ridge National Laboratory's scientists. Proposed AEGL values are published for public comment in the Federal Register. After reviewing public comment, interim values are presented to the AEGL Subcommittee of the National Academy of Sciences (NAS) for review and comment. After

review and comment resolution, the National Research Council under the auspices of the National Academy of Sciences (NAS) publishes the values as final.

Methods, Assumptions, and Suitability: The work of the National Advisory Committee's Acute Exposure Guideline Levels (NAC/AEGL, formally chartered under the Federal Advisory Committee Act) adheres to the 1993 U.S. National Research Council/National Academies of Sciences (NRC/NAS) publication *Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances*. NAC/AEGL, in cooperation with the National Academy of Sciences' Subcommittee on AEGLs, have developed standard operating procedures (SOPs), which are followed by the program. These have been published by the National Academy Press and are referenced below. The cumulative number of AEGL values approved as "proposed" and "interim" by the NAC/AEGL FACA Committee and "final" by the National Academy of Sciences represents the measure of performance. The work is assumed to be completed at the time of final approval of the AEGL values by the NAS. AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposures ranging from 10 min to 8 h. Three levels—AEGL_1, AEGL_2, and AEGL_3—are developed for each of five exposure periods (10 min, 30 min, 1 h, 4 h, and 8 h) and are distinguished by varying degrees of severity of toxic effects (detection, disability, and death respectively). They provide a high degree of flexibility for their use in chemical emergency response, planning, and prevention for accidental or terrorist releases of chemicals. The AEGL Program pools the resources of US and international stakeholders with needs for this information in a cost effective program which develops one set of numbers for use by all stakeholders (DOD, DOT, DOE, States, The Netherlands and others in the international community).

QA/QC Procedures: QA/QC procedures include public comment via the Federal Register process; review and approval by the FACA committee; and review and approval by the NAS/AEGL committee and their external reviewers.

Data Quality Review: N/A

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: This is the first time acute exposure values for extremely hazardous chemicals have been established according to a standardized process and put through such a rigorous review.

References: Standing Operating Procedures for Developing Acute Exposure Guideline Levels for Hazardous Chemicals, National Academy Press, Washington, DC 2001 (<http://www.nap.edu/books/030907553X/html/>). NRC (National Research Council). 1993. *Guidelines for Developing Community Emergency Exposure Levels for Hazardous Substances*. Washington, DC: National Academy Press. AEGL Program website at <http://www.epa.gov/oppt/aegl>

FY 2008 Performance Measure:

- **Percent reduction from prior year in total EPA cost per chemical for which Proposed AEGL value sets are developed (annual measure)**

Performance Database: Complete budgetary information at the program and project level is maintained in EPA's Finance Central database. This database and other financial records are consulted each time the program reports performance results. In addition to Finance Central, OPPT maintains records on AEGL program income, expenditures and carry over from one year to the next; and on the number of FTE's allocated to the program. Information from these records is aggregated to determine total EPA cost per chemical for which a proposed AEGL data set is developed. The denominator of this ratio – number of proposed AEGL data sets – is tracked in separate records maintained by the program. Specifically, there is an Access database containing the approval dates for proposed AEGL values and a Wordperfect file, organized by fiscal year, that is used to record events in the AEGL process as they occur.

Data Source: EPA manages a Federal Advisory Committee Act (FACA) committee that reviews short term exposure values for extremely hazardous chemicals. The supporting data, from both published and unpublished sources and from which the AEGL values are derived, are collected, evaluated, and summarized by FACA Chemical Managers and Oak Ridge National Laboratory's scientists. Proposed AEGL values are published for public comment in the Federal Register and then referred to the National Academies of Science (NAS) for further review and action. Although proposed AEGLs are not considered final until so designated by the NAS, the proposed values are suitable for many purposes. This performance measure is tied to proposed values rather than to final ones because actions through the proposal stage of the AEGL process are largely under EPA's control whereas subsequent action to finalize the AEGL values is largely a matter within NAS jurisdiction.

Methods, Assumptions, and Suitability: The methods involved in developing and reporting on this performance measure largely consist of simple computational steps performed on data relating to AEGL cost and accomplishment. For example, it is necessary to track the number of FTE's assigned to the AEGL program and then find the associated labor cost by multiplying by standard cost-of-living factors. Likewise, the extramural cost associated with managing the program is determined by pulling cost and budgetary data from the relevant databases as described above, multiplying by 70% as an estimate of the proportion of staff and contractor resources devoted to proposed AEGL development, summing as needed, and adjusting for inflation. One assumption underlying these computations is that 70% is a reasonable estimate of the proposal stage's share of total cost devoted to AEGLs. The methods, simple as they are, seem highly suitable for the kinds of measurement to be performed.

QA/QC Procedures: QA/QC procedures for AEGL development include public comment via the Federal Register process; review and approval by the FACA committee; and review and approval by the NAS/AEGL committee and their external reviewers. AEGL documents are formally reviewed for QC purposes by designated contractors and EPA staff at critical junctures utilizing detailed checklists. Cost information from available records is also subjected to appropriate QA/QC controls.

Data Quality Review: This is a new performance measure and, therefore, there is no developed track record of review and correction. However, appropriate oversight of the measurement process will be provided. Information developed in the course of measurement will be presented to senior management within OPPT to address potential concerns related to technical outcomes and to provide quality oversight.

Data Limitations: No specific data limitations have been identified with respect to the information relied upon in developing or reporting this measure.

Error Estimate: Not applicable. This measure does not require inferences from statistical samples and therefore there is no estimate of statistical error.

New/Improved Data or Systems: Access databases, spreadsheets and other files are maintained and improved on an ongoing basis. A new database is being developed to document rationales used to develop AEGL values. This new database should enhance the efficiency of AEGL development.

References: Please see www.epa.gov/oppt/aegl

FY 2008 Performance Measures:

- **Number of cases of children aged 1-5 years with elevated blood lead levels (> or = 10 ug/dL) (PART measure)**
- **Percentage difference in the geometric mean blood level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old. (PART measure)**

Performance Database: Data from the Centers for Disease Control and Prevention's (CDC) National Health and Nutrition Examination Survey (NHANES) is recognized as the primary database in the United States for national blood lead statistics. NHANES is a probability sample of the non-institutionalized population of the United States. Data are collected on a calendar year basis, and is currently released to the public in two year sets. The most current release is the data set for 2003-2004, released in June 2006. Blood lead levels are measured for participants who are at least one year old. The survey collects information on the age of the participant at the time of the survey.

Data Source: The National Health and Nutrition Examination Survey is a survey designed to assess the health and nutritional status of adults and children in the U.S. The survey program began in the early 1960s as a periodic study, and continues as an annual survey. The survey examines a nationally representative sample of approximately 5,000 men, women, and children each year located across the U.S. CDC's National Center for Health Statistics (NCHS) is responsible for the conduct of the survey and the release of the data to the public. NCHS and other CDC centers publish results from the survey, generally in CDC's Morbidity and Mortality Weekly Report (MMWR), but also in scientific journals. In recent years, CDC has published a National Exposure report based on the data from the NHANES. The most current National Exposure report was released June 2006, and is available at the web site

<http://www.cdc.gov/exposurereport/>. The next National Exposure report is expected in mid 2007.

Methods, Assumptions, and Suitability: Detailed interview questions cover areas related to demographic, socio-economic, dietary, and health-related questions. The survey also includes an extensive medical and dental examination of participants, physiological measurements, and laboratory tests. Specific laboratory measurements of environmental interest include: metals (e.g. lead, cadmium, and mercury), VOCs, phthalates, organophosphates (OPs), pesticides and their metabolites, dioxins/furans, and polycyclic aromatic hydrocarbons (PAHs). NHANES is unique in that it links laboratory-derived biological markers (e.g. blood, urine etc.) to questionnaire responses and results of physical exams. For this performance measure, NHANES has been recognized as the definitive source. Estimates of the number of children 1-5 years with an elevated blood lead level based on NHANES have been published by CDC, most recently in May 2005. (See <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5420a5.htm>). Analytical guidelines issued by NCHS provide guidance on how many years of data should be combined for an analysis.

QA/QC Procedures: Background documentation is available at the NHANES web site at <http://www.cdc.gov/nchs/nhanes.htm>. The analytical guidelines are available at the web site http://www.cdc.gov/nchs/about/major/nhanes/nhanes2003-2004/analytical_guidelines.htm.

Data Quality Reviews: CDC follows standardized survey instrument procedures to collect data to promote data quality, and data are subjected to rigorous QA/QC review. Additional information on the interview and examination process can be found at the NHANES web site at <http://www.cdc.gov/nchs/nhanes.htm>.

Data Limitations: NHANES is a voluntary survey and selected persons may refuse to participate. In addition, the NHANES survey uses two steps, a questionnaire and a physical exam. There are sometimes different numbers of subjects in the interview and examinations because some participants only complete one step of the survey. Participants may answer the questionnaire but not provide the more invasive blood sample. Special weighting techniques are used to adjust for non-response. Seasonal changes in blood lead levels cannot be assessed under the current NHANES design. Because NHANES is a sample survey, there may be no children with elevated blood lead levels in the sample, but still some children with elevated blood lead levels in the population.

Error Estimate: Because NHANES is based on a complex multi-stage sample design, appropriate sampling weights should be used in analyses to produce estimates and associated measures of variation. Recommended methodologies and appropriate approaches are addressed in the analytical guidelines provided at the NHANES web site http://www.cdc.gov/nchs/about/major/nhanes/nhanes2003-2004/analytical_guidelines.htm.

New/Improved Data or Systems: NHANES has moved to a continuous sampling schedule, scheduled release of data, and scheduled release of National Exposure reports by CDC.

References: 1) the NHANES web site, <http://www.cdc.gov/nchs/nhanes.htm>; 2) the National Exposure report web site, <http://www.cdc.gov/exposurereport/>; 3) MMWR article with the most

recent estimate of the number of children with elevated blood lead levels, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5420a5.htm>; 4) NHANES Analytical Guidelines, http://www.cdc.gov/nchs/about/major/nhanes/nhanes2003-2004/analytical_guidelines.htm.

FY 2008 Performance Measure:

- **Annual percentage of lead-based paint certification and refund applications that require less than 40 days of EPA effort to process (PART efficiency measure)**

Performance Database: The National Program Chemicals Division (NPCD) in the Office of Pollution Prevention and Toxics (OPPT) maintains the Federal Lead-Based Paint Program (FLPP) database, an electronic database of applications for certification by individuals and firms and applications for accreditation by training providers in states and tribal lands administered by a Federal lead program. The database provides a record of all applications for certification or accreditation for Federally-managed lead programs and the actions on those applications. The database is augmented by hard copy records of the original applications.

Data Source: The FLPP database is available internally to EPA Headquarters and Regional lead program staff who process the applications or oversee the processing. The database is maintained on an EPA Research Triangle Park (RTP), North Carolina server. Access to the database is granted by the Lead, Heavy Metals, and Inorganics Branch (LHMIB) in NPCD. Overall maintenance of the database and periodic improvements are handled by a contractor, currently ICF Consulting, located in Fairfax, Virginia. Data entry of application data is conducted by a second contractor, currently Optimus Corporation, located in Silver Spring, Maryland. Optimus Corporation maintains the file of the original applications. Each EPA Regional office maintains a file of copies of the original applications for that region.

Methods, Assumptions and Suitability: The number of applications for certification in Federally-managed states and tribal lands is approximately 3000 per year. Each of these applications is processed. Certification is issued if all criteria are met. Some applications may be returned to the applicant or withdrawn by the applicant. For the applications that are fully processed, the length of time for EPA processing can be determined from date fields in the FLPP database. Accordingly, a census of all the fully processed applications for certification can be conducted, and the percentage of applications that took more than the prescribed number of days (e.g., 40) of EPA effort to process can be computed based on this census. The census is conducted every six months, and the annual percentage calculated appropriately from the six month percentages.

QA/QC Procedures: NPCD has an approved Quality Management Plan in place, dated January 2005. Applications and instructions for applying for certification and accreditation are documented and available at the web site <http://www.epa.gov/lead/pubs/traincert.htm>. Documentation for the FLPP database is maintained internally at EPA and is available upon request.

Data Quality Reviews: The FLPP database is an internal EPA database, maintained for the purpose of processing and tracking applications. The database is interactive, and operational usage in processing applications by Headquarters and the Regional offices provides ongoing quality reviews.

Data Limitations: Applications that were returned to the applicant or withdrawn by the applicant are out of scope for this performance measure.

Error Estimate: There is no sampling error in this performance measure, because it is based on a census of all applicable records.

New/Improved Data or Systems: The FLPP database is scheduled to undergo improvements in the next few years. The performance measurement system will help determine if there is a change in timeliness after the improvements are implemented.

References: 1) Quality Management Plan for National Program Chemicals Division, January 2005; 2) FLPP database documentation; 3) URL for Applications and Instructions, <http://www.epa.gov/lead/pubs/traincert.htm>.

FY 2008 Performance Measure:

- **Reduction in the current year production-adjusted risk-based score of releases and transfers of toxic chemicals (PART measure)**

Performance Database: The Risk Screening Environmental Indicators (RSEI) Model uses annual reporting from individual industrial facilities along with a variety of other information to evaluate chemical emissions and other waste management activities. RSEI incorporates detailed data from EPA's Toxics Release Inventory (TRI) and Integrated Risk Information System, the U.S. Census, and many other sources. Due to a two year TRI data lag, performance data will be unavailable for the FY 2006 Annual Performance Report. The data are based on calendar year.

Data Source: The RSEI model incorporates data on chemical emissions and transfers and facility locations from EPA's Toxics Release Inventory; chemical toxicity data from EPA's Integrated Risk Information System; stack data from EPA's AIRS Facility Subsystem and National Emissions Trends Database and the Electric Power Research Institute; meteorological data from the National Climatic Data Center; stream reach data from EPA's Reach File 1 Database; data on drinking water systems from EPA's Safe Drinking Water Information System; fishing activity data from U.S. Fish and Wildlife; exposure factors from EPA's Exposure Factor Handbook; and population data from the U.S. Census Bureau.

Methods, Assumptions and Suitability: The RSEI Model generates unique numerical values known as "Indicator Elements" using the factors pertaining to surrogate dose, toxicity and exposed population. Indicator Elements are unitless (like an index number, they can be compared to one-another but do not reflect *actual* risk), but proportional to the modeled relative risk of each release (incrementally higher numbers reflect greater estimated risk). Indicator Elements are risk-related measures generated for every possible combination of reporting facility, chemical,

release medium, and exposure pathway (inhalation or ingestion). Each Indicator Element represents a unique release-exposure event and together these form the building blocks to describe exposure scenarios of interest. These Indicator Elements are summed in various ways to represent the risk-related results for releases users are interested in assessing. RSEI results are for comparative purposes and only meaningful when compared to other scores produced by RSEI. The measure is appropriate for year-to-year comparisons of performance. Depending on how the user wishes to aggregate, RSEI can address trends nationally, regionally, by state or smaller geographic areas.

QA/QC Procedures: TRI facilities self-report release data and occasionally make errors. TRI has QC functions and an error-correction mechanism for reporting such mistakes. EPA updates off-site facility locations on an annual basis using geocoding techniques.

Data Quality Reviews: RSEI depends upon a broad array of data resources, each of which has gone through a quality review process tailored to the specific data and managed by the providers of the data sources. RSEI includes data from the Toxics Release Inventory (TRI), Integrated Risk Information System (IRIS), U.S. Census, etc. All were collected for regulatory or programmatic purposes and are of sufficient quality to be used by EPA, other Federal agencies, and state regulatory agencies. Over the course of its development, RSEI has been the subject of three reviews by EPA's Science Advisory Board. The RSEI model has undergone continuous upgrading since the 1997 SAB Review. Toxicity weighting methodology was completely revised and subject to a second positive review by SAB (in collaboration with EPA's Civil Rights program); air methodology was revised and groundtruthed using New York data to demonstrate high confidence; water methodology has been revised in collaboration with EPA's Water program. When the land methodology has been reviewed and revised, EPA will have completed its formal, written response to the 1997 SAB Review.

Data Limitations: RSEI relies on data from a variety of EPA and other sources. TRI data may have errors that are not corrected in the standard TRI QC process. In the past, RSEI has identified some of these errors and corrections have been made by reporting companies. Drinking water intake locations are not available for all intakes nationwide.

In coastal areas, Publicly Owned Treatment Works (POTW) water releases may go directly to the ocean, rather than nearby streams. EPA is in the process of systematically correcting potential errors regarding POTW water releases. These examples are illustrative of the data quality checks and methodological improvements that are part of the RSEI development effort. RSEI values are recalculated on an annual basis, and, resources permitting, all data sources are updated annually.

Error Estimate: In developing the RSEI methodology, both sensitivity analyses and groundtruthing studies have been used to address model accuracy (www.epa.gov/opptintr/rsei/). For example, groundtruthing of the air modeling performed by RSEI compared to site-specific regulatory modeling done by the state of New York showed virtually identical results in both rank order and magnitude. However, the complexity of modeling performed in RSEI, coupled with un-quantified data limitations, limits a precise estimation of errors that may either over- or under-estimate risk-related results.

New/Improved Data or Systems: The program regularly tracks improvements in other Agency databases (e.g., SDWIS and Reach File databases) and incorporates newer data into the RSEI databases. Such improvements can also lead to methodological modifications in the model. Corrections in TRI reporting data for all previous years are captured by the annual updates of the RSEI model.

References: The methodologies used in RSEI were first documented for the 1997 review by the EPA Science Advisory Board. The Agency has provided this and other updated technical documentation on the RSEI Home Page.

U.S. EPA Office of Pollution Prevention and Toxics, Risk Screening Environmental Indicators Model (RSEI) Home Page. Internet: <http://www.epa.gov/opptintr/rsei/>

U.S. EPA Office of Pollution Prevention and Toxics, Risk Screening Environmental Indicators Model, Peer Reviews. Internet: <http://www.epa.gov/oppt/rsei/pubs/faqs.html>

U.S. EPA Office of Pollution Prevention and Toxics, RSEI Methodology Document. Internet: <http://www.epa.gov/opptintr/rsei/pubs/method2004.pdf>

U.S. EPA Office of Pollution Prevention and Toxics, RSEI User's Manual. Internet: http://www.epa.gov/opptintr/rsei/pubs/users_manual.pdf

U.S. EPA Office of Pollution Prevention and Toxics, RSEI Fact Sheet,. Internet: http://www.epa.gov/opptintr/rsei/pubs/factsheet_v2-1.pdf

FY 2008 Performance Measure:

- **Percent of chemicals or organisms introduced into commerce that do not pose unreasonable risks to workers, consumers or environment (annual measure)**

Performance Database: Implementation of this measure will require the use of several EPA databases: Confidential Business Information Tracking System (CBITS), pre-manufacture notice (PMN) CBI Local Area Network (LAN), 8(e) database (ISIS), and the Focus database. The following information from these databases will be used collectively in applying this measure:

- CBITS: Tracking information on Pre-Manufacture Notices (PMNs) received;
- PMN CBI LAN: Records documenting PMN review and decision, assessment reports on chemicals submitted for review. In addition, the information developed for each PMN is kept in hard copy in the Confidential Business Information Center (CBIC);
- ISIS: Data submitted by industry under the Toxic Substances Control Act (TSCA) Section 8(e). TSCA 8(e) requires that chemical manufacturers, processors, and distributors notify EPA immediately of new (e.g. not already reported), unpublished chemical information that reasonably supports a conclusion of substantial risk. TSCA 8(e) substantial risk information notices most often contain toxicity data but may also contain information on exposure, environmental persistence, or actions being taken to reduce human health and environmental risks. It is an important information-gathering tool that serves as an early warning mechanism;

- Focus: Rationale for decisions emerging from Focus meeting, including decisions on whether or not to drop chemicals from further review.

Measurement results are calculated on a fiscal-year basis and draw on relevant information received over the 12-month fiscal year.

Data Source: The Office of Pollution Prevention and Toxics (OPPT), the office responsible for the implementation of the TSCA, will compare data submitted under TSCA Section 8(e) with previously-submitted new chemical review data (submitted under TSCA Section 5 and contained in the PMN) to determine the number of instances in which EPA’s current PMN review practices would have failed to prevent the introduction of new chemicals or microorganisms into commerce which pose an unreasonable risk to workers, consumers or the environment. Inconsistencies between the 8(e) and previously-submitted new chemical review data will be evaluated by applying the methods and steps outlined below to determine whether the inconsistencies signify an “unreasonable risk.”

Methods, Assumptions, and Suitability: EPA’s methods for implementing this measure involve determining whether EPA’s current PMN review practices would have failed to prevent the introduction of chemicals or microorganisms into commerce that pose an unreasonable risk to workers, consumers or the environment, based on comparisons of 8(e) and previously-submitted new chemical review data. The “unreasonable risk” determination is based on consideration of (1) the magnitude of risks identified by EPA, (2) limitations on risk that result from specific safeguards applied, and (3) the benefits to industry and the public expected to be provided by the new chemical substance. In considering risk, EPA looks at anticipated environmental effects, distribution and fate of the chemical substance in the environment, patterns of use, expected degree of exposure, the use of protective equipment and engineering controls, and other factors that affect or mitigate risk. These are the steps OPPT will follow in comparing the 8(e) data with the previously-submitted new chemical review data.

1. Match all 8(e) submissions in the 8(e) database with associated TSCA Section 5 notices. TSCA Section 5 requires manufacturers to give EPA a 90-day advance notice (via a pre-manufacture notice or PMN) of their intent to manufacture and/or import a new chemical. The PMN includes information such as specific chemistry identity, use, anticipated production volume, exposure and release information, and existing available test data. The information is reviewed through the New Chemicals Program to determine whether action is needed to prohibit or limit manufacturing, processing, or use of a chemical.
2. Characterize the resulting 8(e) submissions by the PMN review phase. For example, whether the 8(e) submissions were received: a) before the PMN notice was received by EPA, b) during the PMN review process, or c) after the PMN review was completed.
3. Review of 8(e) data will focus on 8(e)s received after the PMN review period was completed.
4. Comparison of hazard evaluation developed during PMN review with associated 8(e) submission.
5. Report on the accuracy of the initial hazard determination
6. Revised risk assessment developed to determine if there was an unreasonable risk based on established risk assessment and risk management guidelines and whether current PMN Review practices would have detected and prevented that risk.

The databases used and the information retrieved are directly applicable to this measurement and therefore suitable for measurement purposes.

QA/QC Procedures: OPPT has in place a signed Quality Management Plan (“Quality Management Plan for the Office of Pollution Prevention and Toxics; Office of Prevention, Pesticides and Toxic Substances;” June 2003) and will ensure that those standards and procedures are applied to this effort.

Data Quality Reviews: This is a new performance measure and, therefore, there is no developed track record of review and correction. However, appropriate oversight of the measurement process will be provided. Information developed in the course of measurement will be presented to senior management within OPPT to address potential concerns related to technical outcomes and to provide quality oversight. In addition, the National Pollution Prevention and Toxics Advisory Council (NPPTAC), which consists of external experts providing independent review and direction to OPPT, has provided comment on this measure.

Data Limitations: There are some limitations of EPA’s review which result from differences in the quality and completeness of 8(e) data provided by industry; for example, OPPT cannot evaluate submissions that do not contain adequate information on chemical identity. The review is also affected in some cases by a lack of available electronic information. In particular the pre-1996 PMN cases are only retrievable in hard copy and may have to be requested from the Federal Document Storage Center. This may introduce some delays to the review process.

Error Estimate: Not applicable. This measure does not require inferences from statistical samples and therefore there is no estimate of statistical error. OPPT will review all 8(e) submissions received in the year with corresponding previously-submitted new chemical review data, and not a sample of such submissions.

New/Improved Data or Systems: OPPT is currently developing an integrated, electronic system that will provide real time access to prospective PMN review.

References: OPPT New Chemicals Program

<http://www.epa.gov/opptintr/newchems/>, TSCA Section 8(e) – Substantial Risk

“Quality Management Plan for the Office of Pollution Prevention and Toxics; Office of Prevention, Pesticides and Toxic Substances;” June 2003.

FY 2008 Performance Measure:

- **Percent change from prior year in cost savings due to new chemical pre-screening (annual measure)**

Performance Database: Implementation of this measure will require the use of several EPA databases, all of which play a role in tracking Premanufacture Notices (PMNs) and the action EPA decides to take on such notices. The principal databases involved in PMN tracking, with separate identification of prescreened chemicals, are:

- Chemical Control Division tracking database: Records basic identifying and status information on each PMN submitted to EPA, including name of submitter, identity of technical contact at company, actions taken by EPA. Enables chemicals to be tracked quickly and easily through the PMN review process.
- Management Information Tracking System (MITS): Contains non-CBI data on all PMNs, including chemical identification and actions taken by EPA.
- New Chemicals Focus Meeting database: Contains information on the decisions reached at Focus meetings, including whether to drop chemical from further review, to pursue regulation under the Toxic Substances Control Act (TSCA) Section 5(e) to prohibit or limit activities associated with the new chemical or to pursue regulation under a non-5(e) Significant New Use Rule (SNUR) to require manufacturers, importers and processors to notify EPA at least 90 days before beginning any activity that EPA has designated as a “significant new use,” or, alternatively, to refer the chemical for full-scale standard review. It is critical to know the number and percentage of PMNs going to these outcomes in order to perform base year cost savings calculations in support of the cost savings measure.
- Sustainable Futures prescreening tracking databases: Contain information on PMNs which display evidence of chemical prescreening using OPPT screening methods, including data on the types of assessments and model evaluations performed by the submitter, and contact information on Sustainable Futures participants including date(s) attended EPA training.
- Measurement results are calculated on a fiscal year basis and draw upon relevant information collected over the 12-month fiscal year.

Data Source: The major data sources involved in this measurement are fully described under “Performance Database,” above. No external data sources play a significant role in the calculation of measurement results.

Methods, Assumptions and Suitability: EPA measures percent change in cost savings as a result of chemical prescreening relative to a base year by: 1) determining the base year pre-screening rate and base year cost savings; 2) calculating the current year prescreening rate (prescreened PMNs as a percentage of total PMNs); and 3) determining the actual percent change in cost savings resulting from prescreening by multiplying the base year cost savings by the ratio of the current year prescreening rate to the base year prescreening rate. Finally, the actual percent change in cost savings relative to the base year can be compared to the target percent change of 6.67%. This procedure assumes, quite reasonably, that cost savings from prescreening will generally change in rough proportion to the change in the prescreening rate.

The methods used in calculating base year information are as follows:

- Determine base year prescreening rate by checking the data systems described above to obtain the number of new prescreened chemicals going through the PMN review process and the total number of chemicals undergoing such review. The prescreening rate is simply the ratio of prescreened chemicals to total chemicals undergoing PMN review.

Determine base year cost savings by:

- Checking the relevant databases to determine the number and percentage of base year PMNs that are (a) prescreened PMNs and (b) non-prescreened PMNs
- Estimating the number of prescreened PMNs that would have gone to regulation or standard review if there were no prescreening program (this is done by multiplying the number of prescreened PMNs by the percentage of non-prescreened PMNs that go to one of the “post-Focus meeting outcomes” of standard review, regulation under TSCA Section 5(e), or issuance of a non-5(e) SNUR
- Subtracting the number of actual prescreened PMNs going to one of the post-Focus meeting outcomes from the projected number derived in the previous step, is the estimated number of PMNs avoiding a post-Focus meeting outcome. The rationale is that some pre-screened PMNs still end up requiring post-Focus action, but at a lower rate than for PMNs which are not pre-screened. The hypothetical number estimated in this step, the difference between the projected and actual numbers of pre-screened PMNs requiring a post-Focus meeting outcome, represents the number of cases to have avoided post-Focus action as a result of prescreening.
- Multiplying the number of cases estimated to have avoided post-Focus action as a result of pre-screening by unit cost factors to obtain estimates of the cost savings realized by avoidance of post-Focus meeting outcomes resulting from prescreening (unit cost factors are generated separately from information/estimates maintained by EPA on the labor hours (Agency and contractor) associated with each post-Focus meeting outcome and the EPA cost per labor hour)
- Summing the cost savings realized by avoidance of specified post-Focus meeting outcomes to arrive at total cost savings for the base year.

QA/QC Procedures: OPPT has in place a signed Quality Management Plan (“Quality Management Plan for the Office of Pollution Prevention and Toxics; Office of Prevention, Pesticides and Toxic Substances,” June 2003) and will ensure that those standards and procedures are applied to this effort.

Data Quality Reviews: This is a new performance measure and, therefore, there is no developed record of review and correction. However, appropriate oversight of the measurement process

will be provided. Information developed in the course of measurement will be presented to senior management within OPPT to address potential concerns related to technical outcomes and to provide quality oversight.

Data Limitations: No specific data limitations have been identified with respect to the measure presented here, except to the extent that the measure requires certain assumptions, discussed above, in addition to inputs of hard data.

Error Estimate: Not applicable. This measure does not require inferences from statistical samples and therefore there is no estimate of statistical error.

New/Improved Data or Systems: OPPT is currently developing an integrated electronic system that will provide real time access to prospective PMN review.

References: Additional information on EPA's New Chemicals program for TSCA Section 5 can be found at <http://www.epa.gov/oppt/newchems/index.htm>. Information on the Sustainable Futures Initiative is available at <http://www.epa.gov/opptintr/newchems/pubs/sustainablefutures.htm>.

FY 2008 Performance Measure:

- **Percentage of High Production Volume (HPV) chemicals identified as priority concerns through assessment of Screening Information Data Set (SIDS) and other information with risks eliminated or effectively managed (annual measure)**

Performance Database: EPA will track the number of agency actions (e.g., regulatory, voluntary), targeting risk elimination or management of high production volume chemicals, using internal program databases or the Agency's Regulation and Policy Information Data System (RAPIDS). Many types of Agency actions qualify as risk management or elimination actions. Issuance of a Significant New Use Rule (SNUR) under TSCA is an example of regulatory action that can be tracked by the RAPIDS Promulgation Data field. An example of a non-regulatory risk management/elimination action is a written communication from EPA to chemical manufacturers/users indicating the Agency's concerns and suggesting but not requiring actions to address chemical risks (chemical substitution, handling protections, etc.). These actions would be tracked by monitoring internal communications files. The results are calculated on a calendar-year basis.

Data Source: RAPIDS stores official Agency data on progress of rule-making and other policy program development efforts. Data are supplied by EPA programs managing these efforts. For voluntary actions not tracked in RAPIDS, performance data are tracked internally by program managers.

Methods, Assumptions and Suitability: As EPA identifies HPV chemicals that are priorities for risk management action, following protocols currently under development, the Agency will commence regulatory or non-regulatory actions to address identified risks. All such actions will be recorded for the HPV chemical(s) subject to those actions, enabling EPA to report on progress

in responding to the risks on a chemical- or chemical-category-specific basis. This annual performance measures (APM) commits the Agency to eliminate or effectively manage all such risks. Using data contained in RAPIDS, in the case of regulatory risk management action, EPA's progress towards meeting this APM will be documented by the sequence of formal regulatory development steps documented in that system. Where risk management action takes nonregulatory form, such as issuance of advisory communications to chemical manufacturers or users, progress toward meeting this APM will be tracked by internal files documenting such actions. The definition of risk is being addressed in the development of the protocols used in the HPV screening/prioritization process.

QA/QC Procedures: RAPIDS entries are quality assured by senior Agency managers.

Data Quality Reviews: RAPIDS entries are reviewed by EPA's Regulatory Management Staff.

Data Limitations: N/A

Error Estimate: N/A

New/Improved Performance Data or Systems: N/A

References: None

FY 2008 Performance Measure:

- **The cumulative number of chemicals for which VCCEP data needs documents are issued by EPA in response to industry-sponsored Tier I risk assessments. (annual measure)**

Performance Database: Internal VCCEP program activity tracking database. Data needs documents are issued by EPA to conclude work on all Tier I submissions. Documents may indicate data are sufficient to reasonably demonstrate that children are not subject to significant risks. Documents also may indicate that additional assessment and associated data development are required, commencing Tier 2 work. The results are calculated on a calendar-year basis.

Data Source: Formal EPA files of VCCEP Tier I data needs communications. Data needs are also subject to peer review, results of which are posted and made public on the Toxicology Excellence for Risk Assessment website found at <http://www.tera.org/peer/MeetingReports.html>

Methods, Assumptions and Suitability: Information is tracked directly through internal record-keeping systems. No models or assumptions or statistical methods are employed.

QA/QC Procedures: The VCCEP program operates under Information Quality Guidelines as found at <http://www.epa.gov/quality/informationguidelines/>

Data Quality Reviews: The VCCEP program operates under Information Quality Guidelines as found at <http://www.epa.gov/quality/informationguidelines/>

Data Limitations: None known

Error Estimate: N/A

New/Improved Performance Data or Systems: None

References: <http://www.epa.gov/chemrtk/vccep/index.htm>

FY 2008 Performance Measure:

- **Number of risk management plan audits completed**

Performance Database: There is no database for this measure.

Data Source: OSWER's Office of Emergency Management implements the Risk Management Program under Clean Air Act section 112(r). Facilities are required to prepare Risk Management Plans (RMPs) and submit them to EPA. In turn, HQ provides appropriate data to each Region and delegated State so that they have the RMP data for their geographical area. The Regions and delegated States conduct audits. About ten States have received delegation to operate the RMP program. These delegated States report audit numbers to the appropriate EPA Regional office so it can maintain composite information on RMP audits.

Methods, Assumptions and Suitability: Data are collected and analyzed by surveying EPA's Regional offices to determine how many audits of facilities' risk management plans (RMPs) have been completed.

QA/QC Procedures: Data are collected from states by EPA's Regional offices, with review at the Regional and Headquarters' levels.

Data Quality Review: Data quality is evaluated by both Regional and Headquarters' personnel.

Data Limitations: Data quality is dependent on completeness and accuracy of the data provided by state programs.

Error Estimate: Not calculated.

New/Improved Data or Systems: N/A

Reference: N/A

FY 2008 Performance Measure:

- **Number of countries completing phase out of leaded gasoline**

- **Number of countries introducing low sulfur in fuels**

Performance Database: UNEP Partnership Clearinghouse; This performance measure tracks the number of countries that have phased out lead in gasoline. EPA works with the United Nations Environment Programme (UNEP) and other partners in the global Partnership for Clean Fuels and Vehicles to document the phase out of leaded gasoline and the reduction of sulfur levels in fuels worldwide. UNEP manages the Partnership Clearinghouse, which tracks the status of lead phase-out efforts and the status of sulfur reduction efforts in each country. The Partnership Clearinghouse also documents and verifies each country's implementation of lead phase out and sulfur reduction programs. The Partnership's data on lead phase-out can be found on the Partnership website at: <http://www.unep.org/PCFV/Data/data.htm#leaded>. The Partnership's data on sulfur levels in fuels, by country, can be found on the Partnership website at: <http://www.unep.org/PCFV/Data/data.htm#sulphur>

Data Source: The United Nations Environment Programme serves as the Clearinghouse for the Partnership for Clean Fuels and Vehicles and maintains a database of the status of country lead-phase out. Information from the database is posted on the Partnership website and updated periodically by UNEP -- at least every 6 months. UNEP collects the data from public and private sector partners and contacts government and industry experts in each country for verification before the data are posted. This data collection and cross-checking provide the best currently available information on country lead phase-out status and levels of sulfur.

Methods, Assumptions and Suitability: There is currently no available database on international leaded gasoline sales data or market penetration of alternative fuels, nor is there any international database on sulfur levels in fuels. Because of this gap, the Partnership made the decision to track the number of countries that have phased out lead and reduced sulfur because the data are more easily verifiable.

QA/QC Procedures: Experts at the Partnership for Clean Fuels and Vehicles verify the information in the Partnership Clearinghouse by contacting key people from industry and government within each country.

Data Quality Reviews: N/A

Data Limitations: There currently is no available database on leaded gasoline sales data or market penetration of alternative fuels. The Partnership made the decision to track the number of countries that have phased out lead and reduced sulfur in fuels, because the data are more easily verifiable. Fuel changes and lead phase-out are implemented in different ways in different countries, mostly by legislation. But having the legislation in place does not mean that lead has been eliminated from gasoline. Many countries have set dates for lead phase-out and sulfur reduction; however the Partnership tracks actual progress toward implementation.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: For additional information on the Partnership for Clean Fuels and Vehicles, see the Partnership website at <http://www.unep.org/PCFV>

For more information concerning the database for phase-out of leaded gasoline, see <http://www.unep.org/PCFV/Data/data.htm#leaded>

For additional information on sulfur levels, see <http://www.unep.org/PCFV/Data/data.htm#sulphur>

GOAL 4 OBJECTIVE 2

FY 2008 Performance Measures:

- Number of Brownfields properties assessed [PART performance]
- Number of jobs leveraged from Brownfields activities
- Amount of cleanup and redevelopment funds leveraged at Brownfields properties. [PART performance]
- Acres of Brownfields properties made ready for reuse [PART performance]

Performance Database: The Assessment Cleanup and Redevelopment Exchange System (ACRES) tracks the performance information for the above measures.

Key fields related to performance measures include, but are not limited to:

Property Acreage
Assessment Completion Date
Cleanup Required
Cleanup Completion Date
Funding Leveraged
Jobs Leveraged
Number of Participants Completing Training
Number of Participants Obtaining Employment

Performance measure data is tracked by fiscal year and will not be available for the FY 08 PAR; data will be available for the FY 09 PAR.

Data Source: Data are extracted from quarterly reports and property profile forms (<http://www.epa.gov/brownfields/pubs/rptforms.htm>) prepared by assessment, cleanup, revolving loan fund (RLF), job training, and State and Tribal 128 Voluntary Response Program cooperative agreement award recipients. Information on Targeted Brownfields Assessments is collected from EPA Regions.

Methods, Assumptions and Sustainability: Cooperative agreement recipients report performance data in quarterly reports and property profile forms. Data are reviewed by Regional EPA grant managers to verify activities and accomplishments. Given the reporting cycle and the data entry/QA period, there is typically a six month data lag for ACRES data.

Note that accomplishments reported by Brownfields Assessment Grantees, Brownfields Cleanup Grantees, Brownfields Revolving Loan Fund Grantees, Brownfields Job Training Grantees, Regional Targeted Brownfields Assessments, and State and Tribal 128 Voluntary Response Program Grantees all contribute towards these performance measures. "Number of Brownfields properties assessed" is an aggregate of assessments completed with Assessment Grant funding, Regional Targeted Brownfields Assessment funding, and State and Tribal 128 Voluntary Response Program funding. "Number of Brownfields properties cleaned up" is an aggregate of properties cleaned up by RLF Grantees, Cleanup Grantees, and State and Tribal 128 Voluntary Response Program Grantees. "Number of Acres Made Ready for Reuse" is an aggregate of acreage assessed that does not require cleanup and acreage cleaned up as reported by Assessment Grantees, Regional Targeted Brownfields Assessments, Cleanup Grantees, RLF Grantees, and State and Tribal 128 Voluntary Response Program Grantees. "Number of cleanup and redevelopment jobs leveraged" is the aggregate of jobs leveraged by Assessment, Cleanup and RLF Grantees. "Amount of cleanup and redevelopment funds leveraged at Brownfields properties" is the aggregate of funds leveraged by Assessment, Cleanup and RLF Grantees. "Percentage of Brownfields job training trainees placed" is based on the "Number of Participants Completing Training" and the "Number of Participants Obtaining Employment" reported by Job Training Grantees.

QA/QC Procedures: Data reported by cooperative award agreement recipients are reviewed by EPA Regional grant managers for accuracy and to ensure appropriate interpretation of performance measure definitions. Reports are produced monthly with detailed data trends analysis.

Data Quality Reviews: No external reviews.

Data Limitations: All data provided voluntarily by grantees.

Error Estimate: NA

New/Improved Data or Systems: The Brownfields Program updated the Property Profile Form in FY 2006 to improve data collection and to expand the community of grantees completing the form. The Program anticipates launching an online reporting form in FY 2007; this system will be phased in over the next several years.

References: For more information on the Brownfields program, see *Reusing Land and Restoring Hope: A Report to Stakeholders from the US EPA Brownfields Program* (http://www.epa.gov/brownfields/news/stake_report.htm); assessment demonstration pilots and grants (http://www.epa.gov/brownfields/assessment_grants.htm); cleanup and revolving loan fund pilots and grants (<http://www.epa.gov/brownfields/rlflst.htm>); job training pilots and grants (<http://www.epa.gov/brownfields/job.htm>); and cleanup grants (http://www.epa.gov/brownfields/cleanup_grants.htm).

FY 2008 Performance Measure:

- Cumulative number of communities with potential environmental justice concerns that achieve significant measurable environmental and/or public health improvement through collaborative problem-solving strategies.

Performance Database: The Office of Environmental Justice is developing a database to collect the data for this measure.

Data Source: Semi-annual reports provided by recipients of EPA cooperative agreements in the amount of \$100,000 over a three year project period. These reports are collected and analyzed by the individual technical advisors of each of the projects. The data reported will be analyzed by EPA to determine measurable improvements which result from the projects. These projects vary from reductions in solid waste to reductions in exposure to lead paint. In addition to the semi-annual reporting requirements for the individual projects, the office will also conduct annual evaluations of each of the projects to validate results in the semi-annual reports.

Methods, Assumptions and Suitability: The method to be used to analyze and review the information will depend on the type of project but usually the baseline measures available at the time the project begins will be the starting point; changes to the baseline will be the measures of improvement in environmental and/or public health. The communities with environmental justice issues are defined as those impacted disproportionately by high and adverse exposure to environmental hazards.

QA/QC Procedures: Office of Environmental Justice Quality Management Plan, approved August 5, 2002. To ensure data accuracy and control, the following administrative controls are in place: (1) Report specifications for each project detailing how reported data are collected and calculated, and (2) Quality Assurance Project Plans (QAPP) for projects involving the collection of primary or secondary environmental data. Not all projects involve the collection of primary or secondary environmental data, however, and do not require a QAPP. In those cases, EPA relies fully on the project's reporting requirements and evaluation studies to construct the baselines and trends.

Data Quality Review: The Office of Environmental Justice performs an annual review of each project to verify the data supporting the performance measure. Typically, there are no published results.

Data Limitations: None

Error Estimate: NA

New/Improved Data or Systems: None

References: Office of Environmental Justice Quality Management Plan, approved August 5, 2002.

FY 2008 Performance Measures:

- **Additional people served per million dollars (US and Mexico federal expenditures)**
- **Number of additional homes provided adequate safe drinking water in the Mexican border area that lacked access to wastewater sanitation in 2003**
- **Number of additional homes provided adequate wastewater sanitation in the Mexican border area that lacked access to wastewater sanitation in 2003**

Performance Database: No formal EPA database. Performance is tracked and reported quarterly by the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADBank). Data fields are population served by and homes connected to potable water and wastewater collection and treatment systems.

Data Source: Data sources include U.S. population figures from the 2000 U.S. Census, data on U.S. and Mexican populations served and homes connected by "certified" water/wastewater treatment improvements from the BECC and data on projects funded from the NADBank.

Methods, Assumptions and Suitability: Summation of population from BECC and NADBank.

QA/QC Procedures: EPA Headquarters is responsible for evaluation of reports from BECC and NADBank on drinking water and wastewater sanitation projects. Regional representatives attend meetings of the certifying and financing entities for border projects (BECC and NADBank) and conduct site visits of projects underway to ensure the accuracy of information reported.

Data Quality Reviews: Regional representatives attend meetings of the certifying and financing entities for border projects (BECC and NADBank) and conduct site visits of projects underway to ensure the accuracy of information reported.

Data Limitations: None.

Error Estimate: The error estimate is the same rate accepted by the U.S. Census.

New/Improved Data or Systems: None.

References:

U.S. Department of Commerce, Bureau of the Census, (Washington, DC: U.S. Department of Commerce, 1990). *Instituto Nacional de Estadística, Geografía y Informática, Aguascalientes*, Total Population by State (1990).

Border Environment Cooperation Commission (BECC), Cd Juarez, Chih, and North American Development Bank (NADBank), (San Antonio, TX, 2002).

FY 2008 Performance Measure:

- **Clean-up five waste sites (two abandoned scrap tire sites and three abandoned hazardous waste sites) in the United-States-Mexico border region.**

Performance Database: The measure tracks the number of scrap tire piles and hazardous waste sites cleaned up in the U.S.-Mexico border region. To accomplish this, the EPA works in collaboration with the Mexican federal and state governments, border States, border tribes, local communities, NGOs, the private sector and others.

In the U.S., the EPA Office of International Affairs (OIA) coordinates the Border 2012 program and manages the Border 2012 Project Database, which contains information/data related to project implementation and progress made as submitted by project officers. Data include the name and location of hazardous waste sites, tire piles, plans and timelines for clean up, number of waste tires in the piles, number of tires removed/cleaned up, and dates for project start and end.

Indicator: Estimated Abandoned Waste Tire Piles in the Border Region

Outcome*:	<u>Site</u>	<u>Percent Removed</u>	<u>Original Number of Tires</u>
	El Centinella	77%	1,200,000
	Ciudad Juarez	20%	1,000,000

*As of December 2005

Data Source: The data on hazardous sites and scrap tire clean up comes from local government and contractors hired to conduct the clean up as submitted to SEMARNAT (Mexico), and EPA and as reported on the Indicators Report 2005.

Methods, Assumptions and Suitability: In cooperation with the various entities operating under the Border 2012 program, the Border Indicators Task Force (BITF) selects and develops environmental and performance indicators to communicate important information about the border region and to evaluate progress towards meeting Program goals and objectives. Each of the indicators presented in the 2005 report is classified according to the Driving Forces-Pressures-State-Impact-Response (DPSIR) Framework. DPSIR is based on the idea that Driving Forces such as socio-economic factors lead to natural or human-induced Pressures, which lead to a State, which generates Impacts (sub-divided into Exposure and Effect) that evoke Responses. The Response compartment feeds back into every other compartment, showing that interventions can occur at each point along the causal spectrum. For more information see the *Strategy for Indicator Development* (EPA 600/R-06/015 April 2006).

QA/QC Procedures:

Once the EPA receives information on the status of projects in a border community, EPA's subject and program experts contact key sources in the border area to verify data.

Data Quality Reviews: N/A

Data Limitations: Potential data limitations are: 1) Inconsistencies in methods of data collection, processing, etc., arising from work being done in a foreign location; 2) inaccuracies due to imprecise measurement and recording stemming from tire size and state (whole or in crumbs); and, 3) lags between data collection, reporting, and updating.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: Border 2012 Project Database: EPA-OIA-U.S.-Mexico Team

Program Framework: Border 2012: U.S.-Mexico Environmental Program – EPA-160-R-03-001

State of the Border Region. Indicators Report 2005 – EPA-160-R-06-001

Border 2012 Program Website: <http://www.epa.gov/border> 2012/

FY 2008 Performance Measure:

- **Reduce the mean maternal blood levels of polychlorinated biphenyls (PCBs) and chlordane in indigenous populations in the Arctic.**

Performance Database: Two databases provide the baseline data in support of this performance measure, which tracks the response of human Arctic populations to programmatic efforts to reduce their exposure to priority Persistent Organic Pollutants (POPs) contamination in their environment. Between 1998 and 2002 the Arctic Monitoring and Assessment Program (AMAP) of the Arctic Council, with the participation of all eight Arctic nations, collected data on persistent organic pollutants and human health impacts in the Arctic Rim Region, including spatial and temporal trends of maternal blood concentrations of PCBs and chlordane in indigenous peoples.

Also between 1998 and 2002, an additional study was carried out on “Persistent Toxic Substances, Food Security and Indigenous Peoples of the Russian North”, which assisted AMAP to eliminate data gaps with respect to geographical scope. This study, issued in 2004, was a combined effort of the Global Environment Facility, UNEP, AMAP, and the Russian Association of the Indigenous Peoples of the North, Siberia and Far East.

Both studies documented the fact that Persistent Toxic Substances (PTS) such as PCBs and chlordane are transported to, and accumulate in, the Arctic Region. Data continue to be collected under the AMAP Program and evaluated for health impacts by the AMAP Human Health Experts Group consisting of representatives from all eight Arctic countries.

Both databases are maintained by the AMAP Secretariat in Oslo, Norway.

AMAP Assessment Reports are available at: www.amap.no

Persistent Toxic Substances, Food Security and Indigenous Peoples of the Russian North Report is available at: www.amap.no/Resources/PTS_project.htm

Data Source: The Arctic Council, consisting of eight Arctic nations and Permanent Participants of Indigenous Peoples, participate in the collection, analysis, evaluation and reporting of results on priority pollutants such as PCBs and chlordane. The data reports are posted on the Arctic Council website and shared with the Barents Euro-Arctic Council, the Nordic Council of Ministers, the United Nations Environment Program and others. EPA and other U.S. Federal

Agencies such as NOAA and NIH participate in the collection and interpretation of the data.

Methods, Assumptions and Suitability: Analytical and statistical methods applied to the analysis and interpretation of data, were those methods approved by the European Union and the methods developed by the NIH, CDC and EPA. A standard analytical method used in these studies is high pressure liquid chromatography with electron capture. Statistical methods include regression analysis to look for association of health outcomes between the baby and the mothers and individual contaminants and mixtures of contaminants.

Maternal blood serum concentrations of PCBs and chlordane in indigenous peoples of the Arctic were chosen because, in general, the most devastating impacts of exposure to these POPs are seen in infants exposed to them in utero or via their mother's milk. Additionally, there are no local manufacturing facilities or large point sources of these toxics; indigenous peoples have a limited subsistence diet of fish and mammals that bioaccumulate PCBs and chlordane through transboundary transfer; and human health impacts can be directly correlated to the presence of these toxic compounds. Maternal blood serum was selected as the reference material since it is sensitive to changes in environmental concentrations, has a residence time of many years, and is transported through the umbilical cord blood from mother to fetus, providing clear relationship between contaminant levels and their impact on human health.

QA/QC Procedures: In the PTS study, a Regional Monitoring Center was selected by the project Steering Committee to perform analyses using international methodologies and strict QA/QC procedures. The AMAP study used recognized Data Centers such as the University of Alaska- Fairbanks, and the International Council for the Exploration of the Sea. These Data Centers were already operating using internationally-accepted QA/QC practices.

Data Quality Reviews: In the Arctic Environmental Assessment Reports of AMAP and PTS, over 140 contributing experts and 14 international organizations participated in a series of expert groups to review analytical data, data collection techniques, interpretation of results and health impacts. These expert groups were instrumental in identifying data gaps and weaknesses in the original AMAP assessments that were concurrently addressed by the PTS study. Such gaps included indigenous populations in remote regions of Russia, high Arctic Russian cities which originally did not participated in the AMAP studies, and military populations.

Data Limitations: The remote locations and limited populations of women of child-bearing age are a primary challenge. This is being addressed by a new Arctic Council Arctic Contaminants Action Program called the "Indigenous Peoples Community Action Initiative". Under this initiative, local sources of contamination, such as small amounts of improperly stored obsolete pesticides and PCBs, are identified and removed from the community. Environmental educational programs are also implemented, particularly for women of child-bearing age and children, on how to identify and avoid these toxic contaminants. The time interval between data collection (blood serum) and posting on the AMAP database is approximately five months. There is very little variability in the sample collection techniques because the same doctors from the Northwest Public Health Research Center and Alaska Human Health Consortium are performing the data collection.

Error Estimate: Analytical procedures allow measurements in fractions of ug/l. The error bound for the performance estimate is +/- 5%.

New/Improved Data or Systems: Expanded database development is being performed under the new “Indigenous Peoples Community Action Initiative” (see “Data Limitations” above)

References:

AMAP, 2003. AMAP Assessment 2002: Human Health in the Arctic. Arctic Monitoring and Assessment Programme (AMAP), Oslo, Norway.

(<http://www.amap.no/Assessment/ScientificBackground.htm>)

Persistent Toxics Substances, Food Security and Indigenous Peoples of the Russian North: Final Report, Oslo 2004. (http://www.amap.no/Resources/PTS_project.htm)

Contaminants in Alaska - - Is America’s Arctic at Risk? Alaska Native Science Commission, Interagency Collaborative Paper, September 2000

Northern Contaminants Program-Canada ([http:// www.inac.gc.ca/ncp/abt/bro_e.html](http://www.inac.gc.ca/ncp/abt/bro_e.html))

Bertazzi, P.A., Industrial Disease Standards Panel Report, Ontario Canada, 1987

Dallaire et. Al., 2002. Environmental Health Perspectives Volume 110, Number 8, August 2002.

Stewart P, Darvill T, Lonky E, Reihman J, Pagano J, and Bush B. 1999. Assessment of prenatal exposure of PCBs from maternal consumption of Great Lakes fish: an analysis of PCB pattern and concentration. Environ Res 80(Suppl 2):87-96.

Yakushiji, T., Watanabe, I., Kuwabara, K., Tanaka, R., Kashimoto, T., Kunita, N., Hara, I. Rate of decrease and half-life of polychlorinated biphenyls (PCBs) in the blood of mothers and their children occupationally exposed to PCBs. Archives of Environmental Contamination and Toxicology (1984). vol.13. p.341-345.

GOAL 4 OBJECTIVE 3

FY 2008 Performance Measures:

- **Acres of habitat protected or restored in National Estuary Program (NEP) study areas [Ocean and Coastal PART measure]**
- **Acres of coastal habitat, including tidal wetlands, dunes, riparian buffers, and freshwater wetlands restore or protected [Long Island Sound]**
- **Program dollars per acre of habitat protected or restored [Ocean and Coastal PART efficiency measure]**

Performance Database: The Office of Wetlands Oceans and Watersheds has developed a standardized format for data reporting and compilation, defining habitat protection and restoration activities and specifying habitat categories. The key field used to calculate annual

performance is habitat acreage. Annual results have been reported since 2000 for the NEP (results are calculated on a fiscal year basis).

Information regarding habitat protection is accessible on a web page that highlights habitat loss/alteration, as well as the number of acres protected and restored by habitat type <http://www.epa.gov/owow/estuaries/pivot/overview/intro.htm>. This allows EPA to provide a visual means of communicating NEP performance and habitat protection and restoration progress to a wide range of stakeholders and decision-makers.

Data Source: NEP documents such as annual work plans (which contain achievements made in the previous year), annual progress reports and other implementation tracking materials, are used to document the number of acres of habitat restored and protected. EPA aggregates the data provided by each NEP to arrive at a national total for the entire Program. EPA is confident that the data presented are as accurate as possible. Each NEP reviews the information prior to reporting to EPA. In addition, EPA conducts regular reviews of NEP implementation to help ensure that information provided in these documents is accurate, and progress reported is in fact being achieved.

Methods, Assumptions and Suitability: Measuring the number of acres of habitat restored and protected may not directly correlate to improvements in the health of the habitat reported, or of the estuary overall, but it is a suitable measure of on-the-ground progress. Habitat acreage does not necessarily correspond one-to-one with habitat quality, nor does habitat (quantity or quality) represent the only indicator of ecosystem health. Nevertheless, habitat acreage serves as an important surrogate and a measure of on-the-ground progress made toward EPA's annual performance goal of habitat protection and restoration in the NEP. EPA has defined and provided examples of A protection@ and A restoration@ activities for purposes of measure tracking and reporting (see citation for the PIVOT website in references below.) "Restored and protected" is a general term used to describe a range of activities. The term is interpreted broadly to include created areas, protected areas resulting from acquisition, conservation easement or deed restriction, submerged aquatic vegetation coverage increases, permanent shellfish bed openings, and anadromous fish habitat increases.

The NEP "Habitat Acres Protected or Restored" efficiency measure will be calculated by dividing the total ocean and coastal protection program dollars by the total NEP acres protected or restored. The measure is based on the habitat data collected by the NEPs, as described above and reported in the annual habitat measure, and the total program dollars, which is the sum of the NEP/Coastal budget (including the additional funds for Long Island Sound), the Marine Pollution budget, and the program match as reported by the NEPs.

QA/QC Procedures: Primary data are prepared by the staff of the NEP based on their own reports and from data supplied by other partnering agencies/organizations (that are responsible for implementing the action resulting in habitat protection and restoration). The NEP staff are requested to follow EPA guidance to prepare their reports, and to verify the numbers. EPA then confirms that the national total accurately reflects the information submitted by each program. EPA actions are consistent with data quality and management policies.

Data Quality Review: No audits or quality reviews conducted yet.

Data Limitations: Current data limitations include: information that may be reported inconsistently (based on different interpretations of the protection and restoration definitions), acreage that may be miscalculated or misreported, and acreage that may be double counted (same parcel may also be counted by partnering/implementing agency or need to be replanted multiple years). In addition, measuring the number of acres of habitat restored and protected may not directly correlate to improvements in the health of the habitat reported (particularly in the year of reporting), but is rather a measure of on-the-ground progress made by the NEPs.

Error Estimate: No error estimate is available for this data.

New/Improved Data or Systems: NEPs provide latitude and longitude data (where possible) for each project. These data are then mapped to highlight where these projects are located in each NEP study area. Not only does this assist both the individual NEP and EPA in obtaining a sense of geographic project coverage, but it provides a basis from which to begin exploring cases where acreage may be double-counted by different agencies. An on-line reporting system—NEPORT-- has been developed for the NEPs= use that will assist in tracking habitat projects. EPA has taken steps to align NEPORT data fields with those of the National Estuarine Restoration Inventory (NERI) and with the President's Wetlands Initiative, developed for interagency use.

References: Aggregate national and regional data for this measurement, as well as data submitted by the individual National Estuary Programs, is displayed numerically, graphically, and by habitat type in the Performance Indicators Visualization and Outreach Tool (PIVOT). PIVOT data are publicly available at <http://www.epa.gov/owow/estuaries/pivot/overview/intro.htm>. The Office of Water Quality Management Plan (July 2001) is available on the Intranet at <http://intranet.epa.gov/ow/infopolicy.html>.

FY 2008 Performance Measure:

- **By 2008, working with partners, achieve a net increase of 100,000 acres of wetlands per year with additional focus on biological and functional measures and assessment of wetland condition.**

Performance Database: The U.S. Fish and Wildlife Service produces information on the type and extent of the Nation's wetlands and deepwater habitats. The Emergency Wetland Resources Act of 1986 requires the Service to conduct status and trend studies of the Nation's wetlands, and report the results to Congress each decade.. To date the Fish and Wildlife Service has produced four such documents. On Earth Day 2004, President Bush announced a wetlands initiative that established a federal policy beyond "no net loss" of wetlands. As part of that same Earth Day message, the President directed the Service to accelerate the completion of the status and trends and to undertake this study at more frequent intervals. This information is used by Federal, State, and local agencies, academic institutions, U.S. Congress, and the private sector.

The status and trends report is designed to provide recent and comprehensive estimates of the abundance of wetlands in the 48 conterminous States. This status and trends report indicates whether there is an actual increase in wetland acreage or if wetlands are continuing to decrease. Up-to-date status and trends information is needed to periodically evaluate the efficacy of existing Federal programs and policies, identify national or regional wetland issues, and increase public awareness of and appreciation for wetlands.

The last status and trends report¹⁶ provided the most recent and comprehensive estimates of the current gains and losses for different types of wetlands in the United States on public and private lands from calendar year 1998 to 2004. In calendar year 1997, there were an estimated 105.5 million acres of wetlands in the conterminous United States. In calendar year 2004 107.7 million acres of wetlands were estimated. Of this total, approximately 102.4 million acres (95 percent) are freshwater wetlands and 5.3 million acres (5 percent) are saltwater wetlands. Although the report shows that overall gains in wetland acres exceeded overall losses from 1998 through 2004 (approximately 32,000 acres/yr), this gain is primarily attributable to an increase in unvegetated freshwater ponds, some of which (such as aquaculture ponds) may not function as wetlands and others of which may have varying functional value. The Report also notes the following trends in other wetland categories: freshwater vegetated wetlands declined by 0.5%, a smaller rate of loss than in preceding years; and estuarine vegetated wetlands declined by 0.7%, an increased rate of loss from the preceding years. The Status and Trends Report does not assess the quality or condition of wetlands. EPA will continue working with FWS and other federal agencies to refine the methodology used in preparing future reports, to subdivide current wetland categories, to provide further clarity and information on the types of wetlands that are found on the landscape and to describe the functions and values they provide. In addition EPA is preparing to undertake a National wetland condition study that is scheduled for completion in 2013.

Data Source: The National Status and Trends Report is developed and published by the U.S. Fish and Wildlife Service. This is the only Federal study that provides statistically valid estimates with a published standard error for all wetlands in the conterminous United States. Aerial imagery is the primary data source, and it is used with reliable collateral data such as topographic maps, coastal navigation charts, published soil surveys, published wetland maps, and State, local or regional studies. A random number of sites are also field verified. All photography is cataloged, numbered, tagged, and traced in a database management system.

For each plot, aerial imagery is interpreted and annotated in accordance with procedures published by the Fish and Wildlife Service. The results are compared with previous era imagery, and any changes recorded. The differences between the data sets are analyzed and a statistical estimate of the change is produced.

The five major kinds of wetlands are: 1) freshwater (or palustrine), 2) saltwater (or estuarine), 3) riverine, 4) lacustrine (or lakes and other deepwater habitats), and 5) marine wetlands. For analysis and reporting purposes, these types of wetlands were further divided into subcategories such as freshwater forested wetland, freshwater emergent wetland, estuarine and marine intertidal wetlands.

¹⁶ Dahl, T.E. 2006. Status and trends of wetlands in the conterminous United States 1998 to 2004. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 112pp.

Methods, Assumptions and Suitability: An interagency group of statisticians developed the design for the national status and trends study published in 2000. The study was based on a scientific probability sample of the surface area of the 48 coterminous States. The area sampled was about 1.93 billion acres and the sampling did not discriminate based on land ownership. The study used a stratified, simple random sampling design. About 754,000 possible sample plots comprised the total population. Geographic information system software was used to organize the information of about 4,682 random sample plots. The plots were examined with the use of remote sensed data in combination with field work. Estimates of change in wetlands were made over a specific time period.

QA/QC Procedures: The Service has developed and implemented quality assurance measures that provide appropriate methods to take field measurements, ensure sample integrity and provide oversight of analyses, which includes reporting of procedural and statistical confidence levels. The objective was to produce comprehensive, statistically valid acreage estimate of the Nation's wetlands. Because of the sample-based approach, various quality control and quality assurance measures were built into the data collection, review, analysis, and reporting stages. This includes field verification of the plots. Six Federal agencies assist with field verification work.

Data Quality Reviews: Not Applicable

Data Limitations: Certain habitats were excluded because of the limitations of aerial imagery as the primary data source to detect wetlands. This was consistent with previous wetland status and trends studies conducted by FWS.

Error Estimate: Estimated procedural error ranged from 4 to 6 percent of the true values when all quality assurance measures have been completed. Procedural error was related to the ability to accurately recognize and classify wetlands both from multiple sources of imagery and on the ground evaluations. Types of procedural errors were missed wetlands, inclusion of upland as wetland, misclassification of wetlands, or misinterpretation of data collection protocols. The amount of procedural error is usually a function of the quality of the data collection conventions; the number, variability, training and experience of data collection personnel; and the rigor of any quality control or quality assurance measures.

New/Improved Data or Systems: Advances in computerized cartography were used to improve data quality and geospatial integrity. Newer technology allowed the generation of existing digital plot files at any scale to overlay directly over an image base.

References:

<http://wetlands.fws.gov/index.html>
<http://wetlands.fws.gov/bha/SandT/SandTReport.html>
http://wetlands.fws.gov/Pubs_Reports/publi.htm

FY 2008 Performance Measure:

- **Annually, beginning in FY04 and in partnership with the Corps of Engineers and states, achieve no net loss of wetlands in the Clean Water Act Section 404 regulatory program**

Performance Database: Since 1989, the goal of the Clean Water Act Section 404 program has been no net loss of wetlands.

Historically, the Corps has collected limited data on wetlands losses and gains in its Regulatory Analysis and Management System (RAMS) permit tracking database. The Corps has compiled national Section 404 wetland permitting data for the last 10 years reflecting acres of wetland impacts avoided (through the permit process), acres permitted for impacts, and acres mitigated. However, limitations in methods used for data collection, reporting and analysis resulted in difficulties in drawing reliable conclusions regarding the effects of the Section 404 program.

Data Source: Data included in RAMS is generally collected by private consultants hired by permit applicants or Corps Regulatory Staff. Data input is generally done by Corps staff.

Methods, Assumptions and Suitability: RAMS was designed to be an administrative aid in tracking permits, thus it lacks many of the fields necessary to adequately track important information regarding wetland losses and gains. Also, the database was modified differently for each of the 38 Corps Districts making national summaries difficult. Furthermore, the database is also proprietary making it difficult to retrofit without utilizing its original developers.

QA/QC Procedures: Historically, there has not been a high level of QA/QC with regard to data input into RAMS. Its antiquated format and numerous administrative fields discourage use. Lack of standard terms and classification also make all aspects of data entry problematic.

Data Quality Reviews: Independent evaluations published in 2001 by the National Academy of Sciences (NAS) and the General Accounting Office (GAO) provided a critical evaluation of the effectiveness of wetlands compensatory mitigation (the restoration, creation, or enhancement of wetlands to compensate for permitted wetland losses) for authorized losses of wetlands and other waters under Section 404 of the Clean Water Act. The NAS determined that available data was insufficient to determine whether or not the Section 404 program was meeting its goal of no net loss of either wetland area or function. The NAS added that available data suggested that the program was not meeting its no net loss goal. Among its suite of recommendations, the NAS noted that wetland area and function lost and regained over time should be tracked in a national database and that the Corps should expand and improve quality assurance measures for data entry.

Data Limitations: As previously noted, RAMS currently provides the only national data on wetlands losses and gains in the Section 404 Program. Also, as previously noted, there are a number of concerns regarding the conclusions that can be drawn from these numbers. Data quality issues include:

1. Inability to separate restoration, creation, enhancement and preservation acreage from the aggregate “mitigation” acreage reported;

2. Lack of data regarding how much designated mitigation acreage was actually undertaken, and how much of that total was successful;
3. Lack of data regarding how much of the permitted impacts actually occurred; and
4. Limitations on identifying acres "avoided," because the figure is only based on the difference between original proposed impacts and impacts authorized. Often, permit applicants who are aware of the 404 program's requirements to avoid and minimize impacts to wetlands, make initial site selection and site design decisions that minimize wetland impacts prior to submitting a permit application. Such avoidance decisions benefit applicants, as their applications are more likely to be accepted and processed with minor changes. This behavioral influence that the program engenders is difficult to capture and quantify, but contributes considerable undocumented "avoided" impacts.

Error Estimate: Not applicable

New/Improved Data or Systems: The EPA and the Corps have acknowledged the need for improved 404 tracking. The Corps is currently piloting a new national permit tracking database called ORM (Operation and maintenance business information link, Regulatory Module) to replace its existing database (RAMS). The Corps is partnering with EPA to ensure that the version of ORM that is ultimately deployed will adequately track wetlands and other aquatic resource losses and mitigation. ORM 1.0 has already been deployed in approximately half of the Corps' 38 districts. The Corps expects to deploy ORM 1.0 in the remaining districts in Fall 2006. Also during Fall 2006, Corps plans to beta test ORM 2.0 in selected Districts before upgrading all Districts to ORM 2.0 by the first quarter of 2007. This should enable national reporting in early 2008. Unlike ORM 1.0, ORM 2.0 will have expanded GIS capabilities and additional mandatory data fields for impact and mitigation data. EPA, other federal and state agencies, as well as the public will also have expanded access to data in ORM 2.0 via a system of web-services and web-mapping tools.

ORM 2.0 is being designed to provide improved tracking regarding:

- Type of impacts (i.e., work type)
- Type, quantity and location of aquatic resources impacted (Using Cowardin classification system)
- Type, quantity and location of aquatic resource mitigation (Using Cowardin classification system)
- Type and quantity of mitigation by method (i.e., restoration, creation, enhancement, or preservation)
- Differentiating stream mitigation (in linear feet) from wetlands mitigation (in acres)
- Spatial tracking via GIS enhancements for both impact and mitigation sites (*planned*)
- Functional losses (debits) at the impact site and functional gains at the mitigation site (credits) if assessment tool is available and applied

FY 2008 Performance Measure:

- **Prevent water pollution and protect aquatic ecosystems so that overall ecosystem health of the Great Lakes is improved**

Performance Database: USEPA's Great Lakes National Program Office (GLNPO) will collect and track the eight (8) components of the index and publish the performance results as part of annual reporting under the Government Performance and Results Act (GPRA) and as online reporting of GLNPO's monitoring program, <http://epa.gov/glnpo/glindicators/index.html> . Extensive databases for the indicator components are maintained by GLNPO (phosphorus concentrations, contaminated sediments, benthic health, fish tissue contamination), by binational agreement with Environment Canada (air toxics deposition), and by local authorities who provide data to the USEPA (drinking water quality, beach closures). A binational team of scientists and natural resource managers is working to establish a long term monitoring program to determine extent and quality of coastal wetlands.

Data Source: Data for the index components are tracked internally and generally reported through the State of the Lakes Ecosystem Conference (SOLEC) process. The document, "State of the Great Lakes 2005 -A Technical Report," presents detailed indicator reports prepared by primary authors, including listings of data sources. Depending on the indicators, data sources may include U.S. and Canadian federal agencies, state and provincial agencies, municipalities, research reports and published scientific literature. Information from the following indicators is used to evaluate the Index components:

Coastal Wetlands group of indicators:

Coastal Wetland Invertebrate Community Health
Coastal Wetland Fish Community Health
Coastal Wetland Amphibian Diversity and Abundance
Coastal Wetland Area by Type
Coastal Wetland Plant Community Health
Effects of Water Levels Fluctuations

Phosphorus Concentrations and Loadings

Area of Concern Sediment Contamination (*This component is not included in SOLEC. Information from reports of contaminated sediment remediation is collected by USEPA-GLNPO and is used by GLNPO to evaluate the contaminated sediment index component of this Index.*)

Benthic Health group of indicators:

Hexagenia
Abundances of the Benthic Amphipod Diporeia spp.

Contaminants in Sport Fish

Beach Advisories, Postings and Closures

Drinking Water Quality

Atmospheric Deposition of Toxic Chemicals

Methods, Assumptions, and Suitability: The Index is based on a 40 point scale where the rating uses select Great Lakes State of the Lakes Ecosystem indicators (i.e., coastal wetlands, phosphorus concentrations, benthic health, fish tissue contamination, beach closures, drinking water quality, and air toxics deposition), and an indicator for Area of Concern (AOC) sediment contamination. Each component of the Index is based on a 1 to 5 rating system, where 1 is poor and 5 is good. Authors use best professional judgment to assess the overall status of the ecosystem component in relation to established endpoints or ecosystem objectives, when

available. Each indicator is evaluated for Status (good, fair, poor, mixed) and Trend (improving, unchanging, deteriorating, undetermined). To calculate the Index, the data for each indicator are compared to the evaluation criteria for the numeric, 1 to 5, rating system. Each of the index components, other than the AOC sediment contamination component, is included in the broader suite of Great Lakes indicators, which was developed through an extensive multi-agency process to satisfy the overall criteria of necessary, sufficient and feasible. Information on the selection process is in the document, “Selection of Indicators for Great Lakes Basin Ecosystem Health, Version 4.”

QA/QC Procedures: GLNPO has an approved Quality Management System in place¹(see reference #1 below) that conforms to the USEPA Quality Management Order and is audited every 3 years in accordance with Federal policy for Quality Management.

The SOLEC process relies on secondary use of data, i.e., data for many of the indicators are collected, maintained and analyzed by agencies and organizations other than USEPA. Participating agencies and organizations follow their own QA/QC procedures to assure high quality data. A Quality Assurance Project Plan (QAPP) was developed to document procedures for data assessment and review for the indicators reports prepared for the State of the Great Lakes 2005 report. See “State of the Lakes Ecosystem Conference 2004 QAPP.” Contaminated sediment remediation information is collected in conformance with GLNPO’s Great Lakes Sediment Remediation Project Summary Support QAPP² (see reference #2 below).

Data Quality Review: GLNPO’s Quality Management System has been given “outstanding” evaluations in previous peer and management reviews² (see reference #2 below). GLNPO has implemented all recommendations from these external audits and complies with Agency Quality standards.

An external Peer Review of SOLEC processes and products was conducted in 2003 by an international panel of experts familiar with large-scale regional or national indicator and reporting systems. Panel findings were generally positive and several recommendations were made to consider for future SOLEC events and reports. Many of the recommendations have been implemented, and others are being considered for feasibility. The final report by the review panel is available online at <http://epa.gov/glnpo/solec/index.html>. See “State of the Lakes Ecosystem Conference Peer Review Report” in the SOLEC 2004 section.

A second review of the suite of Great Lakes indicators was conducted by Great Lakes stakeholders in 2004. As a direct result of the findings and recommendations from the participants, several indicators were revised, combined or dropped, and a few others were added. The indicators were also regrouped to allow the user to more easily identify the indicators relevant to particular ecosystem components or environmental issues. The final report from the review is available online at <http://epa.gov/glnpo/solec/index.html>. See “State of the Lakes Ecosystem Conference Peer Review Report, Part 2: Stakeholder Review of the Great Lakes Indicators” in the SOLEC 2004 section.

Data Limitations: Data limitations vary among the indicator components of the Index. The data are especially good for phosphorus concentrations, fish tissue contamination, benthic health, and

air toxics deposition. The data associated with other components of the index (coastal wetlands, AOC sediment contamination, beach closures, and drinking water quality) are more qualitative. Some data are distributed among several sources, and without an extensive trend line. Limitations for each of the index components are included in the formal indicator descriptions in the document, "Selection of Indicators for Great Lakes Basin Ecosystem Health, Version 4." The data provided in the sediment tracking database should be used as a tool to track sediment remediation progress at sites across the Great Lakes. Many of the totals for sediment remediation are estimates provided by project managers. For specific data uses, individual project managers should be contacted to provide additional information.

Error Estimate: Error statistics for the Great Lakes Index have not been quantified. Each unit of the 40 point scale represents 2.5% of the total, so any unit change in the assessment of one of the component indicators would result in a change of the index of that magnitude. The degree of environmental change required to affect an indicator assessment, however, may be significantly large.

New/Improved Data or Systems: The data system specifically for this index is being developed. Data continue to be collected through the SOLEC process by various agencies, including GLNPO. Efforts are currently in progress to integrate various Great Lakes monitoring programs to better meet SOLEC objectives and to increase efficiencies in data collection and reporting. Documentation regarding SOLEC is available on the Internet and from GLNPO⁴ (see reference # 4 below).

References:

1. "Quality Management Plan for the Great Lakes National Program Office." EPA905-R-02-009. October 2002, Approved April 2003.
2. "Great Lakes Sediment Remediation Project Summary Support QAPP." March 2006. Unpublished – in USEPA GLNPO files.
3. "*GLNPO Management Systems Review of 1999.*" Unpublished - in USEPA Great Lakes National Program Office files.
4. a. "State of the Lakes Ecosystem Conference 2004 QAPP." Unpublished. Prepared as part of Cooperative Agreement between USEPA and Environment Canada.

b. Canada and the United States. "State of the Great Lakes 2003." ISBN 0-662-34798-6, Environment Canada, Burlington, Ontario, Cat. No. En40-11/35-2003E, and U.S.

c. Environmental Protection Agency, Chicago, EPA 905-R-03-004. 2003. Available on CD and online at www.binational.net.

d. Canada and the United States. "Implementing Indicators 2003 - A Technical Report." ISBN 0-662-34797-8 (CD-Rom), Environment Canada, Burlington, Ontario, Cat. No. En164-1/2003E-MRC (CD-Rom), and U.S. Environmental Protection Agency, Chicago,

EPA 905-R-03-003. 2003. Available on CD from U.S. EPA/Great Lakes National Program Office, Chicago. Available online at <http://epa.gov/glnpo/solec/index.html>

e. Canada and the United States. "State of the Great Lakes 2005." Environment Canada, Burlington, Ontario (Cat No. En161-3/0-2005E-PDF) and U.S. Environmental Protection Agency, Chicago (EPA 905-R-06-001), 2006 Available online at <<http://epa.gov/glnpo/solec/index.html>>

f. Bertram, Paul and Nancy Stadler-Salt. "Selection of Indicators for Great Lakes Basin Ecosystem Health, Version 4." Environment Canada, Burlington, Ontario, and U.S. EPA, Chicago. 2000. Available online at <www.binational.net>.

All SOLEC documents, background reports, indicator reports, indicator development processes, conference agenda, proceedings and presentations are available online at <http://epa.gov/glnpo/solec/index.html>. The documents are sorted by SOLEC year and include the State of the Great Lakes reports which are released the following calendar year.

FY 2008 Performance Measure:

- **Long-term average concentration trends of PCBs in whole lake trout and walleye will decline.**

Performance Database: Great Lakes National Program Office (GLNPO) Great Lakes Fish Monitoring Program (GLFMP) ¹(see reference #1 below). This program is broken into two separate elements, Element 1 – Open Water Trend Monitoring and Element 2 – Game Fish Fillet Monitoring. Each program collects and monitors contaminants in Great Lakes fish at alternating locations throughout the Great Lakes Basin; fish are collected at one set of sites during even years and at another set in odd years. Element 1 began with the collection of data in Lake Michigan in 1972 and the additional lakes were added in 1976. Element 2 began with the collection of data in all five of the Great Lakes in the early 1980's. In FY08, the database will contain QA/QCed field data from fish collected in 2006 and all QA/QCed analytical data for fish collected between 1972 and 2005. A new grantee was selected for this program in 2005, thus delaying the release of analytical data collected in 2004 and 2005 until 2007. Data collected in 2006 is expected to be able to be used for reporting in 2008. Data are reported on a calendar year basis and are specific to the even or odd year sampling schedule (even year sites are only compared to other even year sites etc.)

Data Source: GLNPO is the principal source of data for the Great Lakes Fish monitoring program. The Great Lakes States and Tribes assist with fish collection. Previous cooperating organizations include the U.S. Geological Survey (USGS), the U.S. Fish and Wildlife Service (USFWS), and the Food and Drug Administration (FDA).

Methods, Assumptions, and Suitability: This indicator provides concentrations of selected organic contaminants in Great Lakes open water fish. The Great Lakes Fish Monitoring Program is broken into two separate elements that monitor potential exposure to contaminant

concentrations for wildlife (Element 1) and humans through consumption (Element 2). Only Element 1 is included in this indicator.

The first element, Open Lakes Trend Monitoring Program, was created to: (1) determine time trends in contaminant concentrations, (2) assess impacts of contaminants on the fishery using fish as biomonitors, and (3) assess potential risk to the wildlife that consume contaminated fish. The first element includes data from ten 600-700 mm lake trout (*Salvelinus namaycush*) whole fish composites (5 fish in each composite) from each of the lakes. Since sufficient lake trout are not found in Lake Erie, data for 400 – 500 mm walleye (*Stizostedion vitreum vitreum*) are used for that Lake.

All GLFMP data are quality-controlled and then loaded into the Great Lakes Environmental Database (GLENDa). Included in GLENDa are flags for each data point that can be used to evaluate the quality of the data. Each Great Lake is a unique environment with a distinct growth rate, food web, and chemical integrity. For this reason, a direct comparison of annual concentrations between basins is not appropriate. However, an average annual basin-wide percent decrease can be determined using an exponential decrease function, and the 1990 data as the baseline. The percent decrease of Element 1 can be calculated and compared to the 5% reduction target to determine if the target has been met. All years of data from all lakes are plotted on the same graph, with each year containing 5 data points. An exponential decrease is then found for the entire data set and the percent decrease is calculated from the best fit line. The Lake Michigan data set represents the worst case scenario in the Great Lakes Basin for the Open Lakes Trend Monitoring Program.

QA/QC Procedures: GLNPO has an approved Quality Management System in place² (see reference #2 below) that conforms to the USEPA Quality Management Order and is audited every 3 years in accordance with Federal policy for Quality Management. The Quality Assurance (QA) plan that supports the analytical portion of the fish contaminant program is approved and available online³ (see reference #3 below). The draft field sampling Quality Assurance Project Plan (QAPP) is being revised and will be submitted to the GLNPO QA Officer for review upon the completion of the Quality Management Plan.

Data Quality Review: GLNPO's Quality Management System has been evaluated as "outstanding" in previous peer and management reviews⁴ (see reference #4 below). GLNPO has implemented all recommendations from these external audits and complies with Agency Quality standards.

Data Limitations: Great Lakes Fish Monitoring Program data are not well-suited to portray localized changes. Nevertheless, data collected at a certain site (odd year or even year sites) can be compared to data collected from the same site. In addition, only very general comparisons can be made of contaminant concentrations between lakes. A recent review of the odd year Open Lake Trend Monitoring in Lake Erie data indicate an increased variability in the data between the years of 1999 and 2003 because during those years several individual samples (fish) fell outside of the desired size range leading to a higher or lower than average mean sample size for the composite.

Error Estimate: The data quality objective of the fish contaminant program was to detect a 20% change in each measured contaminant concentration between two consecutively sampled periods at each site. Based on changing environmental conditions, the data quality objective has been revised to have an 80% probability to detect a 10% change per year, over three to four sampling periods, at the 95% confidence level. An official outside peer review of these data is tentatively scheduled for spring of 2007 to finalize the data quality objective for Element 1 and to create a data quality objective for Element 2.

New/Improved Data or Systems: The GLENDa database is a significant new system with enhanced capabilities. Existing and future fish data will be added to GLENDa.

References:

Supporting Program Documentation: All journal publications relevant to the Great Lakes Fish Monitoring Program, final project reports, and quality documentation can be found at the GLFMP website, <http://www.epa.gov/glnpo/glindicators/fish.html>.

1. *"The Great Lakes Fish Monitoring Program - A Technical and Scientific Model For Interstate Environmental Monitoring."* September, 1990. EPA503/4-90-004.
2. "Quality Management Plan for the Great Lakes National Program Office." EPA905-R-02-009. October 2002, Approved April 2003. <http://www.epa.gov/glnpo/qmp/>
3. *"Great Lakes Fish Monitoring Program – Quality Assurance Project Plan for Sample Collection Activities"*, Great Lakes National Program Office. http://www.epa.gov/glnpo/glindicators/fishtoxics/GLFMP_QAPP_082504.pdf
4. *"GLNPO Management Systems Review of 1999."* Unpublished - in USEPA Great Lakes National Program Office files.

FY 2008 Performance Measure:

- **Long term concentration trends of toxic chemicals in the air in the Great Lakes basin will decline**

Performance Database: Great Lakes National Program Office (GLNPO) integrated atmospheric deposition network ¹ (see reference #1 below) (IADN) operated jointly with Environment Canada. Reporting starts with 1992 data and includes concentrations of polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and organochlorine pesticides in air and precipitation; however, this Performance Measure addresses only PCBs. Monitoring results from 2006 will be reported in 2008. Data are reported on a calendar year basis the second year after collection.

Data Source: GLNPO and Environment Canada are the principal sources of the data for IADN. Data also come through in-kind support and information sharing with other Federal agencies and Canada. Only data from US stations in IADN are being used for this measure.

Methods, Assumptions, and Suitability: There are five master IADN stations, one for each lake, which are supplemented by satellite stations in other locations. The master stations are located in remote areas and are meant to represent regional background levels. Concentrations from the master stations are used for the performance measure. Concentrations from the satellite stations in Chicago and Cleveland are also sometimes used to demonstrate the importance of urban areas to atmospheric deposition to the Lakes. Air samples are collected for 24 hours using high-volume samplers containing an adsorbent. Precipitation samples are collected as 28-day composites. Laboratory analysis protocols generally call for solvent extraction of the organic sampling media with addition of surrogate recovery standards. Extracts are then concentrated followed by column chromatographic cleanup, fractionation, nitrogen blow-down to small volume (about 1 mL) and injection (typically 1 uL) into gas chromatography instruments.

All IADN data are loaded and quality controlled using the Research Database Management System (RDMQ), a Statistical Analysis System (SAS) program. RDMQ provides a unified set of quality assured data, including flags for each data point that can be used to evaluate the usability of the data. Statistical summaries of annual concentrations are generated by the program and used as input into an atmospheric loading calculation. The loadings calculation is described in detail in the Technical Summary referenced below. However, calculating loadings requires additional data and constants that introduce further error. Therefore, the averaged annual concentrations rather than the loadings are used in the performance measure. Concentrations can vary from year to year due to differences in weather (temperature, wind patterns, etc.), so comparing concentrations from one year to the next is not always appropriate. This performance measure examines the average percent decline for the **long-term trend** determined using an exponential decrease function. Each year the average percent decline is calculated after adding new data. A baseline percent decrease was determined using data through 2000, and the aim is that this rate of decrease will continue.

QA/QC Procedures: GLNPO has a Quality Management System in place, which conforms to the USEPA Quality Management Order and is audited every 3 years in accordance with Federal policy for Quality Management² (see reference #2 below). Quality Assurance Project Plans are in place for the laboratory grantee, as well as for the network as a whole. A jointly-funded QA officer conducts laboratory and field audits, tracks QA statistics, and carries out special QA studies. Data from all contributing agencies are quality-controlled using the SAS-based system.

Data Quality Review: GLNPO's Quality Management System has been evaluated as "outstanding" in previous peer and management reviews³ (see reference #3 below). GLNPO has implemented all recommendations from these external audits and complies with Agency Quality Standards⁴ (see reference #4 below). The IADN program has a joint Canadian-US quality system and binational Steering Committee that meets periodically in person or via conference calls to make decisions on network operation and data management and quality.

A regular set of laboratory and field blanks is taken and recorded for comparison to the IADN field samples. In addition, a suite of chemical surrogates and internal standards is used extensively in the analyses. There are common performance standards for PCBs, organochlorine pesticides, and PAHs. A common calibration standard for PCBs is now used. A jointly-funded QA officer conducts laboratory and field audits, tracks QA statistics, and carries out special QA

studies. As previously mentioned, data from all contributing agencies are quality-controlled using a SAS-based system.

Data Limitations: The sampling design is dominated by rural sites that under-emphasize urban contributions to deposition; thus, although the data are very useful for trends information, there is less assurance of the representativeness of deposition to the whole lake. U.S. and Canadian laboratories use somewhat different sampling and analytical methods; QA studies have found that differences in resulting data are attributable mostly to the sampling differences. There are gaps in open lake water column organics data, thus limiting our ability to calculate atmospheric loadings. This gap is being addressed through the recent implementation by GLNPO of the Great Lakes Aquatic Contaminant Surveillance (GLACS) program, which will collect water contaminant data in the Lakes.

In the past, there has been a lag in the data from the Canadian sites (Burnt Island on Lake Huron and Point Petre on Lake Ontario). U.S. data is usually reported two years after it is collected (i.e., 2004 data was reported in 2006); the Canadian data may not be available on this schedule; consequently only US data is being used to report on this measure.

Error estimate: The performance measure examines the long-term trend in concentrations. Concentrations have an error of +/- 40%, usually less. Differences between laboratories have been found to be 40% or less. This is outstanding given the very low levels of these pollutants in the air and the difficulty in analysis. Improvements in quality assurance (use of a clean lab for Canadian precipitation analysis, making calibration standards consistent among agencies, etc.) are helping to further close this gap, and recent intercomparison site data reflect this.

New/Improved Data or Systems: Joint data that has passed quality review will be available from Canada's National Atmospheric Chemistry (NAtChem) Database and Analysis System, which includes atmospheric data from many North American networks and is linked from IADN's website at: <http://www.msc.ec.gc.ca/iadn/data/form/form_e.html> The IADN homepage can be found at < www.msc.ec.gc.ca/iadn/ >. Copies of IADN data are now held in U.S. and Canadian databases. Environment Canada management is working to reduce the data lag from the Canadian IADN stations.

References:

1. "Great Lakes National Program Office Indicators. Air Indicators." <http://www.epa.gov/glnpo/glindicators/air.html>

Details of these analyses can be found in the Laboratory Protocol Manuals or the agency project plans, which can be found on the IADN resource page at <http://www.epa.gov/glnpo/monitoring/air/iadn/iadn.html>

Overall results of the project can be found in "*Technical Summary of Progress under the Integrated Atmospheric Deposition Program 1990-1996*" and the "*Technical Summary of Progress under the Integrated Atmospheric Deposition Network 1997-2002*". Both (as well as the Atmospheric Loadings reports) can be found on the IADN resource page.

2. "Quality Management Plan for the Great Lakes National Program Office." EPA905-R-02-009. October 2002, Approved April 2003.
3. "GLNPO Management Systems Review of 1999." Unpublished - in USEPA Great Lakes National Program Office files.
4. "Integrated Atmospheric Deposition Network Quality Assurance Program Plan - Revision 1.1." Environment Canada and USEPA. June 29, 2001. Unpublished - in USEPA Great Lakes National Program Office files.

FY 2008 Performance Measure:

- **Cumulative total of Areas of Concern within the Great Lakes Basin that have been restored and delisted**

Performance Database: USEPA's Great Lakes National Program Office will track the cumulative total Areas of Concern (AOC) and post that information <http://www.epa.gov/glnpo/aoc/index.html>. Forty-three AOCs have been identified: 26 located entirely within the United States; 12 located wholly within Canada; and five that are shared by both countries. Since 1987, GLNPO has tracked the 31 that are within the US or shared. On June 19, 2006, the Oswego River, NY AOC became the first U.S. AOC to be officially removed from the list of U.S. AOCs. Information is reported on a calendar year basis, however the system is being designed for semi-annual or more frequent updates.

Data Source: Internal tracking and communications with Great Lakes States, the US Department of State and the International Joint Commission (IJC).

Methods, Assumptions, and Suitability: USEPA's Great Lakes National Program Office is in regular communication with the Great Lakes States, the US Department of State and the IJC, and is responsible for coordinating and overseeing the de-listing of AOCs. Generally speaking, under the Great Lakes Water Quality Agreement, an AOC is an area in the Great Lakes determined to have significant beneficial use impairments, such as restrictions on fish and wildlife consumption, fish tumors, eutrophication, beach closings, added costs to agriculture or industry. In 1989, the IJC established a review process and developed AOC listing/delisting criteria (<http://www.ijc.org/rel/boards/annex2/buis.htm#table1>) for existing and future AOCs. In 2001, the U.S. Policy Committee, led by GLNPO and including State, Tribal, and Federal agencies responsible for Great Lakes environmental issues, developed delisting guidelines for domestic AOCs (<http://www.epa.gov/glnpo/aoc/delist.html>) and for the binational AOCs shared by Michigan and Ontario (<http://www.epa.gov/glnpo/aoc/delist.html> - appendix 5).

QA/QC Procedures: GLNPO has an approved Quality Management System in place¹ (see reference #1 below) that conforms to the USEPA Quality Management Order and is audited every 3 years in accordance with Federal policy for Quality Management.

Data Quality Review: GLNPO's Quality Management System has been given "outstanding" evaluations in previous peer and management reviews² (see reference #2) below. GLNPO has implemented all recommendations from these external audits and complies with Agency Quality standards.

Data Limitations: None known.

Error Estimate: None.

New/Improved Data or Systems: NA

References:

GLNPO will develop and maintain the appropriate tracking system for de-listed U.S. or binational Areas of Concern. Information regarding Areas of Concern is currently available online at: <http://www.epa.gov/glnpo/aoc/index.html>

1. "Quality Management Plan for the Great Lakes National Program Office." EPA905-R-02-009. October 2002, Approved April 2003.
2. "GLNPO Management Systems Review of 1999." Unpublished - in USEPA Great Lakes National Program Office files.

FY 2008 Performance Measure:

- **Cubic yards of contaminated sediment in the Great Lakes remediated (cumulative from 1997)**

Performance Database: Data tracking sediment remediation are compiled in two different formats. The first is a matrix that shows the annual and cumulative totals of contaminated sediment that was remediated in the Great Lakes basin in the reporting year and from 1997 for each Area of Concern or other non-Areas of Concern with sediment remediation. The second format depicts the yearly totals on a calendar year basis graphically. These databases are reported approximately one year after the completion of work, thus, results from calendar year 2007 remediation will be reported in FY 2008.

Data Source: GLNPO collects sediment remediation data from various State and Federal project managers across the Great Lakes region that conduct and coordinate contaminated sediments work. These data are obtained directly from the project manager via an information fact sheet the project manager completes for any site in the Great Lakes basin that has performed any remedial work on contaminated sediment. The project manager also indicates whether an approved Quality Assurance Project Plan (QAPP) was used in the collection of data at the site. GLNPO does not accept unsolicited data without adequate assurance that a QAPP was in place and the reporters of the data are not likely to be biased.

Methods, Assumptions, and Suitability: The data collected to track sediment remediation in the Great Lakes show the amount of sediment remediated (dredged, capped, other) for that year, the amount of sediment remediated in prior years, and the amount of sediment remaining to be addressed for a particular site. This format is suitable for year-to-year comparisons for individual sites.

QA/QC Procedures: GLNPO relies on the individual government/agency project managers to provide information on whether an approved QAPP was in place during remediation of contaminated sediment. This information is used to decide if the data provided by the project manager are reliable for GLNPO reporting purposes. If an approved QAPP was not used, sediment data would not likely be reported by GLNPO, unless GLNPO finds that alternative information is available that provides sufficient quality documentation for the project and associated data. This approach allows GLNPO to use best professional judgment and flexibility in reporting data from any cases where there was not a QAPP, but (a) the remedial action is noteworthy and (b) the project was conducted by recognized entities using widely accepted best practices and operating procedures.

The tracking database houses information on the calculated amount of sediment remediated at individual sites as provided by the project managers. The individual site project managers are responsible for completing the data request forms, reviewing draft figures to verify that the GLNPO project manager transferred the data correctly, and providing any updated or improved estimates. It is GLNPO's responsibility to determine if the data are usable based upon the information sheet provided by the project managers. GLNPO does not attempt to verify mass and volume estimates due to the variability in how to calculate them. GLNPO ensures that the estimates provided make sense for the site, and that all estimates are reported in the same units. GLNPO management and Sediment Team members review the data, in the graphic and matrix formats, prior to reporting. GLNPO's Sediment Team works closely with partners and has confidence in those who provide data for the summary statistics. This familiarity with partners and general knowledge of ongoing projects allows GLNPO management to detect mistakes or questionable data.

Data Quality Review: The data, in both the graphic and matrix formats, are reviewed by individual project managers, GLNPO's Sediment Team, and management prior to being released. Data quality review procedures are outlined in the QAPP referenced below. GLNPO's Quality Management System has been given "outstanding" evaluations in previous peer and management reviews. GLNPO has implemented all recommendations from these external audits and complies with Agency Quality Standards.

Data Limitations: The data provided in the sediment tracking database should be used as a tool to track sediment remediation progress at sites across the Great Lakes. Many of the totals for sediment remediation are estimates provided by project managers. For specific data uses, individual project managers should be contacted to provide additional information.

Error Estimate: The amount of sediment remediated or yet to be addressed should be viewed as estimated data. A specific error estimate is not available.

New/Improved Data or Systems: Existing tracking systems are anticipated to remain in place.

References:

1. Giancarlo Ross, M.B. Quality Assurance Project Plan for “ Great Lakes Sediment Remediation Project Summary Support.” Unpublished – in USEPA Great Lakes National Program Office files.
2. Giancarlo Ross, M.B. “*Sediment Remediation Matrix*”. Unpublished - in USEPA Great Lakes National Program Office files.
3. Giancarlo Ross, M.B. “*Sediment Remediation Pie Charts*”. Unpublished - in USEPA Great Lakes National Program Office files.
4. Giancarlo Ross, M.B. “Compilation of Project Managers Informational Sheets”. Unpublished - in USEPA Great Lakes National Program Office files.

FY 2008 Performance Measures:

- **Percent of goal achieved for implementation of nitrogen reduction practices (expressed as progress meeting the nitrogen reduction goal of 162.4 million pounds reduced) [PART annual output measure-Chesapeake Bay Program]**
- **Percent of goal achieved for implementation of phosphorus reduction practices (expressed as progress meeting the phosphorus reduction goal of 14.36 million pounds) [PART annual output measure-Chesapeake Bay Program]**
- **Percent of goal achieved for implementation of sediment reduction practices (expressed as progress meeting the sediment reduction goal of 1.69 million tons reduced) [PART annual output measure-Chesapeake Bay Program]**
- **Reduce point source nitrogen discharges to the Long Island Sound**
- **Total nitrogen reduction practices implementation achieved as a result of agricultural best management practice implementation per million dollars to implement agricultural BMPs [PART efficiency measure- Chesapeake Bay Program]**

Performance Database: Reducing Pollution Summary (Controlling Nitrogen, Phosphorus and Sediment.) Implementation of point & nonpoint source nitrogen and phosphorus reduction practices throughout the Bay watershed, expressed as % of reduction goal achieved. The nitrogen goal is a 162.4 million pound reduction from 1986 levels to achieve an annual cap load of 175 million lbs (based on long-term average hydrology simulations). The phosphorus goal is a 14.36 million pound reduction from FY1986 levels to achieve an annual cap load of 12.8 million lbs (based on long-term average hydrology simulations). Achieving the cap loads is expected to result in achievement of the long-term restoration goals for submerged aquatic vegetation and dissolved oxygen. Point source loads are monitored or estimated based on expert evaluation of treatment processes. Nonpoint source loads are simulated based on reported implementation of best management practices (BMPs) that reduce nitrogen and phosphorus pollution. The simulation removes annual hydrological variations in order to measure the effectiveness of BMP

implementation and converts the numerous BMPs, with various pollution reduction efficiencies – depending on type and location in the watershed – to a common currency of nitrogen and phosphorus reduction.

Implementation of sediment reduction practices throughout the Bay watershed, expressed as % of land-based sediment reduction goal achieved. The sediment reduction goal is a 1.69 million ton reduction from FY 1986 levels to achieve an annual cap load of 4.15 million tons (based on average hydrology simulations). Achieving this cap load is expected to result in achievement of the long-term restoration goals for submerged aquatic vegetation and dissolved oxygen. Loads are simulated based upon reported implementation of best management practices (BMPs) that reduce sediment pollution. The simulation removes annual hydrological variations in order to measure the effectiveness of BMP implementation and converts the numerous BMPs, with various pollution reduction efficiencies – depending on type and location in the watershed – to a common currency of sediment reduction.

The Bay data files used in the indicator are located at <http://www.chesapeakebay.net/pubs/statustrends/186-data-2003.xls>. Data have been reported for calendar years 1985, 2000, 2001, 2002, 2003, 2004, 2005 and are expected on an annual basis after 2005. Data are from Chesapeake Bay watershed portions of NY, MD, PA, VA, WV, DE, and DC.

The FY 2008 Annual Performance Report for these measures will be based on the results of the calendar year 2007 data collection. We expect to receive the preliminary results for calendar year 2007 in September 2008

Data Source: Each jurisdiction (NY, MD, PA, VA, WV, DE, and DC) tracks and approves annual point source effluent concentrations, flows data as well as non-point source BMP data. It submits the data to the Chesapeake Bay Program Office. Contact Jeff Sweeney, jsweeney@chesapeakebay.net.

Methods, Assumptions and Suitability: The data are of high quality. Data are consolidated by watershed boundaries at the state level and provided to the Chesapeake Bay Program Office for input into the watershed model.

What is the Watershed Model?

A lumped parameter Fortran-based model (HSPF) that mimics the effects of hydrology, nutrient inputs, and air deposition on land and outputs runoff, groundwater, nutrients and sediment to receiving waters. Ten years of simulation are used and averaged to develop the reduction effects of a given set of Best Management Practices (BMPs). Using a ten-year average of actual weather (hydrologic, temperature, wind, etc.) ensures wet, dry and average conditions for each season are included. The effectiveness of the model is dependent upon the quality of the assumptions, BMPs and landuse descriptions used. The model is calibrated extensively to real-time monitoring, outside peer review and continual updates as better information, data collection and computer processing power become available.

What are the input data?

The model takes meteorological inputs such as precipitation, temperature, evapotranspiration, wind speed, solar radiation, dewpoint, and cloud cover to drive the hydrologic simulation. The changes in nutrient outputs are primarily determined by such factors as land use acreage, BMPs, fertilizer, manure, atmospheric deposition, point sources, and septic loads.

BMPs: Watershed Model BMPs include all nutrient reduction activities tracked by the jurisdictions for which a source has been identified, cataloged and assigned an efficiency. Efficiencies are based on literature review, recommendations of the appropriate source workgroup and approved by the Nutrient Subcommittee. It is the responsibility of the jurisdictions to track and report all nutrient reduction activities within their borders and maintain documentation to support submissions.

Land use acreage is determined by combining analyses of satellite imagery and county-based databases for agricultural activities and human population. Fertilizer is determined by estimated application rates by crop and modified by the application of nutrient management BMPs. Manure applications are determined by an analysis of animal data from the census of agriculture.

Atmospheric deposition is determined by an analysis of National Atmospheric Deposition Program (NADP) deposition data and modified by scenarios of the Regional Acid Deposition Model. Point Source loads are determined from Discharge Monitoring Reports. Septic loads are estimated in a study commissioned by the Chesapeake Bay Program (CBP).

<http://www.chesapeakebay.net/pubs/1127.pdf>

<http://www.chesapeakebay.net/pubs/114.pdf>

<http://www.chesapeakebay.net/pubs/112.pdf>

<http://www.chesapeakebay.net/pubs/777.pdf>

What are the model outputs?

The watershed model puts out daily flows and nitrogen, phosphorus, and sediment loads for input to the water quality model of the Chesapeake Bay. The daily loads are averaged over a 10-year hydrologic period (1985-1994) to report an average annual load to the Bay. The effect of flow is removed from the load calculations.

What are the model assumptions?

BMPs: Model assumptions are based on three conditions: knowledge, data availability and computing power. The ability to alter what is used in the watershed model is a function of the impact the change would have on calibration. In many cases there is new information, data or methodologies that would improve the model, but changes are not possible because of the impact on the current calibration.

Changes in manure handling, feed additives, new BMPs and some assumptions could be incorporated into the model without impacting the calibration. In these cases, the changes were made.

Other input assumptions, such as multiple manure application levels, increasing the number of and redefining some land uses, defining new nutrient or sediment sources, adjusting for varying levels of management (range of implementation levels) are items scheduled for incorporation in the new model update (2007)

Input assumptions are documented in the above publications. Assumptions of the actual model code are in the HSPF documentation:

ftp://water.usgs.gov/pub/software/surface_water/hspf/doc/hspfhelp.zip

Input data are collected from states and local governments programs. Methods are described at <http://www.chesapeakebay.net/data/index.htm>, (refer to CBP Watershed Model Scenario Output Database, Phase 4.3). For more information contact Kate Hopkins at hopkins.kate@epa.gov or Jeff Sweeney jsweeney@chesapeakebay.net

QA/QC Procedures: State offices have documentation of the design, construction and maintenance of the databases used for the performance measures, showing they conform to existing U.S. Department of Agriculture Natural Resources Conservation Service (USDA/NRCS) technical standards and specifications for nonpoint source data and EPA's Permit Compliance System (PCS) standards for point source data. State offices also have documentation of implemented Best Management Practices (BMPs) based on USDA NRCS standards and specification and the Chesapeake Bay Program's protocols and guidance. BMPs are traditionally used to reduce pollutant loads coming from nonpoint sources such as urban/suburban runoff, agriculture, and forestry activities.

References include: the USDA NRCS Technical Guide and Appendix H from the Chesapeake Bay Program (contact Kate Hopkins at hopkins.kate@epa.gov). Quality assurance program plans are available in each state office.

Data Quality Reviews: All data are reviewed and approved by the individual jurisdictions (NY, MD, PA, VA, WV, DE, and DC) before input to the watershed model. QA/QC is also performed on the input data to ensure basic criteria, such as not applying a BMP at a higher level than allowed. A specific level of input should yield output within a specified range of values. Output is reviewed by both the CBPO staff and the Tributary Strategy Workgroup as an additional level of QA/QC. Any values out of the expected range are analyzed and understood before approval and public release. The model itself is given a quarterly peer review by an outside independent group of experts. There have been no data deficiencies identified in external reviews.

Data Limitations: Data collected from voluntary collection programs are not included in the database, even though they may be valid and reliable. The only data submitted by state and local governments to the Chesapeake Bay Program Office are data that are required for reporting under the cost share and regulatory programs. Cost share programs include state and federal grant programs that require a recipient match. State and local governments are aware that

additional data collection efforts are being conducted by non-governmental organizations; however, they are done independently of the cost share programs and are not reported.

Error Estimate: There may be errors of omission, misclassification, incorrect georeferencing, misdocumentation or mistakes in the processing of data.

New/Improved Data or Systems: The next version of the watershed model is currently under development and will be completed in 2007. The new version (phase 5) will have increased spatial resolution and ability to model the effects of management practices. The phase 5 watershed model is a joint project with cooperating state and Federal agencies. Contact Gary Shenk gshenk@chesapeakebay.net or see the web site at <http://www.chesapeakebay.net/phase5.htm>

References:

See <http://www.chesapeakebay.net/data/index.htm>, refer to CBP Watershed Model Scenario Output Database, Phase 4.3. Contact Kate Hopkins at hopkins.kate@epa.gov or Jeff Sweeney jsweeney@chesapeakebay.net Reducing Pollution Summary (Controlling Nitrogen, Phosphorus and Sediment) indicators are published at <http://www.chesapeakebay.net/status.cfm?sid=186>. The nutrient and sediment loads delivered to the Bay data files used in the indicator are located at

<http://www.chesapeakebay.net/pubs/statustrends/186-data-2003.xls>. See “Chesapeake Bay Watershed Model Application and Calculation of Nutrient and Sediment Loadings, Appendix H: Tracking Best Management Practice Nutrient Reductions in the Chesapeake Bay Program, A Report of the Chesapeake Bay Program Modeling Subcommittee”, USEPA Chesapeake Bay Program Office, Annapolis, MD, August 1998, available at <http://www.chesapeakebay.net/pubs/777.pdf>

See USDA NRCS Field Office Technical Guide available at <http://www.nrcs.usda.gov/technical/efotg/>. The indicator and data survey is published at http://www.chesapeakebay.net/pubs/2006reports/IndicatorSurvey_Reducing_Pollution_032406.doc.

FY 2008 Performance Measures:

- Percent of point source nitrogen reduction goal of 49.9 million pounds achieved [PART annual outcome measure- Chesapeake Bay Program]
- Percent of point source phosphorus reduction goal of 6.16 million pounds achieved [PART annual outcome measure-Chesapeake Bay Program]

Performance Database: Point source nitrogen and phosphorus reductions are reported as % of goal achieved and pounds. The goal for point source nitrogen reductions is 49.9 million pound reduction from FY 1986 levels. The goal for point source phosphorus reductions is 6.16 million pound reduction from FY 1986 levels. Point source nitrogen and phosphorus data is reported based upon monitored results from the previous calendar year.

The Bay data files used in the indicator are located at <http://www.chesapeakebay.net/pubs/statustrends/127-data-2002.xls>. Data have been collected 1985-2004 and are expected on an annual basis after 2004.

The FY 2008 Annual Performance Report for these measures will be based on the results of the 2007 data collection. We expect to receive the preliminary results for 2007 in September 2008.

Data Source: Each jurisdiction (NY, MD, PA, VA, WV, DE, and DC) tracks and approves annual point source effluent concentrations and flow data. It submits the data to the Chesapeake Bay Program Office. Contact; [Ning Zhou, zhou.ning@epa.gov](mailto:zhou.ning@epa.gov).

Methods, Assumptions and Suitability: Point source loads are calculated from measured or estimated values of effluent flows and concentrations. The Chesapeake Bay Program Phase 4.3 Watershed Model is the tool used to transform calculated point source discharge loads (generally, from monitored flow and concentration data) to nutrient loads delivered to Chesapeake Bay tidal waters.

Peer-reviewed methods are employed to estimate point source discharges where measured data are not available. Refer to: “Chesapeake Bay Watershed Model Application & Calculation of Nutrient & Sediment Loadings - Appendix F: Phase IV Chesapeake Bay Watershed Model Point Source Loads” at <http://www.chesapeakebay.net/pubs/114.pdf>; Quality Assurance Project Plan (QAPP) “Standard Operating Procedures for Managing Point Source Data – Chesapeake Bay Program” on file for the EPA grant (contact: Quality Assurance Officer, Mary Ellen Ley, mley@chesapeakebay.net).

The following methods/assumptions pertain to discharge data:

- Monitored discharge data are generated from the EPA-approved standard sampling and analysis methods and documented in the Data Monthly Reports from facilities to jurisdictions.
- Discharge data which date to the earlier years of the record are inadequate for many regions in the Bay watershed; however, the 1986 baseline is consistent throughout the record.
- Facilities have been added to the point source database over the years, not necessarily because they physically came on-line, but because they were previously untracked. In addition, facilities have been turned inactive in the point source database over time because they went off line or combined with other facilities as new plants.
- Protocols of calculating discharges from measured or estimated flows and effluent concentrations have been adjusted throughout the data record to better reflect actual end-of-pipe loads.
- Tributary-specific pollution reduction and habitat restoration plans (“Tributary Strategies”) for some jurisdictions are not final so the goals will be adjusted in the future as jurisdictions update implementation plans that better reflect projected point source discharges.

QA/QC Procedures: Jurisdictions (NY, MD, PA, VA, WV, DE, and DC) providing point source effluent data to the Bay Program office are expected to submit documentation of their

quality assurance and quality control policies, procedures, and specifications in the form of Quality Assurance Management Plans and Quality Assurance Project Plans. Jurisdictional documentation, however, is limited and it is unknown if protocols follow EPA-approved objectives as established in the “Chesapeake Bay Program Quality Assurance Guidelines and Requirements” section of the CBP Grant and Cooperative Agreement Guidance, which is relevant to projects involving the collection of environmental data.

Procedures for compiling and managing point source discharge data at the Chesapeake Bay Program office are documented in the following EPA-approved Quality Assurance Project Plan: “Standard Operating Procedures for Managing Point Source Data – Chesapeake Bay Program” on file for the EPA grant (contact: Quality Assurance Officer, Mary Ellen Ley, mley@chesapeakebay.net).

Data Quality Reviews: Point source data sets from seven jurisdictions are merged at the Chesapeake Bay Program office. Continual peer-review of the thoroughness of discharge data and methods of managing the information by the Point Source Workgroup promotes consistency and completeness among the jurisdictions of calculated end-of-pipe loads.

Data Limitations: The CBP relies on information submitted and approved by the jurisdictions (NY, MD, PA, VA, WV, DE, and DC).

Error Estimate: The CBP tries to trace significant variability in the data and limit its impact.

New/Improved Data or Systems: N/A

References:

Study/survey design procedures for point source discharges can found at:

- “Chesapeake Bay Watershed Model Application & Calculation of Nutrient & Sediment Loadings - Appendix F: Phase IV Chesapeake Bay Watershed Model Point Source Loads” at <http://www.chesapeakebay.net/pubs/114.pdf>
- Quality Assurance Project Plan (QAPP) “Standard Operating Procedures for Managing Point Source Data – Chesapeake Bay Program” on file for the EPA grant (contact: Quality Assurance Officer, Mary Ellen Ley, mley@chesapeakebay.net).

The Point Source Nitrogen Loads Delivered to the Bay indicator is published at <http://www.chesapeakebay.net/status.cfm?sid=127>.

The Point Source Phosphorus Loads Delivered to the Bay indicator is published at <http://www.chesapeakebay.net/status.cfm?sid=128>.

The Wastewater Pollution Controls indicator is published at <http://www.chesapeakebay.net/status.cfm?sid=226>.

The indicator and data survey are published at http://www.chesapeakebay.net/pubs/2006reports/IndicatorSurvey_Reducing_Pollution_032406.doc.

FY 2008 Performance Measure:

- Percent of forest buffer planting goal of 10,000 miles achieved [**PART annual outcome measure-Chesapeake Bay Program**]

Performance Database: Forest buffer planting is reported as % of goal achieved. The long term goal is to plant 10,000 miles of forest buffers. The information is based on cumulative acres planted since FY 1997 provided by the states for the previous calendar year.

The Bay data files used in the indicator are located at <http://www.chesapeakebay.net/pubs/statustrends/83-data-2002.xls>. Data have been collected 1996-2005 and are expected on an annual basis after 2005.

The FY 2008 Annual Performance Report for these measures will be based on the results of the 2007 data collection. We expect to receive the preliminary results for 2007 in March 2008.

Data Source: Sampling design is formulated by the USDA for tracking projects and funds. Data and metadata are sent to the Forestry Work Group (state-level Departments of Forestry) by participating state coordinators and field personnel. Geographic Information System maps are produced by the UMD Center for Environmental Science. Contacts: Sally Claggett, sclaggett@fs.fed.us and Judy Okay, jokay@chesapeakebay.net

Methods, Assumptions and Suitability: Data collected for tracking linear ft, miles, and acres of forest buffers are measured directly. State data are merged to get cumulative miles. Submission criteria have been set and agreed to by State agencies. The data are summarized in a spreadsheet by geographic location with related extent of project sites. A Geographic Information System (GIS) is used to help generate the indicator data.

Data Quality Reviews: The data are collected by state field personnel and submitted to the state-level Departments of Forestry for QA/QC checks.

Data Limitations: The data are only as good as the data originally submitted by the states. This information passes through many hands before being merged into the annual cumulative miles. Human error enters into this type of record. The data are compiled and released with utmost attention to accuracy and validation of locations and extents of riparian forest buffers.

Error Estimate: none calculated.

New/Improved Data or Systems: N/A

References: The indicator is published at <http://www.chesapeakebay.net/status.cfm?sid=83>.

The indicator and data survey are published at http://www.chesapeakebay.net/pubs/2006reports/ForestBuffersRestored_Indicator.doc.

FY 2008 Performance Measures:

- **Prevent water pollution and protect aquatic ecosystems so that overall aquatic system health of coastal waters of the Gulf of Mexico is improved on the “good/fair/poor” scale of the National Coastal Condition Report**
- **Reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico**

Performance Database: (1) Louisiana Coastal Hypoxia Shelfwide Survey metadata (data housed at National Oceanic and Atmospheric Administration/National Ocean Data Center, Silver Spring, Maryland). Funds for this research are provided by the National Oceanic and Atmospheric Administration, Coastal Ocean Program (NOAA/COP)

(2) Southeast Area Monitoring and Assessment Program (**SEAMAP**) - Gulf surveys.

The data used in assessing performance under this measure have been collected annually on a calendar year basis since 1982.

Data Source: (1) Hydrographic data are collected during annual surveys of the Louisiana continental shelf. Nutrient, pigment and station information data are also acquired. The physical, biological and chemical data collected are part of a long-term coastal Louisiana dataset. The goal is to understand physical and biological processes that contribute to the causes of hypoxia and use the data to support environmental models for use by resource managers.

(2) The Southeast Area Monitoring and Assessment Program (SEAMAP) is a state/Federal/university program for collection, management and dissemination of fishery-independent data and information in the southeastern United States.

Methods, Assumptions and Suitability: The distribution of hypoxia on the Louisiana shelf has been mapped annually in mid-summer (usually late July to early August) over a standard 60- to 80- station grid since 1985. During the shelfwide cruise, data are collected along transects from the mouth of the Mississippi River to the Texas border. Information is collected on a wide range of parameters, including conductivity/temperature/depth (CTD), light penetration, dissolved oxygen, suspended solids, nutrients, phytoplankton, and chlorophyll. Hydrographic, chemical, and biological data also are collected from two transects of Terrebonne Bay on a monthly basis, and bimonthly, off Atchafalaya Bay. There is a single moored instrument array in 20-m water depth in the core of the hypoxic zone that collects vertical conductivity/temperature data, as well as near-surface, mid, and near-bottom oxygen data; an upward directed Acoustic Doppler Current Profiler (ADCP) on the seabed measures direction and speed of currents from the seabed to the surface. There is also an assortment of nutrient and light meters.

Station depths on the cruises range from 3.25 to 52.4 meters. Northern end stations of transects are chosen based on the survey vessel's minimum depth limits for each longitude.

Standard data collections include hydrographic profiles for temperature, salinity, dissolved oxygen, and optical properties. Water samples for chlorophyll *a* and phaeopigments, nutrients, salinity, suspended sediment, and phytoplankton community composition are collected from the surface, near-bottom, and variable middle depths.

The objective is to delimit and describe the area of midsummer bottom dissolved oxygen less than 2 (mg. L).

Details of data collection and methodology are provided in referenced reports.

QA/QC Procedures: NOAA does not require written QA/QC procedures or a Quality Management Plan; however, the procedures related to data collection are covered in metadata files.

The SEAMAP Data Management System (DMS) conforms to the SEAMAP Gulf and South Atlantic DMS Requirements Document developed through a cooperative effort between National Marine Fisheries Service (NMFS) and other SEAMAP participants.

Data Quality Reviews: (1) Essential components of the environmental monitoring program in the Gulf of Mexico include efforts to document the temporal and spatial extent of shelf hypoxia, and to collect basic hydrographic, chemical and biological data related to the development of hypoxia over seasonal cycles. All data collection protocols and data are presented to and reviewed by the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force (the Task Force) in support of the adaptive management approach as outlined in the Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico (the Action Plan).

(2) Biological and environmental data from all SEAMAP-Gulf surveys are included in the SEAMAP Information System, managed in conjunction with National Marine Fisheries Service – Southeast Fisheries Science Center (NMFS-SEFSC). Raw data are edited by the collecting agency and verified by the SEAMAP Data Manager prior to entry into the system. Data from all SEAMAP-Gulf surveys during 1982-2003 have been entered into the system, and data from 2004 surveys are in the process of being verified, edited, and entered for storage and retrieval.

Data Limitations: Monitoring for shelf-wide conditions are currently performed each year primarily, but not exclusively, in July. The spatial boundaries of some monitoring efforts are limited by resource availability. Experience with the datasets has shown that when data are plotted or used in further analysis, outlying values may occasionally be discovered.

Error Estimate: (1) The manufacturers state +/- 0.2mg/L as the error allowance for both SeaBird and Hydrolab oxygen sensors.

References:

Mississippi River/Gulf of Mexico Watershed Nutrient Task force.2001. Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico. Washington, DC.

Rabalais N.N., R.E. Turner, Dubravko Justic, Quay Dortch, and W.J. Wiseman. 1999. Characterization of Hypoxia. Topic 1 Report for the Integrated assessment on Hypoxia in the Gulf of Mexico. NOAA Coastal Ocean Program Decision Analysis Series No. 15. Silver Spring Maryland: National Oceanic and Atmospheric Administration.

Hendee, J.C. 1994. Data management for the nutrient enhanced coastal ocean productivity program. *Estuaries* 17:900-3

Rabalais, Nancy N., W.J. Wiseman Jr., R.E. Turner ; Comparison of continuous records of near-bottom dissolved oxygen from the hypoxia zone of Louisiana. *Estuaries* 19:386-407

SEAMAP Information System <http://www.gsmfc.org/sis.html>

FY 2008 Performance Measure:

- **Restore water and habitat quality to meet water quality standards in 13 coastal areas**

Performance Database: EPA's "Surf Your Watershed" and EPA's WATERS Expert Query Tool

Data Source: Data regarding impaired segments are from EPA's "Surf Your Watershed" and EPA's WATERS Expert Query Tool updated every two years when states submit their 303(d) reports on the status of impaired water segments as required in the Clean Water Act (CWA) 305(b) report. Another source of data is the EPA-approved Decision Documents, the Quality Assurance Project Plan (QAPP) for state 303(d) data.

Methods, Assumptions and Suitability: To begin, the Decision Documents for each Gulf State are acquired. The water bodies listed as impaired for Florida, Alabama, and Mississippi are compared to "Surf Your Watershed" and then to the WATERS Expert Query Tool. Louisiana and Texas have a different form for their Decision Documents, which include only delisted water bodies. For these two states only "Surf Your Watershed" and WATERS Expert Query Tool are used. All the data are cross referenced for discrepancies. Then, tables are created for each watershed in the Gulf of Mexico Program's Priority Watershed Inventory. In all, 67 tables are created. These tables include a segment identification number for viewing the water segment on a map, a link to the URL for "Surf Your Watershed", name of the state basin the segment is located, the watershed the segment is located, the name of the waterbody, the number and type of impairment for that segment, and the year the impairment is listed. Delisting information is also listed in the tables for segments that have that information. The information available for delisting includes the segment identification number, the waterbody name, what impairment was delisted, the basis for the delisting, and a link to the total maximum daily load (TMDL) document if it exists. Segments that are shared among two or more watersheds are highlighted for easier recognition when counting the number of segments duplicated among watersheds.

Shapefiles are acquired from the states that contain the 303(d) (e.g., impaired) segments for that state. The segments listed in the state shapefile, however, do not always match EPA's ("Surf Your Watershed", WATERS Expert Query Tool, and Decision Documents). Therefore, it is sometimes necessary to contact the state for additional shapefiles that contain missing segments. The data are grouped by watershed with a name to represent the area in the shapefile (ex. 2002_03170009_303d_line). New fields are added to the shapefile such as segment identification number (matches the number from the tables), TMDL status ("Impaired Water

Segment,” “TMDL Completed,” “Restored”), number of impairments for that segment, list of impairments for that segment, and the waterbody name for that segment. Maps are then generated to show the number of impairments in each watershed. “Impaired Water Segments” are visible with a red cross hatch, “TMDL Completed” has a yellow cross hatch, and a “Restored” appears with a blue cross hatch. Each segment is labeled with the identification number found in the shapefile and the table. All maps include the Hydrologic Unit Code (HUC) number and the HUC name, legend, scale bar, inset map, GMPO logo, disclaimer for the state if one was provided, and the date the map was created. In all, 67 maps are created.

QA/QC Procedures: There are three EPA data sources: “Surf Your Watershed,” “WATERS,” and Decision Documents. Each data source is cross referenced with the other two sources to ensure there are no discrepancies in the listed impaired segments. The EPA data sources are from EPA- reviewed state documents.

Data Quality Reviews: There are no outside reviews of the 67 tables and maps generated in a report. However, GMPO is awaiting final approval of new web pages that will display them. This new site will be a subset of “Surf Your Watershed” and will be labeled as “Surf Your Gulf Watershed”. “Surf Your Gulf Watershed” will detail the impaired segments for the 13 priority areas.

Data Limitations: Data are updated every two years on “Surf Your Watershed” and in WATERS Expert Query Tool due to the fact that states submit a 303(d) report every two years on the status of the impaired segments in each state as required in Clean Water Act (CWA) 305(b) report.

Error Estimate: None identified.

References:

EPA’s “Surf Your Watershed” <http://cfpub.epa.gov/surf/locate/map2.cfm>

EPA’s WATERS (Watershed Assessment Tracking and Environmental Results) Expert Query Tool http://www.epa.gov/waters/tmdl/expert_query.html

FY 2008 Performance Measure:

- **Restore, enhance, or protect acres of important coastal and marine habitats.**

Performance Database: Coastal Emergent wetlands border the Gulf of Mexico and include tidal saltwater and freshwater marshes and mangroves. Encompassing over two million hectares (five million acres or more than half of the national total), the Gulf of Mexico coastal wetlands serve as essential habitat for a diverse range of species.

Total wetland loss (coastal and inland) for the five Gulf States from 1780 until 1980 was estimated to be 40 million square kilometers, approximately 50%. Between 1985 and 1995 the southeastern U.S. lost the greatest area of wetland (51% of the national total).

Coastal emergent wetland loss for Louisiana represents 67% of the nation's total loss (177,625 hectares or 438,911 acres) from 1978 to 1990.

The Gulf of Mexico Program achieves its acreage goal each year by cooperative funding of projects that result in the enhancement, protection or restoration of coastal habitat. This coastal habitat includes marshes, wetlands, tidal flats, oyster beds, seagrasses, mangroves, dunes and maritime forest ridge areas.

Data Source: The amount of acreage restored, protected and enhanced by the Gulf of Mexico Program is derived from the individual project's Statement of Work contained within the project proposal. This acreage is then verified by the EPA Project Officer and by the project's Program Manager through site visits during the life of the project, quarterly reports submitted to the Gulf of Mexico Program Office (GMPO), aerial photography, ground-truthing, and digital topographic. Data verification occurs at the end of the project too.

Methods, Assumptions and Suitability: The Gulf of Mexico Program achieves this goal successfully each year by cooperatively funding restoration projects with our multiple federal and state program partners. Our partners additionally follow required QA/QC procedures on their projects and routinely conduct site visits to provide verification of the acreage restored. These partners and our process to restore, protect and enhance Gulf coastal habitat include:

1. Gulf of Mexico Program Office State Proposal Solicitation through Requests for Proposals (RFPs)
2. GMP Partnership Challenge Grant Programs
 - A) *National Fish and Wildlife Foundation (NFWF) Cooperative Agreement*
 - 5- STAR Habitat Restoration Challenge Grants
 - Shell Marine Habitat Restoration Grants
 - B) *NOAA Community Restoration Grant Program* Supports Gulf Ecological Management Sites (GEMS)

<http://www.epa.gov/gmpo/habitat/hablinks.html>

QA/QC Procedures: The projects that are funded are required to provide a QA/QC plan if the restoration project involves monitoring. In those cases, EPA has documented Assistance Agreements with QA/QC approved plans. Both NOAA and the National Fish and Wildlife Foundation require QA/QC plans if the projects involve scientific monitoring. Additionally, the EPA Project Manager is required to conduct site visits, during the duration of the project to verify actual acreage restored, protected and/or enhanced. QA/QC includes but is not limited to, aerial photography, ground-truthing, transect growth monitoring and routine site visits of all funded projects.

Data Quality Reviews: Award Process for supporting habitat at restoration projects through partnership cooperative agreements.

1. Gulf of Mexico Program Office Competitive RFPs
2. GMP Partnership Challenge Grant Program Grants
 - A) *National Fish and Wildlife Foundation (NFWF)*
 - 5-STAR Projects - Habitat office staff and team members review proposals, rank and recommend projects for funding. This review includes identification of any

duplicative proposals already submitted for funding through other grant programs supported by GMPO, as well as opportunities to broker with other habitat grant funding programs, i.e. through Coastal America and the Corporate Wetlands Restoration Partnership Grant Program (CWRP)

Shell Marine Habitat Restoration Grants - Habitat team reviews and ranks proposals.

B) NOAA Community Restoration Grant Program

Supports Gulf Ecological Management Sites (GEMS). The Gulf of Mexico Foundation, NOAA and the Gulf of Mexico Program established a Steering Committee to review and select the NOAA CRP projects for funding. The steering committee consists of EPA, all GEMS State Managers, NOAA, and USFWS staff. As with our partnership with the National Fish and Wildlife Foundation, the review is to ensure there is no duplication of funding and to seek opportunities for brokering with other restoration grant programs.

Review of the restoration data occurs in the field and through field analysis by the project manager as the project progresses. This review is accomplished through measures such as aerial photography, ground-truthing, transect growth monitoring and routine site visits of all funded projects. Data are verified by EPA and our Program Partners through site visits and quarterly reports.

Data Limitations: Limitations of use for the data are carefully detailed by the data provider and project manager for each project that yields acreage. Images and topographic data have routinely been used for restoration projects and few to no limitations are expected from these datasets beyond that of image resolution.

Error Estimate: The acreage is documented by the project managers for each project in required EPA Quarterly Reports. Data are subject to a second verification following the completion of the project.

FY 2008 Performance Measures:

- **Mean percent stony coral cover in the Florida Keys National Marine Sanctuary (FKNMS) and in the coastal waters of Dade, Broward, and Palm Beach Counties, Florida working with all stakeholders (federal, state, regional, and local)**
- **Maintain the overall health and functionality of seagrass beds in the FKNMS as measured by the long-term seagrass monitoring project that addresses composition and abundance, productivity, and nutrient availability**
- **Maintain the overall water quality of the near shore and coastal waters of the FKNMS**

Performance Database: As required by the Florida Keys National Marine Sanctuary and Protection Act of 1990, EPA and its partners developed a comprehensive long-term status and trends monitoring program as a critical component of the Water Quality Protection Program for

the FKNMS. The comprehensive monitoring program was initiated in 1995 and includes water quality, coral reef and seagrass components. Annual results are reported each year on a fiscal-year basis. Historically, EPA has provided the majority of funding for the three monitoring projects, but other agencies (e.g., NOAA, U.S. Army Corps of Engineers (USACE), and state/local government agencies) also provide significant funding.

Data Source: The Water Quality and Seagrass Monitoring Projects are conducted by Florida International University's Southeast Environmental Research Center (SERC) and the Coral Reef Evaluation and Monitoring Project is conducted by the Florida Fish and Wildlife Research Institute. EPA provides funding via cooperative agreements and the other government agencies provide funds via federal assistance agreements or contracts. Monitoring data are collected each year on an annual or quarterly basis depending on the project. Results of each monitoring project are reported in annual reports. The data for each monitoring project is collected and archived by staff of the Florida Fish and Wildlife Research Institute under a cooperative agreement with the EPA. In addition, the principal investigators for each monitoring project have developed Web sites where anyone can go and review the data.

Methods, Assumptions and Suitability: The comprehensive monitoring program for the FKNMS was developed by a large group of technically competent and knowledgeable scientists familiar with the aquatic environment of the Florida Keys and the coral reef ecosystem. For each monitoring project, EPA worked closely with recognized experts to develop a detailed scope of work including sampling locations and frequency, parameters, field and analytical methods, quality assurance/quality control, data management, and reporting. The monitoring program was designed to provide representative coverage of the entire 2,900 square nautical miles of the Sanctuary. In general, monitoring sites were located throughout the FKNMS on a stratified-random basis and were determined to be compatible with EPA's Environmental Monitoring and Assessment Program protocol (<http://www.epa.gov/region4/sesd/reports/epa904r01002.html>). The overall monitoring program was designed to address the primary objective of the comprehensive long-term monitoring program for the FKNMS - to provide data needed to make unbiased, statistically rigorous statements about the "status of and trends in" selected water quality conditions and biological communities in the Sanctuary. For the monitoring program, the null hypothesis is that there is no change over time. The field data are tested against the null hypothesis that no change has occurred. All three monitoring projects (water quality, coral reef and seagrass) have demonstrated the ability to detect change over time and are suitable for determining the health of the coral reef ecosystem of the FKNMS.

QA/QC Procedures: The principal investigators for each monitoring project developed and submitted to EPA a Quality Assurance Project Plan (QAPP) to ensure that the data generated are accurate and representative of actual conditions and the degree of certainty of the data can be established. The QAPPs were developed in accordance with EPA guidance documents and the principal investigators consulted with the Regional QA/QC Officer and the Project Officer for the monitoring projects. It was required that the QAPP be approved by EPA before any work could begin on a monitoring project.

Data Quality Review: Through the QAPP, the principal investigators explicitly commit to incorporating procedures that will reduce random and systematic errors. In addition, the

principal investigators document quality assurance procedures and evaluate the quality of the data being generated by the monitoring projects. Further, the Technical Advisory Committee (TAC) of the Florida Keys National Marine Sanctuary reviews and assesses the monitoring projects and the data they produce on a regular and continuing basis.

Data Limitations: There are no known limitations of the data set.

Error Estimate: Coral Reef Evaluation and Monitoring Project – a power analysis was done at the beginning of the project to determine the limit of detectable change for the point count method used to determine the percent stony coral cover within the FKNMS. The estimate of actual performance is accurate to 2.4%.

Water Quality Monitoring Project – the project collects data from 154 sites within the FKNMS on a quarterly basis. Therefore, error estimates for the 2005 baseline values are mostly due to the large spatial variability and seasonal temporal variability. Because water quality data are not normally distributed, the project uses the median as the measure of central tendency. For chlorophyll a, the interquartile range (IQR) is 0.29 and the median absolute deviation (MAD) is 0.12. The light attenuation k_d IQR is 0.12 and the MAD is 0.05. Dissolved inorganic nitrogen has an IQR of 0.50 and a MAD of 0.26. For total phosphorus, the IQR is 0.90 and the MAD is 0.04.

Seagrass Monitoring Project – benthic plant community structure is measured using the rapid visual assessment technique known as the Braun-Blanquet method. This method is very quick, yet it is robust and highly repeatable, thereby minimizing among-observer differences. The Braun-Blanquet method has proven to be precise enough to detect subtle interannual variations yet robust enough to survive changes in personnel. Elemental content (carbon, nitrogen, and phosphorus) of seagrass leaves is determined by cleaning the leaves of all epiphytes, drying the leaves at low temperature, and grinding to a fine powder. Elemental content is then measured using established methods and calculating on a dry weight basis. All isotopic analyses are determined on the material collected for elemental analysis at the SERC Stable Isotope Lab using standard elemental analyzer isotope ratio mass spectrometer (EA-IRMS) procedures. Analytical reproducibility of the reported values, based on sample replicates, are better than 0.2‰ for ^{15}N and 0.08‰ for ^{13}C .

New/Improved Performance Data or Systems: The database management system for the Water Quality Protection Program of the FKNMS is geographic information based (GIS) and used to record the biological, physical, and chemical results from the comprehensive monitoring projects. The data from the three monitoring projects are collected and archived by the database managers at the Florida Fish and Wildlife Research Institute. The data archives component encompasses both raw and synthesized data. The data integration component incorporates the synthesized data, both tabular and geospatial. These data are integrated into a GIS to facilitate further analysis by scientists and managers. The results data contained within the database integration system are documented with project level metadata as well as attribute or parameter level metadata. An Internet Map Service (IMS) is being created to serve the data and this website will make both data access and mapping capabilities available to users without having access to expensive GIS-mapping software. An IMS allows users to view and query GIS and tabular data via a Web browser without having an expensive GIS on their computer. The overall

goal of the database management system is to provide a data integration system that takes into account the varying levels of data produced by the various monitoring projects and the needs of both managers and researchers.

References:

<http://serc.fiu.edu/wqmnetwork/>

www.serc.fiu.edu/wqmnetwork

www.fiu.edu/~seagrass

http://ocean.floridamarine.org/fknms_wqpp

http://research.myfwc.com/features/category_sub.asp?id=2360

FY 2008 Performance Measure:

- **Improve the water quality of the Everglades ecosystem as measured by total phosphorus, including meeting the 10 parts per billion total phosphorus criterion throughout the Everglades Protection Area marsh and the effluent limits to be established for discharges from storm water treatment areas**

Performance Database: As required by the Clean Water Act and Florida's Everglades Forever Act, the oligotrophic Everglades marsh within the Everglades Protection Area must meet the newly adopted 10 parts per billion numeric criterion for total phosphorus. EPA approved the criterion and its application methodology in 2005. A monitoring program to determine whether the criterion is in fact being met throughout the Everglades marsh is necessary to determine whether the water body can be expected to meet its designated use, whether phosphorus concentrations are stable or are increasing, whether the concentrations in impacted areas are improving, and whether watershed phosphorus control efforts costing in excess of \$1 billion are effective.

Data Source: Water quality is monitored throughout the Everglades marsh at dozens of long-term monitoring stations. These stations are sampled cooperatively in a joint effort by Florida Department of Environmental Protection, South Florida Water Management District, Everglades National Park, and Loxahatchee National Wildlife Refuge. Some of these stations were monitored previously by the United States Geological Survey beginning as long ago as 1953. Results of monitoring are reported in annual reports. The data are collected and are available to the public through a web site. Stormwater Treatment Area (STA) effluent phosphorus monitoring is in place as required by Florida and NPDES permits.

Methods, Assumptions and Suitability: The monitoring program was developed by scientists, with decades of experience regarding Everglades water quality and ecology, from the Florida Department of Environmental Protection, South Florida Water Management District, Everglades National Park, Loxahatchee National Wildlife Refuge and the EPA. The marsh monitoring program is designed to provide representative coverage of the entire 2,000 square mile freshwater Everglades. The monitoring program is capable of detecting temporal trends in phosphorus condition throughout the Everglades. The null hypothesis is that there is no change over time.

QA/QC Procedures: Field samples are collected by standard sampling protocol and analytical results are from accredited laboratories using standard methods. In addition, a series of ongoing laboratory round-robin exercises are overseen by the Florida Department of Environmental Protection. Field and lab protocol are also periodically reassessed by a Technical Oversight Committee that includes five Florida and federal agencies. Quality Assurance Project Plans are in place.

Data Quality Review: Water is sampled in the field by Department of Interior or South Florida Water Management District technical personnel using established Standard Operating Procedures. Data are subject to ongoing quality review by the interagency Technical Oversight Committee on a regular and continuing basis.

Data Limitations: There are no known limitations of the data set.

Error Estimate: Annual average total phosphorus concentrations are accurate to within 1 part per billion.

New/Improved Performance Data or Systems: Interagency dialogue and oversight provide ongoing reassessments that evaluate data credibility and completeness.

References:

<http://www.epa.gov/waterscience/criteria/nutrient/ecoregions/>
<http://www.sfwmd.gov/org/ema/toc/index.html>
http://www.sfwmd.gov/org/ema/toc/archives_docs.html
<http://www.dep.state.fl.us/labs/assessment/index.htm>
<http://www.dep.state.fl.us/labs/everglades/roundrobin.htm>
<http://www.walker.net/#Selected%20Publications>

FY 2008 Performance Measure:

- **Additional miles of river and stream corridor reopened to anadromous fish passage through removal of dams and barriers or installation of by-pass structures such as fishways [Long Island Sound]**

Performance Database: An internal database is under development to track the measure.

Data Source: The states within the Long Island Sound watershed will provide the data to track this measure. The 2005 cumulative baseline is 81 miles reopened. Long Island Sound Study, Sound Health 2006 Environmental Indicators: www.longislandsoundstudy.net/indicators/index.htm on Habitat Protection/River Miles Restored and Coastal Habitat Restored. Stamford, CT: EPA Long Island Sound Office

FY 2008 Performance Measure:

- **Percent of the population in each of the U.S. Pacific Island Territories served by community drinking water systems will receive drinking water that meets all applicable health-based drinking water standards throughout the year** (2005 Baseline: 95 percent of the population in American Samoa, 10 percent in CNMI (Commonwealth of the Northern Mariana Islands), and 80 percent of Guam served by community water systems received drinking water that meets all applicable health-based drinking water standards throughout the year.)

Performance Database: SDWIS (Safe Drinking Water Information System) is the database used to track this performance measure throughout the United States. However, of the three U.S. territories in the Pacific, only American Samoa has put data into this database on a reliable basis. (For example, Guam has not entered data in this database in years. We are working with CNMI and Guam in 2007 to enter data into SDWIS on a reliable basis.) In the interim, in Guam and CNMI we are working to get the data directly from the public water systems.

Data Source: Health-based violations are either reported by the territories (currently American Samoa only) or obtained through direct communication with public water systems (currently Guam and CNMI). Percentage of population served by community drinking water systems receiving 24-hour water is obtained through direct communication with territory (CNMI only). Population data are obtained from U.S. Census data.

Methods, Assumptions and Suitability: Our method is to calculate the performance measure as the percentage of people in the territories served by public water systems who are receiving 24-hour water that meets all health-based drinking water standards (i.e., no health-based violations). We can provide an aggregate value for the three Pacific territories using a weighted average based upon their populations. Our first main assumption is that a public water system must provide 24-hour water on a regular basis before it can provide drinking water that meets all health-based drinking water standards. This is an assumption that generally does not need to be made in the rest of the United States; and in the Pacific territories is an issue mainly in the CNMI. For example, the island of Saipan in the Northern Mariana Islands (population 70,000) is the only municipality of its size in the U.S. without 24-hour water (most of its residents get water only one or two hours per day; all but the poorest residents rely on bottled water or rain water as the source of their drinking water). This method is suitable for the Pacific islands because the situation is unique to the Pacific Island territories, and is one of the underlying reasons for the need to track access to safe drinking water. Our second main assumption is that health-based violations reported by the territories are correct. Our third main assumption is that US Census data are correct.

QA/QC Procedures: American Samoa follows QA/QC procedures in the data it submits to EPA for entry into the SDWIS database. There is no other Quality Management Plan or Quality Assurance Project Plan currently associated with this indicator.

Data Quality Reviews: Although the territories are responsible for reviewing and assuring quality of health-based violation reporting, EPA has had to communicate directly with public water systems in Guam and CNMI to get the data (and continues to do so as part of ongoing enforcement and compliance efforts). EPA is also in direct communication with the territories to

obtain percentage of population receiving 24-hour water. The US Census is responsible for reviewing and assuring population data quality. There is no other peer review or external data quality review.

Data Limitations: Potential data limitations include: (a) inconsistencies in reporting health-based violations among territories; and (b) inaccuracies due to imprecise measurement of percentage of population served by public water systems that receives 24-hour water.

Error Estimate: A quantitative estimate of error in the database is not possible.

New/Improved Data or Systems: Regarding SDWIS data, EPA will be working with the territories of Guam and CNMI in 2007 to provide more complete data to assess performance. Regarding percentage of population receiving 24-hour water, EPA will be working closely with the CNMI public water system and the CNMI Water Task Force (in the Office of the Governor) to both more accurately assess percentage of population receiving 24-hour water, and to provide 24-hour water to a greater percentage of the population.

References: N/A.

FY 2008 Performance Measure:

- **Sewage treatment plants in the U.S. Pacific Island Territories will comply 90 percent of the time with permit limits for biochemical oxygen demand (BOD) and total suspended solids (TSS)** (2005 Baseline: the sewage treatment plants in the Pacific Island Territories complied 59 percent of the time with BOD and TSS permit limits.)

Performance Database: ICIS (Integrated Compliance Information System) is used to track this performance measure.

Data Source: DMRs (Discharge Monitoring Reports) provided to EPA on a quarterly basis by the Pacific Island wastewater utilities are the data source.

Methods, Assumptions and Suitability: Permit conditions require each of the wastewater utilities to use EPA approved sampling methods. DMRs are self-reported by the Pacific island utilities to EPA on a quarterly basis for major facilities (greater than 1 million gallons per day of discharge). The main assumption is that the self-reported data are accurate.

QA/QC Procedures: Each of the Pacific island utility labs has and follows QA/QC procedures for this data.

Data Quality Reviews: EPA reviews the DMR reports to make sure they are thoroughly filled out. There are occasional EPA field audits of the utility labs.

Data Limitations: Potential data limitations include: (a) inconsistencies among personnel in performing sampling and analysis; and (b) incomplete data due to lack of sampling or lack of lab equipment.

Error Estimate: A quantitative estimate of error in the database is not possible.

New/Improved Data or Systems: EPA maintains communication with each of the utilities to improve sampling and analysis of BOD and TSS, and to improve reporting of DMRs.

References: N/A

FY 2008 Performance Measure:

- **Beaches in each of the U.S. Pacific Island Territories monitored under the Beach Safety Program will be open and safe for swimming 96 percent of days of the beach season** (2005 Baseline: beaches were open and safe 64 percent of the 365-day beach season in American Samoa, 97 percent in CNMI and 76 percent in Guam.)

Performance Database: PRAWN ((Program tracking for Advisories, Water quality and Nutrients) is used to track this performance measure.

Data Source: Reports provided to EPA on a quarterly basis by the Pacific Island environmental agencies (Guam EPA, American Samoa EPA, CNMI DEQ) are the data source.

Methods, Assumptions and Suitability: The Pacific Island environmental agencies use EPA-approved methods to take bacteriological samples at beaches and analyze them in their labs. They put together reports that include beach sampling data and number of days beaches were closed or had advisories posted based on bacteriological concerns. The Pacific Island environmental agencies submit these reports to EPA on a quarterly basis. EPA inputs data from the report into the PRAWN database. The main assumption is that the Pacific Island environmental agencies are following the EPA-approved methods for sampling and analysis. The secondary assumption is that EPA's contractor is correctly entering data from the reports.

QA/QC Procedures: Each of the Pacific Island environmental agencies has EPA-certified laboratories. Part of the certification process is establishing and adhering to QA/QC procedures.

Data Quality Reviews: EPA recertifies the labs on a periodic basis. Data quality from all lab procedures is reviewed.

Data Limitations: Potential data limitations include: (a) reporting inconsistencies within the database among jurisdictions which report on a quarterly basis (as the Pacific territories do) and on an annual basis.

Error Estimate: A quantitative estimate of error in the database is not possible.

New/Improved Data or Systems: EPA maintains communication with the Pacific territorial environmental agencies on changes in format which make it easier to enter data into the PRAWN database.

References: N/A.

FY 2008 Performance Measure:

- **Acres of wetland habitat and 3,000 acres of upland habitat in the Lower Columbia River watershed.**

Performance Database: The database used to track habitat restoration in the Lower Columbia River watershed is titled “Regional Restoration Project Inventory”. The database includes at a minimum the following data fields: Project title, lead organization, project partners, latitude/longitude, and acreage.

Results are updated annually on a fiscal year basis.

Data Source: Habitat restoration data are reviewed through direct communication with multiple agencies and partners conducting habitat restoration projects in the Lower Columbia River watershed, and the database is cross-referenced with other state, regional, and federal funding sources and project tracking databases. Due to the numerous partners involved in each project, and their involvement in the maintenance of the database, the confidence in the data accuracy and reliability is high.

Methods, Assumptions and Suitability: Habitat restoration data in the Lower Columbia River watershed is collected and tracked via direct and ongoing communication with the network of agencies and organizations conducting habitat restoration in the watershed. The main assumption for this method is that all agencies and organizations conducting habitat restoration in the watershed are included in the database review. The acreage indicator chosen is suitable for progress towards our goal because the restoration projects included in the database protect, enhance, and restore both wetland and upland habitat.

QA/QC Procedures: QA/QC procedures do not apply to tracking the Regional Restoration Project Inventory database. The database is reviewed by entities involved in or conducting habitat restoration projects in the Lower Columbia River watershed. The database is maintained annually, reviewed internally, distributed to regional entities conducting habitat restoration, and referenced when reporting several times annually. There is no Quality Management Plan or Quality Assurance Project Plan associated with this indicator.

Data Quality Reviews: The Regional Restoration Project Inventory is a database and reporting tool that employs the available level of project detail by multiple agencies and organizations. This tool is used internally and amongst agencies and organizations conducting habitat restoration in the Lower Columbia River watershed, therefore peer reviews, audits, and reports by external groups are not applicable.

Data Limitations: Potential data limitations include: (a) inconsistencies in or non-standard methods of acreage measurement, due to multiple agencies and organizations reporting; (b) inaccuracies due to imprecise measurement of acreage; (c) significant variability in the data, due to advancements in acreage calculation methods and therefore variable accuracy over time; (e)

incomplete or inaccurate data from agencies and organizations that choose not to submit or review project data.

Error Estimate: Based on the level of involvement from agencies and organizations conducting habitat restoration in the Lower Columbia River, the quantitative estimate of actual performance and calculation of error in the database is not possible.

New/Improved Data or Systems: The tracking of habitat restoration project data in the Lower Columbia River watershed will improve with the advancement of tracking technologies, including GIS analysis, and the maintained communication with agencies and organizations conducting habitat restoration in the watershed. The management of the database will adapt to these advancements when technically and feasibly possible.

References: N/A

GOAL 4 OBJECTIVE 4

FY 2008 Performance Measures:

- **Improved protocols for screening and testing (PART Measure)**
- **Effects and exposure milestones met (PART Measure)**
- **Assessment milestones met (PART Measure)**
- **Risk management milestones met (PART Measure)**

Performance Database: N/A

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: Annual milestones in support of the Multi-Year Plan for Endocrine Disruptors research are developed and revised during the annual budget and performance planning process. Self-assessments of progress toward completing these activities are based on the pre-defined goals.

QA/QC Procedures: Procedures are now in place to require that all annual milestones be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management.

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research milestones and outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Endocrine Disruptors Multi-Year Plan, available at: <http://www.epa.gov/osp/myc/edc.pdf> (last accessed on January 3, 2007)

FY 2008 Performance Measure:

- **Number of states using a common monitoring design and appropriate indicators to determine the status and trends of ecological resources and the effectiveness of national programs and policies (PART measure)**

Performance Database: Internal Regional EPA tracking system for partners in twenty-three states.

Data Source: Data are derived from internal assessments of state activities.

Methods, Assumptions and Suitability: Data for this measure are collected based on assessments of the number of states using Environmental Monitoring and Assessment Program (EMAP) data to monitor the condition of ecological resources. EMAP data are generated, in part, by a cooperative agreement with twenty-three states to conduct the National Coastal Assessment Monitoring survey, which introduces a standard protocol for monitoring the ecological condition of estuaries; including, probabilistic sampling designs, response designs for indicators, laboratory analyses, statistical analyses and reporting formats.

QA/QC Procedures: N/A

Data Quality Reviews: N/A

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: EPA anticipates by 2007, all states will have adopted and implemented the National Coastal Assessment Monitoring survey. Improvements in the management of contracts, coordination of the shipment of samples, and distribution of resulting data are now performed by EPA to give states without capability opportunity to partner with the agency.

References:

EMAP data, available at: <http://www.epa.gov/docs/emap/index.html> (last accessed on January 4, 2007)

US EPA. 2001. Environmental Monitoring and Assessment Program (EMAP): National Coastal Assessment Quality Assurance Project Plan, 2001-2004. EPA/620/R-01/002. Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL.

FY 2008 Performance Measures:

- **Percentage of planned outputs delivered in support of public health outcomes long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support of mechanistic data long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support of the aggregate and cumulative risk long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support of the susceptible subpopulations long-term goal (PART Measure)**
- **Percentage of planned outputs delivered in support efficient and effective clean-ups and safe disposal of contamination wastes.**
- **Percentage of planned outputs delivered in support of water security initiatives**
- **Percentage of planned outputs delivered in support of risk assessors and decision-makers in the rapid assessment of risk and the determination of cleanup goals and procedures following contamination.**
- **Percentage of planned outputs delivered on time in support of establishment of the environmental National Laboratory Response Network**
- **Percentage of planned outputs delivered in support of HHRA health assessments. (PART Measure)**
- **Percentage of planned outputs delivered in support of Air Quality Criteria/Science Assessment documents (PART Measure)**
- **Percentage of planned outputs delivered in support of HHRA Technical Support Documents (PART Measure)**
- **Percentage of planned outputs delivered (PART Measure)**

Performance Database: Integrated Resources Management Systems (internal database) or other internal tracking system.

Data Source: Data are generated based on self-assessments of progress toward completing research goals.

Methods, Assumptions and Suitability: To provide an indication of progress towards achievement of a program's long-term goals, each program annually develops a list of key research outputs scheduled for completion by the end of each fiscal year. This list is finalized by the start of the fiscal year, and no changes are made after this point. The program then tracks quarterly the progress towards completion of these key outputs against pre-determined schedules and milestones. The final score is the percent of key outputs from the original list that are successfully completed on-time.

QA/QC Procedures: Procedures are now in place to require that all annual outputs be clearly defined and mutually agreed upon within ORD by the start of each fiscal year. Progress toward completing these activities is monitored by ORD management

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the research outputs being measured. However, long-term performance measures and independent program reviews are used to measure research quality and impact

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Human Health Multi-Year Plan, available at: <http://epa.gov/osp/my/HH%20MYP%20Final.pdf> (last accessed January 3, 2007).

Global Change Research Multi-Year Plan, available at: <http://epa.gov/osp/my/global.pdf> (last accessed January 3, 2007)

Human Health Risk Assessment Multi-Year Plan, available at: <http://epa.gov/osp/my/HHRA.pdf> (last accessed January 3, 2007).

FY 2008 Performance Measure:

- **Average cost to produce Air Quality Criteria/Science Assessment documents (Efficiency Measure)**
- **Average time (in days) to process research grant proposals from RFA closure to submittal to EPA's Grants Administration Division, while maintaining a credible and efficient competitive merit review system (as evaluated by external expert review) (Efficiency Measure)**

Performance Database: N/A

Data Source: Data are generated based on self-assessments of progress toward completing program goals.

Methods, Assumptions and Suitability: The HHRA Program's efficiency measure tracks the cost to produce AQCDs for use by the Office of Air and Radiation in developing their policy options for the NAAQS. Total FTE and extramural dollar costs are cumulated over a five year period and divided by the number of AQCDs produced in this time period, to create a moving annual average \$/AQCD. The Human Health Program's efficiency measure tracks the average time to process and award grants.

QA/QC Procedures: N/A

Data Quality Reviews: N/A

Data Limitations: Data do not capture the quality or impact of the program activities. However, other performance measures and independent program reviews are used to measure the quality and impact of the program.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: N/A

GOAL 5 OBJECTIVE 1

FY 2008 Performance Measures:

- **Pounds of pollution estimated to be reduced, treated, or eliminated as a result of concluded enforcement actions [PART]**
- **Percentage of concluded enforcement cases requiring that pollution be reduced, treated, or eliminated [PART]**
- **Percentage of concluded enforcement cases requiring implementation of improved environmental management practices [PART]**
- **Dollars invested in improved environmental performance or improved environmental management practices as a result of concluded enforcement actions (i.e., injunctive relief and SEPs)**
- **Pounds of pollutants reduced, treated, or eliminated as a result of audit agreements [PART]**

Performance Databases: The Integrated Compliance Information System Federal Enforcement & Compliance (ICIS FE&C) database tracks EPA judicial and administrative civil enforcement actions. The newly enhanced Criminal Case Reporting System (CCRS) tracks criminal enforcement actions.

Data Source: Most of the essential data on environmental results in ICIS FE&C is collected through the Case Conclusion Data Sheet (CCDS), which Agency staff begin preparing after the conclusion of each civil, judicial and administrative enforcement action. EPA implemented the CCDS in 1996 to capture relevant information on the results and environmental benefits of concluded enforcement cases. Information from the CCDS is used to track progress for several of the performance measures. The CCDS form consists of 22 specific questions which, when completed, describe specifics of the case; the facility involved; information on how the case was concluded; the compliance actions required to be taken by the defendant(s); the costs involved; information on any Supplemental Environmental Project to be undertaken as part of the settlement; the amounts and types of any penalties assessed; and any costs recovered through the action, if applicable. The CCDS documents whether the defendant/respondent, in response to an order for injunctive relief or otherwise in response to the enforcement action, will: (1)

implement controls that will reduce pollutants; and/or (2) improve environmental management practices to curtail, eliminate or better monitor and handle pollutants in the future.

The Criminal Enforcement Program also collects information on pollution reductions on a separate case conclusion data form. The criminal enforcement case conclusion form is being used in FY07.

Methods, Assumptions and Suitability: For enforcement actions which result in pollution reductions, staff estimate the amount of pollution reduced for an immediately implemented improvement, or for an average year once a long-term solution is in place. There are established procedures to be used by EPA staff to calculate, by statute, e.g., Clean Water Act (CWA), the pollutant reductions or eliminations. The calculation determines the difference between the current Aout of compliance@ quantity of pollutants released and the post enforcement action Ain compliance@ quantity of pollutants released. This difference is then converted into standard units of measure.

QA/QC Procedures: QA/QC procedures [See references] are in place for both the CCDS and ICIS FE&C data entry. There is a CCDS Training Booklet [See references] and a CCDS Quick Guide [See references], both of which have been updated and distributed throughout regional and headquarters= offices. The criminal enforcement program has prepared a companion guide for use by its field agents. Separate CCDS Calculation and Completion Checklists [See references] are required to be filled out when the CCDS is completed. Criminal enforcement measures are quality assured by the program at the end of the fiscal year.

Quality Management Plans (QMPs) are prepared for each office within The Office of Enforcement and Compliance Assurance (OECA). The Office of Compliance's (OC) QMP, effective for 5 years, was approved July 29, 2003 by the Office of Environmental Information (OEI) and is required to be re-approved in 2008. To satisfy the Government Performance and Results Act (GPRA), the Agency's information quality guidelines, and other significant enforcement and compliance policies on performance measurement, OECA instituted a requirement for semiannual executive certification of the overall accuracy of ICIS information. In addition, in FY 2003, OC established a quarterly data review process to ensure timely input, data accuracy, and reliability of EPA's enforcement and compliance information.

Data Quality Review: Information contained in the CCDS and ICIS FE&C are required by policy to be reviewed by regional and headquarters= staff for completeness and accuracy. ICIS data are quality-reviewed quarterly, and reviewed and certified at mid-year and end-of-year.

Data Limitations: Pollutant reductions or eliminations reported in CCDS are projected estimates of pollutants to be reduced or eliminated if the defendant carries out the requirements of the settlement. (Information on expected outcomes of state enforcement is not available.) The estimates are based on information available at the time a case is settled or an order is issued. In some instances, this information will be developed and entered after the settlement, during continued discussions over specific plans for compliance. Because of the time it takes to agree on compliance actions, there may be a delay in completing the CCDS. Additionally, because of unknowns at the time of settlement, different levels of technical proficiency, or the nature of a

case, OECA=s expectation is that the overall amount of pollutants to be reduced or eliminated will be prudently underestimated based on CCDS information.

Error Estimate: Not available

New & Improved Data or Systems: In November 2000, EPA completed a comprehensive guide on the preparation of the CCDS estimates. This guide, issued to headquarters and regional staff, was made available in print and CD-ROM, and was supplemented in FY 2002 and updated in FY 2004 [See references]. The guide contains work examples to ensure better calculation of the amounts of pollutants reduced or eliminated through concluded enforcement actions. EPA trained each of its ten regional offices during FY 2002. OC=s QMP was approved by OEI July 29, 2003, and is effective for five years. [See references]. A new criminal enforcement case management, tracking and reporting system (CCRS) came on-line during FY 2006 and replaces the existing criminal docket (CRIMDOC). This new system is more user friendly and allows for greater tracking, management, and reporting capabilities.

In June, FY 2006, a new version of the ICIS data system, ICIS FE&C, became operational. The new data system has all of the functionality of old ICIS (ICIS 1.0) but also adds functionality for tracking EPA enforcement and compliance activities. In addition, another component of ICIS, “ICIS-NPDES” is becoming the database of record for the CWA National Pollutant Discharge Elimination System (NPDES) program, including all federal and state enforcement, compliance and permitting data. States will be migrated in phases to ICIS NPDES from the legacy data system, the Permit Compliance System (PCS), over a period of about two years. As a state’s data is migrated from PCS to ICIS-NPDES, so too is its NPDES federal compliance and enforcement data for that state.

References: Quality Assurance and Quality Control procedures: Data Quality: Life Cycle Management Guidance, (IRM Policy Manual 2100, dated September 28, 1994, reference Chapter 17 for Life Cycle Management). CCDS: CCDS, Training Booklet, issued November 2000; Quick Guide for CCDS, issued November 2000, and “Guide for Calculating Environmental Benefits of Enforcement Cases: FY2005 CCDS Update” issued August 2004 available: <http://intranet.epa.gov/oeca/oc/resources/ccds/ccds.pdf>. Information Quality Strategy and OC=s Quality Management Plans: Final Enforcement and Compliance Data Quality Strategy, and Description of FY 2002 Data Quality Strategy Implementation Plan Projects, signed March 25, 2002. ICIS: U.S. EPA, OECA, ICIS Phase I, implemented June 2002. Internal EPA database; non-enforcement sensitive data available to the public through the Freedom of Information Act (FOIA). Criminal Enforcement Division Case Conclusion

FY 2008 Performance Measure:

- **Percentage of regulated entities taking complying actions as a result of on-site compliance inspections and evaluations**

Performance Databases: ICIS FE&C and manual reporting by regions.

Data Sources: EPA regional offices, Office of Civil Enforcement - Air Enforcement Division (Mobile Source program), Office of Compliance - Agriculture Division (Good Laboratory Practices), and the Compliance Assessment and Media Programs Division (Wood Heaters).

Methods, Assumptions and Suitability: The Inspection Conclusion Data Sheet, (ICDS) will be used to analyze results from inspections/evaluations conducted under EPA=s statutes. EPA will analyze ICDS from on-site complying actions taken by facilities, deficiencies observed, and compliance assistance provided. The EPA inspectors complete the ICDS for each inspection or evaluation conducted, and the information is entered into ICIS or reported manually. This measure was selected because it directly counts the number of times compliance assistance has been provided and allows for the analysis of the data to determine trends over time.

QA/QC Procedures: The ICIS FE&C data system has been developed per Office of Environmental Information Lifecycle Management Guidance, which includes data validation processes, internal screen audit checks and verification, system and user documents, data quality audit reports, third party testing reports, and detailed report specifications for showing how data are calculated.

Data Quality Review: The information in the CCDS, ICDS and ICIS FE&C is required by policy to be reviewed by regional and headquarters= staff for completeness and accuracy. In FY2003, to satisfy the GPRA, the Agency's information quality guidelines, and other significant enforcement and compliance policies on performance measurement, OECA instituted a requirement for semiannual executive certification of the overall accuracy of information. ICIS FE&C data are reviewed quarterly and certified at mid-year and end of year.

Data Limitations: ICIS FE&C is the official database of record for all inspections not reported into one of the legacy data bases (with the exception of the Underground Injection Control (UIC) inspections in some regions). Legacy databases still operational include Air Facility System (AFS), FS, PCS, RCRAInfo, National Compliance Data Base System (NCDB), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) / Toxic Substances Control Act (TSCA) Tracking System (FTTS). Beginning in 2007, NCDB/FTTS inspection data will be reported into ICIS FE&C. Regions have been encouraged to report all inspection ICDS information into ICIS. If regions continue to use manual reporting for ICDS, it may result in redundant, incomplete, or contradictory data.

New & Improved Data or Systems: In June FY 2006, a new version of the ICIS data system, ICIS FE&C became operational. The new data system has all of the functionality of old ICIS (ICIS 1.0) but adds functionality for tracking EPA enforcement and compliance activities. Further, ICIS-NPDES is beginning to replace the PCS as the database of record for the NPDES program, including all federal and state enforcement, compliance and permitting data. (States will be migrating over to ICIS-NPDES in phases, over a period of about two years.)

References:

- ICIS: U.S. EPA, OECA, ICIS FE&C, implemented June 2006
- ICIS: U.S. EPA, OECA, ICIS-NPDES, implemented June 2006

- Memo dated October 11, 2005: Entering Manually Reported Federal Inspections into ICIS in FY 2006
- Internal EPA database
- Non-enforcement sensitive data available to the public through the Freedom of Information Act (FOIA).

FY 2008 Performance Measures:

- **Percentage of regulated entities receiving direct compliance assistance from EPA reporting that they improved environmental management practices as a result of EPA assistance**
- **Percentage of regulated entities receiving direct assistance from EPA reporting that they reduced, treated, or eliminated pollution, as a result of EPA assistance**

Performance Database: EPA headquarters and regions will manage data on regulated entities receiving direct compliance assistance from EPA through ICIS.

Data source: Headquarters and EPA's regional offices will enter information in ICIS upon completion and delivery of media and sector-specific compliance assistance including workshops, training, on-site visits and distribution of compliance assistance tools. ICIS is designed to capture outcome measurement information such as increased awareness/understanding of environmental laws, changes in behavior and environmental improvements as a result of the compliance assistance provided.

Methods, Assumptions and Suitability: These measures are automatically produced in the ICIS database which records the number of entities that received direct assistance from EPA and report that they improved an environmental management practice and/or report that they reduced, treated or eliminated pollution as a result of EPA assistance. ICIS produces the percentage by dividing the number of respondents to each of two follow-up survey questions by the number of respondents. The figure is aggregated nationally from the regional data. A percentage measure was chosen to track the goal for year to year comparability as opposed to a direct number which varies year to year.

QA/QC: Automated data checks and data entry guidelines are in place for ICIS.

Data Quality Review: Information contained in the ICIS is reviewed by regional and headquarters staff for completeness and accuracy. In FY2003, OECA instituted a requirement for semiannual executive certification of the overall accuracy of information to satisfy the GPRA, the Agency's information quality guidelines, and other significant enforcement and compliance policies on performance measurement. ICIS data are reviewed quarterly and certified at mid-year and end of year.

Data Limitations: None

Error Estimate: None

New & Improved Data or Systems: EPA plans to improve and/or modify elements of the compliance assistance module in ICIS based on use of the system.

References: US EPA, ICIS Compliance Assistance Module, February 2004; US EPA, Compliance Assistance in the Integrated Compliance Information System Guidance, February 20, 2004. US EPA, 2005 Guidance Addendum for Reporting Compliance Assistance in the ICIS, March 2005.

GOAL 5 OBJECTIVE 2

FY 2008 Performance Measure:

- Number of pounds of reduced (in millions) of priority chemicals as measured by National Partnership for Environmental Priorities members.
- **Number of pounds of priority list chemicals removed from or reduced in waste streams per cost to perform such actions. [PART efficiency]**

Performance Database: Under Information Collection Request no. 2050-0190 (“Reporting Requirements Under EPA’s National Partnership for Environmental Priorities”, renewed April 2006) the National Partnership for Environmental Priorities (NPEP) program collects information on partner (mostly from the industrial sector, and one municipal facility) priority chemical reduction commitments, technical solutions proposed to achieve reductions, and actual reduction achievements. Achievements are verified through discussions between EPA waste minimization national experts and partner technical personnel, and further verified using the Toxics Release Inventory system where possible.

NPEP efficiency measure: The denominator of the efficiency measure, or the cost to perform such actions, equals program cost minus quantifiable benefit per pound of reduction. Program cost is calculated to be the cost for Federal program implementation (FTE + grant and contract funding). Industry cost is neutral. Quantifiable benefits include information collected through NPEP success stories on resource savings (e.g. water, energy) resulting from implementation of waste minimization technologies and processes.

Data Source: As part of their partnership agreement, NPEP partners provide information concerning what priority list chemicals they commit to reduce, the process through which the reduction will be achieved, and the time frame for achieving the commitment. When the commitment is achieved they provide EPA with a “success story” which identifies the actual achievement, confirms the process used to achieve the reduction, and provides additional information of interest to the general public and other technical personnel concerning how the achievement was met. Information is reviewed by EPA waste minimization national experts for reasonableness based on best professional judgment. An internal tracking system is used to track pounds committed, achievement date, and actual achievement. NPEP partner achievement data is further verified against TRI reporting when the partner is a TRI regulated facility. The Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), Section 313 (Toxics Release Inventory) and expanded by the Pollution Prevention Act of 1990 (40 CFR Part

13101; www.epa.gov/tri) requires that regulated facilities report facility-specific, chemical-specific release, waste and recycling data to EPA.

Methods, Assumptions, and Suitability: Regional targets are calculated to meet the national total goal. This is a new measure which does not have comparable historical data. EPA does not intend to reconcile FY 08 results with prior years.

EPA waste minimization national experts are trained in industrial or chemical engineering and have significant experience in evaluating industrial processes for waste minimization potential and efficiency. Their professional judgment forms the basis for accepting the applicants' waste minimization commitment and achievement. Additionally, when the partner is also a TRI regulated facility, achievement data are verified against TRI reporting

QA/QC Procedures:

Internal tracking: EPA engineers review commitment information. In cases where commitment information is initially incomplete or lacks substantiation, EPA engineers may conduct site visits in order to make a determination that the commitment is reasonably achievable. Information on number of pounds committed for reduction, achievement date and actual achievement is reported by NPEP partners and stored in an internal NPEP tracking system. Tracking system data are periodically reviewed by EPA regional coordinators to ensure that they accurately reflects partner commitments. Corrections are made to tracking system data when they are identified.

TRI Database verification: Most facilities use EPA-certified automated Toxics Release Inventory (TRI) Form R reporting tools, which contain automated error checking mechanisms. Upon receipt of the facilities' reports, EPA conducts automated edits, error checks, data scrubs, corrections and normalization during data entry and subsequent processing. The Agency does not control the quality of the data submitted by the regulated community. EPA does, however, work with the regulated community to improve the quality of their estimates.

Data Quality Review:

Internal Tracking data: Tracking system data are periodically reviewed by EPA regional coordinators to ensure that they accurately reflects partner commitments. Corrections are made to tracking system data when they are identified.

TRI data: The quality of the data contained in the TRI chemical reports is dependent upon the quality of the data that the reporting facility uses to estimate its releases and other waste management quantities. Use of TRI Form R by submitters and EPA's data reviews help assure data quality. The GAO Report Environmental Protection: EPA Should Strengthen Its Efforts to Measure and Encourage Pollution Prevention (GAO - 01 - 283, February, 2002, <http://www.gao.gov/new.items/d01283.pdf>), recommends that EPA strengthen the rule on reporting of source reduction activities. Although EPA agrees that source reduction data are valuable, the Agency has not finalized regulations to improve reporting of source reduction activities by TRI-regulated facilities.

Data Limitations: For both internal tracking system and TRI data, use of the data should be based on the user's understanding that the Agency does not have direct assurance of the accuracy of the facilities' measurement and reporting processes.

Error Estimate:

Internal Tracking: This is a new measurement tool, implemented with the 2006 – 2011 strategic plan. No error estimate is available at this time. However, EPA is developing an error tracking process for use in 2007 and should have an error estimate for fiscal year 2007 in early 2008.

TRI data: From the various data quality efforts, EPA has learned of several reporting issues such as incorrect assignment of threshold activities and incorrect assignment of release and other waste management quantities (EPA-745-F-93-001; EPA-745-R-98-012; www.epa.gov/tri/tridata/data_quality_reports/index.htm; www.epa.gov/tri/report/index.htm.) For example, certain facilities incorrectly assigned a 'processing' (25,000 lb) threshold instead of an 'otherwise use' (10,000 lb) threshold for certain non-persistent, bioaccumulative and toxic (PBT) chemicals, so they did not have to report if their releases were below 25,000 lbs. Also, for example, some facilities incorrectly reported fugitive releases instead of stack releases of certain toxic chemicals.

New/Improved Data or Systems: Use of internal tracking data allows EPA to measure direct progress resulting from the NPEP program. Historically EPA has measured trends using TRI. Because TRI data are influenced by a variety of factors, including multiple EPA and State regulations, voluntary programs, and national economic trends, use of TRI did not allow EPA to directly measure program results. The internal tracking system is a limited data set and is 100% reviewed by expert engineers, is a reasonably accurate data set.

References: <http://www.epa.gov/epaoswer/hazwaste/minimize/index.htm>; www.epa.gov/tri/ and additional citations provided above. (EPA-745-F-93-001; EPA-745-R-98-012; <http://www.epa.gov/tri/report/index.htm>; www.epa.gov/tri/tridata/data_quality_reports/index.htm; www.epa.gov/tri/report/index.htm Bureau of Economic Analysis (BEA) indices are available at <http://www.bea.gov/bea/regional/gsp/>.

FY 2008 Performance Measures:

- Pounds of hazardous materials reduced by P2 program participants (PART measure)
- BTUs of energy reduced, conserved or offset by P2 program participants (annual measure)
- Gallons of water reduced by P2 program participants (annual measure)
- Business, institutional and government cost reduced by P2 program participants (PART measure)

The Agency's Pollution Prevention programs, or results centers, include Green Chemistry, Design for the Environment, Green Engineering, Regional Offices for Results, Pollution Prevention Resource Exchange (P2RX), Environmentally Preferable Purchasing, Hospitals for a Healthy Environment, and Green Suppliers Network. Each of these program/results centers operates under the principles of the Pollution Prevention Act and works with others to reduce waste at the source, before it is generated. The programs are designed to facilitate the incorporation of pollution prevention concepts and principles into the daily operations of government agencies, businesses, manufacturers, nonprofit organizations, and individuals. Each program/results center contributes outcome results which are added to the combined flow of results. Data is rolled up into a single tracking tool: "P2 Program 2011 Strategic Targets - Contributions by Program.xls," which aggregates annual progress toward the goals.

Performance Database:

Green Chemistry (GC): EPA has developed an electronic database ("metrics" database) that allows organized storage and retrieval of green chemistry data submitted to EPA on alternative feedstocks, processes, and safer chemicals. The database was designed to store and retrieve, in a systematic fashion, information on the environmental benefits and, where available, economic benefits that these alternative green chemistry technologies offer. The database was also designed to track the quantity of hazardous chemicals and solvents eliminated through implementation of these alternative technologies. Green Chemistry technology nominations are received up to December 31 of the year preceding the reporting year, and it normally takes 6-12 months to enter new technologies into the database. The database currently has information on all technologies received through 2006.

Design for the Environment (DfE): DfE has an evaluation spreadsheet that is populated for all its programs (i.e., Alternatives to Lead Solder in Electronics, Furniture Flame Retardant Alternatives, the Formulator Program, and a collaboration with the Air Office on DfE approaches as implementation mechanisms for regulating Local Area Sources, such as Auto Refinishing). Spreadsheet content vary by project, and generally include measures comparing baseline technologies or products to safer ones, as well as information on partner adoption and/or market share of safer alternatives. For example, the DfE Formulator Program tracks the move to safer chemicals (such as pounds of chemicals of concern no longer used by partners, and conversely pounds of safer ingredients) and reductions in water and energy use.

Green Engineering (GE): GE will be developing an electronic database to keep track of environmental benefits of GE projects including pounds of hazardous chemicals prevented and/or eliminated, gallons of water, British Thermal Units (BTUs) and dollars saved and pounds of carbon dioxide (CO₂) emissions eliminated.

Regional Offices: EPA's Regional Offices' (Regions) P2 results come primarily through grants they award, and results from projects managed by EPA Regional staff. Regional Offices use the GranTrack database to collect and organize information on the P2 and Source Reduction grants they award. GranTrack includes multiple information fields covering administrative and financial aspects of the grants as well as results reported by grantees. The database can be searched and reports developed in numerous ways, including by Region, type of grant, year grant

awarded, and year of results. Data may be displayed for individual grants or in aggregate covering multiple grants.

P2Rx: Many state and local P2 programs are currently collecting data on P2 program activities, outputs, and outcomes to feed into the National Pollution Prevention Results System, which will provide data on pollution prevention environmental outcomes performance measures. Standardized metrics have been developed, with definitions, as well as an ongoing system to gather data on these metrics through the regional P2Rx centers. Over 30 state and state-level P2 organizations have signed Memoranda of Agreements to provide data. As the system is implemented, data collected from the programs will be placed first in regional databases managed by the 8 P2Rx centers and then in a new national database. The system was ready for initial use on a national scale in Spring 2006. Each P2Rx center now hosts a Regional Aggregation Module set up to collect data from each program in their region. Actual data entry is just starting. In order to avoid counting data describing the same results twice in EPA performance measurement systems, data from work funded by EPA grants reported through the EPA GranTrack system will be counted in the Regional Center for Results totals, and not in the P2Rx center totals when that data is also reported to the P2Rx center directly by the grantee. Since state and other results funded by EPA grants will be reported through the Regional Center for Results, as just described, the results reported in EPA performance measurement systems through the P2Rx center will therefore be funded from non-federal sources. As a result, EPA cannot claim full responsibility for these results. Nevertheless, EPA support for P2 research, such as technical assistance and outreach through such mechanisms as publications, training, and information inquiries answered by the 8 P2Rx centers, contributes to national P2 progress even when there is no direct EPA funding for a specific project. To capture this indirect effect of EPA's role, 10% of the results reported through the P2Rx center will be counted in EPA performance measurement systems.

Hospitals for a Healthy Environment (H2E) Program: The H2E program maintains its own electronic program database. Data is collected voluntarily from Partners on an ongoing and continuous basis. Data is requested on mercury and waste reduction information broken down by types of waste. Information on BTUs, gallons of water, and dollar savings are only requested in award applications.

Green Suppliers Network (GSN): GSN utilizes a Customer Relationship Management database (CRM) in partnership with the National Institute of Standards and Technology's Manufacturing Extension Partnership Program (NIST MEP) to collect performance metrics for the program. The CRM was originally configured to collect economic information from companies receiving services through the NIST MEP system. The CRM has been modified to capture the environmental metrics collected during a GSN review at a company, such as the value of environmental impact savings identified, energy conserved (BTU, kwh/year), water conserved (gal/year), water pollution reduced (lbs/year), air emissions reduced (lbs/year), hazardous waste reduced (lbs/year), solid waste reduced (lbs/year), and toxic/hazardous chemical use reduced (lbs/year).

EPP Center for Results. Results for Environmentally Preferable Purchasing (EPP) come from the Federal Electronics Challenge (FEC), the Electronic Product Environmental Assessment

Tool (EPEAT), and Green Janitorial Products. FEC uses the FEC Administrative Database for storage and retrieval of baseline and annual reporting information from FEC partners. EPP staff run these reporting data through the Environmental Benefits Calculator to calculate pounds of hazardous and non-hazardous pollution reduced, units of energy conserved, and costs saved (among other benefits) on an annual basis. EPEAT-registered manufacturers provide reporting data via the Green Electronics Council, which collects and organizes EPEAT reporting data. As with FEC, the EPP team runs these reporting data through the Environmental Benefits Calculator to calculate pounds of hazardous and non-hazardous pollution reduced, units of energy conserved, and costs saved (among other benefits) on an annual basis. For Janitorial Products, the EPP team will collect annual reporting data from various EPA contacts for EPA's Environmental Management System (EMS), and then run these data through the Green Cleaning Calculator to calculate pounds of hazardous pollution reduced. FY 2006 data will be collected in January 2007. This collection will be the first time FEC uses an online form to collect program data.

Data Source:

Green Chemistry (GC): Industry and academia submit nominations annually to the Office of Pollution Prevention and Toxics (OPPT) in response to the Presidential Green Chemistry Challenge Awards. Environmental and economic benefit information is included in the nomination packages. The metrics database pulls this public benefit information from the nominations. The database currently has information on all technologies received through 2006.

Design for the Environment (DfE): The source of DfE's evaluation information varies by the project and the partner industry. For example, in DfE's Formulator Recognition Program, partners provide proprietary information on the production volume of their improved formulations. For other partnerships, data sources typically include technical studies (e.g., Alternatives Assessments and Life-Cycle Assessments) and market/sales/adoption information from sources such as industry associations.

Green Engineering (GE): Data will come from various sources and partners including the regions, academia and industry. For example, for GE projects related to the pharmaceutical industry, data will be directly reported by the project leaders. Some information may also come from profiles of recognized projects taken from technical journals or organizations, such as the American Institute of Chemical Engineers, or directly reported by project leaders on industry projects or joint academia-industry projects.

Regional Offices: P2 Grant and Source Reduction grant data are secured from grant applications, grant reports and supplemental forms and entered into the P2 Grant Database, Gran Track.

P2Rx center: See above.

H2E Program: Because the H2E program is a voluntary program, the information collected is voluntarily submitted by hospital Partners. The H2E program maintains an ICR for the collection of data which allows EPA to collect data from third parties under the Paperwork Reduction Act.

Green Suppliers Network (GSN): Data are collected by the GSN Review Team during a GSN review at the company's facility. This team consists of a "lean" manufacturing expert from the NIST MEP system and an environmental expert usually from the state environmental agency or its designee. Lean manufacturing is a business model and collection of methods that help eliminate waste while delivering quality products on time and at least cost. NIST MEP has a system of lean experts who assist businesses through the process of becoming more efficient and cost effective. The metrics are recorded in the final report generated for the company's use and also are entered into the CRM database by the NIST MEP center. All MEP centers are grantees to the Department of Commerce and must adhere to DOC's requirements for the collection and handling of data. These requirements are reinforced by the terms of the "Request for Proposals" to which each center (e.g., grantee) responds and which must be followed during a GSN review.

EPP Center for Results. For FEC, the data source is federal partners. For EPEAT, the data source is EPEAT-registered manufacturers of electronic products. For Janitorial Products, the data source is EPA EMS contacts for procuring janitorial products.

Methods, Assumptions, and Suitability:

Green Chemistry (GC): The public information is tracked directly through internal record-keeping systems. No models or assumptions or statistical methods are employed.

Design for the Environment (DfE): Each DfE partnership identifies and focuses on a unique set of chemicals and industrial processes. For DfE's Formulator Recognition Program, partner-provided data on production volumes is aggregated to determine the total reductions of hazardous chemicals achieved through the program. For Lead-Free Solder and Furniture Flame Retardants, market data for the production volume of the chemical of concern provides the measure for reduction. DfE's Data Program Tracking Spreadsheet includes the methods and assumptions for each project's measures.

Green Engineering (GE): The information will be supplied directly by project leaders and/or academic-industry-region partners. The information will be tracked directly through EPA record keeping systems. GE's Data Program Tracking spreadsheet includes methods and assumptions.

Regional Offices: The data will come from state and other P2 grantees and other sources as described above. No models or assumptions or statistical methods are employed by EPA

P2Rx: The data will come from state and local P2 programs as described above. No models or assumptions or statistical methods are employed.

H2E Program: The data comes directly from program Partners, specifically hospitals. No models or assumptions or statistical methods are employed.

Green Suppliers Network (GSN): Data is entered by the NIST MEP. The data is collected using the standard procedures normally utilized by the environmental agency participating in the GSN review. A standard set of metrics has been defined by the GSN program and is collected at each review. The data are aggregated by NIST MEP headquarters and reported to EPA on a regular

basis. These data can also be aggregated by sector. The data are aggregated to maintain confidentiality for all companies participating in the program. No models or statistical methods are employed.

EPP Center for Results. For FEC, various assumptions are used to estimate data (starting in 2006) regarding the number of desktops per employee and the average life cycle of desktops. Also, metric calculations rely on the assumptions that: 1) the EPEAT criteria now qualifying a product for the “bronze” level (see www.epeat.net for criteria); 2) the weight of recycled desktop components; and 3) the commercial process for electricity will not change between 2006-2011. For EPEAT, similar assumptions are made for the weight of plastic components and the weight of packaging for desktops. In the future, when actual data is used to calculate environmental benefits each year, these assumptions will no longer be necessary. Instead, the only assumptions in effect will be that partners report accurate data and those assumptions needed for the Calculator (to be determined) to translate environmental attributes and activities into environmental benefits. The Environmental Benefits Calculator assists institutional purchasers in measuring the environmental and economic benefits of purchasing environmentally preferable products. For Janitorial Products, the method involves reporting the types of products and work practices used during routine cleaning activities in office buildings. The Green Cleaning Calculator assists in calculating pounds of hazardous pollution reduced.

QA/QC Procedures: All Pollution Prevention and Toxics programs operate under the Information Quality Guidelines as found at <http://www.epa.gov/quality/informationguidelines>, last accessed on July 27, 2008 and under the Pollution Prevention and Toxics Quality Management Plan (QMP). The Quality Management Plan is for internal use only.

Green Chemistry: Data undergo a technical screening review by the Agency before being uploaded to the database to determine if the data adequately support the environmental benefits described in the Green Chemistry Challenge Awards application. Subsequent to Agency screening, data are reviewed by an external independent panel of technical experts from academia, industry, government, and nongovernmental organizations (NGOs). Their comments on potential benefits are incorporated into the database. The panel is convened by the Green Chemistry Institute of the American Chemical Society, primarily for judging nominations submitted to the Presidential Green Chemistry Challenge Awards Program and selecting winning technologies.

Design for the Environment (DfE): Data undergo a technical screening review by DfE before being added to the spreadsheet. DfE determines whether data submitted adequately support the environmental benefits described.

Green Engineering (GE): Data will be reviewed by the partners including industry, academia, and the regions. Data will also be reviewed by GE to ensure transparency, reasonableness and accuracy.

Regional Offices: Data will undergo technical screening review by EPA Regional and Headquarters staff and their contractor before being placed into GranTrack. Data for projects

managed directly by EPA Regional staff will be reviewed by Regional personnel. Additional QA/QC steps to be developed, as appropriate.

P2Rx: Data will undergo technical screening review by EPA and other program participants (e.g., Pollution Prevention Resource Exchange (P2Rx) centers) before being placed in the database. Additional QA/QC steps to be developed, as appropriate.

H2E Program: Data undergo technical screening review by the grantee (National Center for Manufacturing Sciences, which administers the program through a subgrant) before being placed in the database. QA/QC plan is a part of the grant requirement.

Green Suppliers Network (GSN): Data is collected and verified under NIST MEP's QA/QC plan. Each NIST MEP Center must follow QA/QC requirements as grantees to the Department of Commerce. Additionally, the environmental data are collected under the specific requirements of the state environmental agency participating in each GSN review. Each state agency utilizes their own QA/QC plan for data collection because they utilize the data for purposes in addition to the GSN program.

EPP Center for Results. Regarding FEC, EPEAT, and Janitorial Products, the calculators of environmental benefits (e.g., the Environmental Benefits Calculator and the Green Cleaning Calculator) underwent internal and external review during their development phases. The Environmental Benefits Calculator is still undergoing an external peer review and will not be finalized until Fall/Winter 2006. Regarding FEC and EPEAT, instructions and guidelines are provided to partners on how to report data. Their reporting forms are reviewed annually by EPA management. For EPEAT, EPEAT-registered manufacturers sign a Memorandum of Understanding in which they warrant the accuracy of the data they provide. For Janitorial Products, contractors sign a contract stating that they are providing janitorial products according to certain specifications. For FEC, EPEAT, and Janitorial Products, data undergo an internal technical review before these data are run through the calculators.

Data Quality Review: All Office of Pollution Prevention and Toxics (OPPT) programs operate under EPA's Information Quality Guidelines as found at <http://www.epa.gov/quality/informationguidelines> (last accessed on July 27, 2008) and under the OPPT's Quality Management Plan (QMP).

Green Chemistry (GC): Review of industry and academic data as documented in U.S. EPA, Office of Pollution Prevention and Toxics, Green Chemistry Program. Files available at <http://www.epa.gov/opptintr/greenchemistry/> (last accessed on July 27, 2008)

Design for the Environment (DfE): Data collected includes those from industry associations and government reports. Source data is compared with industry trends and examined by industry and NGO partners.

Green Engineering (GE): Data collected will be reviewed to meet data quality requirements.

Regional Offices: The GranTrack metrics and data system incorporate ideas and system features from the National Pollution Prevention Results System, developed with EPA support by such organizations as the Northeast Waste Management Officials Association, Pacific Northwest Pollution Prevention Resource Center, and National Pollution Prevention Roundtable. Data for projects managed directly by EPA Regional staff will be reviewed by Regional personnel.

P2Rx: The new metrics and data system were based, in part, on recommendations in the February 2001 GAO report, “EPA Should Strengthen Its Efforts to Measure and Encourage Pollution Prevention” (GAO-01-283). They also incorporate work by such organizations as the Northeast Waste Management Officials Association, Pacific Northwest Pollution Prevention Resource Center, and National Pollution Prevention Roundtable.

H2E Program: Not applicable

Green Suppliers Network (GSN): Not applicable.

EPP Center for Results. For FEC, data are entered on-line with an additional error-checking function on the online form. The mechanism by which the EPP program is receiving data from the Green Electronics Council is still being determined. For Janitorial Products, data quality review steps (as of 4th quarter 2006) are still under development.

Data Limitations:

Green Chemistry (GC): Occasionally data are not available for a given technology due to confidential business information (the Presidential Green Chemistry Challenge Awards Program does not process CBI). Because the Presidential Green Chemistry Challenge is a voluntary public program, it cannot routinely accept or process CBI. If the program stakeholders cannot verify a technology because of proprietary information, especially during the final judging stage of the awards program, they can and do ask EPA to conduct the verification internally. EPA will then ask the company to share confidential information with CBI-cleared OPPT staff in order for EPA to conduct the verification. It also is occasionally unclear as to what is the percentage market penetration of implemented alternative green chemistry technology (potential benefits vs. realized benefits). In these cases, the database is so noted.

Design for the Environment (DfE): Occasionally, data on innovative chemistries or technologies are claimed CBI by the developing company, thus limiting the implementation of beneficial pollution prevention practices on a wider scale.

Green Engineering (GE): There may be instances in which environment benefits are not clearly quantified and/or available due to various reasons including CBI. In those instances, the data have to be carefully evaluated and considered for reporting. If the information is included, the uncertainties/limitations will be noted

Regional Offices: Limitations arise from the reliance on individual state and other P2 grantees and other sources to gather data. These programs vary in attention to data collection from sources within their jurisdictions, data verification and other QA/QC procedures. Also, despite changes described below to add consistent metrics and definitions, some differences exist. EPA is

attempting to address these concerns by strengthening reporting requirements in its P2 grants, focusing on outcomes, and standardizing GranTrack metrics with those in the National P2 Results System. EPA is also in the process of adding a P2 component to the EPA Information Exchange Network (which provides financial support and a comprehensive data system to link state data with EPA).

P2Rx: Limitations arise from the reliance on individual state and local P2 programs to gather data. These programs vary in attention to data collection from sources within their jurisdictions, data verification and other QA/QC procedures. Also, despite development of core measures and a data dictionary, differences in reporting exist among data sources. EPA is attempting to address these concerns by working with the groups described above who have been partners in the development of the National Pollution Prevention Results System. EPA is also in the process of adding a P2 component to EPA Information Exchange Network

H2E Program: Not all hospital Partners have turned in their facility assessment information. However, in order to be considered for an award under the program, hospital Partner **MUST** submit facility information; therefore, the program has a very complete set of information for hospital Partners who have applied for awards. This introduces self-selection bias to the reported data as the hospitals with the best track records are those that apply for the awards. The program has roughly 10% of all Partner facilities' assessment data. An internal assessment conducted of data collected from Partners revealed some calculation errors and data inconsistencies regarding how waste data is captured by the hospital Partners. The program has gone back to correct some of those errors.

Green Suppliers Network (GSN): Limitations arise from the reliance on individual programs to gather data. These programs vary in attention to data collection from sources within their jurisdictions, data verification and other QA/QC procedures. The GSN program has attempted to address these concerns by strengthening the data collection requirements in the Request for Proposals that MEP centers must be respond to in order to perform a GSN review.

EPP Center for Results. FEC and EPEAT have a built-in reliance on partners for data reporting.

Error Estimate:

Green Engineering (GE): There may be instances in which environmental benefits are not clearly quantified. In those instances, the data will be excluded.

Design for the Environment (DfE): The program simply compiles data and does not conduct statistical analysis. Error estimates are not available

H2E: The program does not use a statistical approach to collect the data and therefore does not have confidence intervals for the performance estimates.

Green Suppliers Network (GSN): Not applicable.

EPP Center for Results. Any errors detected during internal technical review of performance data submitted would be addressed, either through correction of data or elimination of data.

New/Improved Data or Systems:

Regional Offices: EPA recently updated and expanded GranTrack, both to improve usability and to add a much greater level of detail regarding results reported by grantees. In regard to reporting of results, GranTrack includes activity measures, behavioral measures, and outcome measures. The metrics chosen and their definitions generally are consistent with those used in the National Pollution Prevention Results System, described in the P2Rx center. Also, EPA is planning to grant the public restricted access to GranTrack. The following fields will be accessible: general information, projects and results data, status of grant, funding, keywords, partners, and sectors.

P2Rx: This center's data collection system is currently under initial implementation through the partnership described above.

H2E Program: The program is currently beta-testing new facility assessment software which will help hospital Partners collect and compute facility environmental improvement data. The software automatically converts units and tabulates information from the hospital's source data, as well as calculating costs for different waste streams. Anticipated roll-out for the software will be in 2007.

EPP Center for Results. FEC will use additional on-line data entry forms in 2007.

References:

Green Chemistry (GC): <http://www.epa.gov/opptintr/greenchemistry/>
Design for the Environment (DfE): <http://www.epa.gov/opptintr/dfe/>
Green Engineering (GE): <http://www.epa.gov/opptintr/greenengineering/>
Pollution Prevention (P2) Programs: <http://www.epa.gov/oppt/p2home/index.htm>
<http://www.p2.org/workgroup/Background.cfm>
<http://www.epa.gov/Networkg/>
Hospitals for a Healthy Environment (H2E):
<http://www.epa.gov/oppt/pollutionprevention/pubs/h2e.htm>
Green Suppliers Network (GSN): www.greensuppliers.gov
EPP Center for Results. Information about FEC's annual reporting is on the FEC web site at:
<http://www.federalelectronicschallenge.net/report.htm>
Information about the Environmental Benefit Calculator is on the FEC web site at:
<http://www.federalelectronicschallenge.net/resources/docs/enbencalc.pdf>
The EPEAT Subscriber and License Agreement is available on the EPEAT web site at: <http://www.epeat.net/docs/Agreement.pdf>

FY 2008 Performance Measure:

- **Reductions of hazardous chemicals per federal dollar spent (lbs/dollar) [PART efficiency measure]**

EPA measures the accomplishments of the Design for the Environment's (DfE) Formulator Recognition Program by comparing reductions in hazardous chemicals achieved to program resources, including FTE, overhead and extramural dollars spent. The Formulator Recognition Program works with formulators of chemical-intensive products to reduce the use of hazardous chemicals through green chemistry innovations. DfE partners provide information on levels of reduction.

Performance Database: The DfE formulator program collects confidential data each year from a sample of partner companies and enters the information into the formulator program tracking component of the DfE program evaluation spreadsheet. Key data elements used to calculate the efficiency measure are the quantity of hazardous chemicals reduced through reformulation by product type, and spending information obtained from the OPPT Finance Central database. The efficiency measure numerator is the sum of the average pounds of hazardous chemicals reduced per formulation multiplied by the annual quantity of each formulation. The denominator is the annual program resources expended.

Data Source: Partners voluntarily provide information on the pounds of hazardous chemicals reduced per formulation and the annual production of those formulations. Resource data is from OPPT internal sources.

Methods, Assumptions and Suitability: Data on reductions of chemicals are averaged with information from previous years to create an average annual quantity of hazardous chemical reduced per formulation and multiplied by the total number of formulations recognized by the program. The result is the total annual reduction in pounds of hazardous chemicals. The method aggregates across all formulators and assumes that the entire quantity of recognized formulations is reformulated. Program resources are calculated directly from EPA figures. The efficiency measure corresponds directly to the program goal of cost-effectively reducing hazardous chemical use and can compare cost effectiveness year-to-year.

QA/QC Procedures: Design for the Environment operates under EPA's Information Quality Guidelines as found at <http://www.epa.gov/oei/qualityguidelines/index.html> and under the OPPT Quality Management Plan.

Data Quality Reviews: Data undergo a technical screening review by DfE staff before being added to the program tracking spreadsheet.

Data Limitations: The data submitted voluntarily by partners is confidential. The information made public information is limited to aggregated values. In addition, only nine formulators are represented in each annual sample to reduce reporting burden, which may contribute to sampling error.

Error Estimate: Due to the sampling methodology, no error estimate is possible.

New/Improved Data or Systems: Each year additional data is added to the program tracking spreadsheet and averaged with preceding years. Cumulative data will provide a more stable estimate of total pounds of hazardous chemicals reduced through the DfE formulator program.

References:

<http://www.epa.gov/oei/qualityguidelines/index.html>

The DfE Program Tracking Spreadsheet for chemical formulators contains Confidential Business Information.

FY 2008 Performance Measures:

- **Reduce water use at Performance Track facilities**
- **Reduce hazardous materials use at Performance Track facilities**
- **Reduce production of greenhouse gases at Performance Track facilities**
- **Reduce toxic releases to water at Performance Track facilities**
- **Reduce combined NO_x, SO_x, VOC and PM emissions at Performance Track facilities**

Performance Databases: In 2003, EPA developed an electronic database, Performance Track On-Line (a Domino database) which facilities use to electronically submit their environmental performance data. The data are stored in Performance Track Online as well as in the Performance Track Members Database (a Microsoft Access database).

Members report on results in a calendar year. Fiscal year 2008 data represents members' calendar year 2007 performance. That data will be reported to the Performance Track program by April 1, 2008. The data will then be reviewed, aggregated, and available for external reporting in September 2008. (Calendar year 2008 data will become available in September 2009.)

Data Source: All data are self-reported and self-certified by member facilities. As described below, Performance Track engages in quality control to the extent possible, but it does not conduct formal auditing. However, as described below, Performance Track staff visit up to 10% of Performance Track member facilities each year. In addition, a criterion of Performance Track membership is the existence of an environmental management system (EMS) at the facility, a key element of which is a system of measurement and monitoring. Most Performance Track facilities have had independent audits of their EMSs, which create a basis for confidence in the facilities' data.

Methods, Assumptions, and Suitability: Data collected from members' applications and annual performance reports are compiled and aggregated for the externally-reported indicators. Performance Track members commit to two to four environmental improvements, selected from a comprehensive list of environmental indicators. Facilities then report on their performance in these indicators over a three-year period of participation. Because facilities choose the areas in which they will report, the externally reported indicators (listed above) may or may not be included in any particular facility's set of reported indicators. If a facility does not include one or more of the above indicators as one of its commitments, then its performance for that indicator, either positive or negative, will not be included in EPA's aggregated data for the indicator.

The data reflect the performance results across the entire facility, and are thus considered “facility-wide” improvements. Members are not permitted to report on environmental improvements for a subset of the facility; rather, the data reported must represent the performance for the given indicator across the entire facility. Performance Track staff ensures that all improvements are facility-wide by conducting a thorough technical review of the submitted performance data. Any data that are determined to not reflect the entire facility’s performance is either revised or excluded from the aggregated and externally reported results. EPA believes that this review process minimizes instances of reporting on non-facility wide improvements.

The data are normalized for production rates or other rates of output at the facilities. Normalized results take into account production or output changes at facilities.

The data can be used to make year-to-year comparisons, but reviewers and analysts should bear in mind that Performance Track membership is constantly in flux. Although members should retain the same set of indicators for their three-year participation period, as new members join the program and others leave, the group of facilities constantly changes. In a few instances, members make replacement commitments due to closure of certain product lines or other major business changes.

Due to unavoidable issues regarding the timing of the application period, a small subset of reported data will represent performance improvements over two years for the facilities’ first reporting year.

QA/QC Procedures: Performance data submitted to the program are reviewed for completeness and adherence to program requirements, and undergo a technical screening review by EPA and contractor staff. The quality of the data, however, is dependent on the quality of the measurement or estimation at the facility level. In cases where it appears possible that data is miscalculated or misreported, EPA or contractor staff contact the facility and request resubmittal of the data. If the accuracy of data remains under question or if a facility has provided incomplete or non-standard data, the database is coded to ensure that the data is excluded from aggregated and externally reported results.

As described, Performance Track is quality controlled to the extent possible, but is not audited in a formal way. However, Performance Track staff visit up to 10% of Performance Track member facilities each year. During those visits, facilities are asked about their data collection systems and about the sources of the data reported to the program. Additionally, a prerequisite of Performance Track membership is an environmental management system (EMS) at the facility, a key element of which is a system of measurement and monitoring. Most Performance Track facilities have had independent audits of their EMSs, which increases confidence in the facilities’ data. The independent assessment became a requirement in 2004.

Data Quality Reviews: N/A.

Data Limitations: Potential sources of error include miscalculations, faulty data collection, misreporting, and nonstandard reporting on the part of the facility. It is clear from submitted

reports that some facilities have a tendency to estimate or round data. Errors are also made in converting units and in calculations. In general, however, EPA is confident that the externally reported results are a fair representation of members' performance.

Error Estimate: Not calculated.

New/Improved Performance Data or Systems: Since spring 2004, all Performance Track applications and annual performance reports have been submitted electronically (through the Performance Track On-Line system), thus avoiding the need for manual data entry. This has also allowed for improved standardization of data collection. Additionally, the program has implemented a new requirement that all members receive an independent assessment of their EMSs prior to membership. Lastly, the program has reduced the chances that data may not reflect facility-wide data by addressing the issue in the review process and by instituting "facility-wide data" requirements for all indicators.

References: Members' applications and annual performance reports can be found on the Performance Track website at <https://yosemite.epa.gov/oepi/ptrack.nsf/faMembers?readform>. *Performance Track On-Line* and the *Performance Track Members Database* are not generally accessible. Performance Track staff can grant access to and review of the databases by request.

FY 2008 Performance Measure:

- 75% of innovation projects under the State Innovation Grant Program and other piloting mechanisms will achieve, on average, 8.0% or greater improvement in environmental results **from a project initiation baseline measure for the sectors and facilities** (e.g., reductions in air or water discharges, improvements in ambient water or air quality, or improvements in compliance rates) or a 5% or greater improvement in cost-effectiveness and efficiency. In FY 08, six (6) projects will be reaching completion, at which point they are evaluated, and the target is for five (5) to meet the performance goal

Performance Databases: The Office of Environmental Policy Innovation (OEPI) maintains an EPA-internal database, the "State Innovation Grant Database" (a Lotus Notes - Domino database) to retain and organize data on competition, award and project performance for its State Innovation Grant Program. The data base is managed by OEPI and access within the Agency can be granted to EPA project officers and program officials. In the past, we have granted access to this database to the Office of the Inspector General for use in a program evaluation. Data entry is performed by staff within OEPI. Within the sections on project performance, the database includes all available quarterly project progress reports and final project reports. Quarterly reports are timed to the lifecycle of an individual project rather than all projects on a fixed date. These reports include document in MS Word and WordPerfect formats as well as spreadsheets, all generated by the State Grant recipients to track their project milestones identified in the final project work plan. Beginning in 2006, OEPI will use the data to generate an annual performance report for the State Innovation Grant program. The projects funded by the grant program typically have a 2-4 year lifetime and during that period, each project reports on a quarterly basis and provides a final project outcome report at the termination of the project.

Projects implemented under the State Innovation Grant Program typically do not show measurable environmental outcomes until the programs initiated under the grants are fully implemented. For example, a State implementing an Environmental Results Program for a particular business sector may take up to three years to develop the compliance assistance program and operator manuals, conduct a baseline assessment of performance, implement the compliance assistance workshops, provide adequate time for businesses to fully adopt the program and then conduct a performance assessment for a statistical sample of hundreds of facilities state-wide. Dates captured in the project quarterly reports provide information on attainment of operational milestones and outputs. The final reports are expected to provide measurement of first, second or third order outcomes to assess the success of the project. This is significant because outcome measurement is not possible until the grant project is completed. Only milestones and output measurements (e.g., development of a compliance handbook, compliance assistance workshops) are available during the operation of the individual projects. Thus, performance assessment occurs only at the end of a project. Projects we will report on in 2007 are projects initiated in 2003 and 2004.

Data Source: Data on performance are reported by the States for projects funded under the State Innovation Grant Program. Data are collected by the States using a variety of mechanisms depending upon the specific projects. For instance, for Environmental Results Programs (ERPs), the State prepares a compliance manual for a specific business sector and a compliance worksheet. Participating operators self-certify their performance using the worksheet and its checklist. The States audit statistically random samples of the participating facilities and certify the performance of these facilities independently. States are required to report only composite data for these projects. Other types of projects may rely on a facility's environmental monitoring conducted under a permit to certify performance. Only rarely are new data required for a State Innovation Grant Program project. We rely heavily on existing performance assessments conducted under permitting programs to assess baseline and outcome performance improvement. For instance, the grant program has funded several facility environmental management systems (EMS). Facilities typically have independent third-party audits of their EMSs, which create a basis for confidence in the facilities' data. In general EPA is confident that the externally reported results are a fair representation of members' performance.

Methods, Assumptions, and Suitability: Performance assessment methods will vary across project types in this program. For instance, ERPs focus on improvement in compliance rates and program efficiency. Compliance rates are determined by a statistically-based sample audit of participating facilities within an ERP sector by the State. Currently, the State Innovation Grant program is sponsoring ERP projects in a number of business sectors (dry cleaning, printing, auto body repair, auto salvage, Underground Storage Tanks (USTs), Injection Wells, Concentrated Animal Feeding Operations (CAFOs), Oil and Gas well drilling and operation, dental facility mercury management, etc). Some of these facilities will report compliance based upon operational processes. Others may be able to go beyond compliance reporting and provide estimates of pollution prevention (e.g., pounds of mercury recovered from dental amalgam).

Other project types, such as Environmental Management Systems will typically will utilize facility monitoring protocols developed for their permits and use those to develop assessments of

improvements in emissions and discharges. Where EMS-driven projects also develop engineering estimates of improvements in pollutant discharges brought about by manufacturing changes, those estimates would require verification related to any alteration in permits.

Analysts should bear in mind that these projects almost never produce incremental improvements across their lifetime (e.g., in a 3-year project, one third of the projects proposed benefits will not occur in each year. Rather, project outcomes are generally measurable only at the completion of the project which marks full implementation. In a number of instances, full implementation may require time beyond the grant-funded project period. In these instances we have sought commitments from recipient-states to continue measuring performance and reporting to EPA after the grant project itself has been completed. The significant impact on the State Innovation Grant program is that outcomes reported in any year will reflect completion of projects initiated 2-4 years earlier and not incremental benefits during the lifetime of a project. Thus, reporting of outcomes in 2007 will be based upon projects funded in FY 2003 and FY 2004.

QA/QC Procedures: Each project funded under the State Innovation Grant Program is required to develop a Quality Assurance Project Plan (QAPP) that is compliant with EPA guidance. The QAPP is reviewed by the designated QA official from the appropriate EPA Region and OEPI's QA reviewer. States must have an approved QAPP before the beginning of any data collection. OEPI has prepared guidance for state grant recipients on development of performance measures and quality assurance plans. OEPI also requires participation by each new state grant recipient in an annual training workshop that addresses these areas. Additionally, final project reports will be made available to other States and to the public for examination. EPA is also a partner with State Innovation Grant recipients in the conduct of open forums for discussion of projects, such as the ERP All-States Meeting held annually to allow open examination of progress and results in each of the ERP projects.

Data Quality Reviews: N/A.

Data Limitations: Potential sources of error include miscalculations, faulty data collection, misreporting, inconsistent reporting, and nonstandard reporting on the part of the facility. Manually entered data are sometimes typed incorrectly.

Because States are required to submit only synoptic (or meta) data with regard to program performance, we rely on the States to apply the appropriate steps to ensure data accuracy and appropriateness of analysis as described in their QAPP. In 2007, OEPI will initiate a post-award monitoring program that will include steps to audit reporting under the State Innovation grant Program.

Error Estimate: Not calculated.

References: Information on the State Innovation Grant Program, including State pre-proposals and final workplans can be found on the program website at: <http://www.epa.gov/innovation/stategrants>. OEPI anticipates publication of its first State Innovation Grants Program progress report in early 2007.

GOAL 5 OBJECTIVE 3

FY 2008 Performance Measures:

- **Percent of tribes with delegated and non-delegated programs (PART measure)**
- **Percent of tribes with EPA-reviewed monitoring and assessment occurring (PART measure)**
- **Percent of tribes with EPA-approved multimedia work plans (PART measure)**
- **Number of environmental programs implemented in Indian country per million dollars (PART efficiency measure)**

Performance Database: EPA's American Indian Environmental Office (AIEO) developed an information technology infrastructure, named the Tribal Program Enterprise Architecture (TPEA). The TPEA is a suite of secure Internet-based applications that track environmental conditions and program implementation in Indian country as well as other AIEO business functions. One TPEA application, the Objective 5.3 Reporting System, tracks progress in achieving the performance targets under Goal 5 Objective 3 of EPA's National Strategic Plan – "Improve Human Health and the Environment in Indian Country." EPA staff use the Objective 5.3 Reporting System to establish program performance commitments for future fiscal years and to record actual program performance for overall national program management. The Objective 5.3 Reporting System serves as the performance database for all of the annual performance measures and PART measures.

Data Source: Data for the Objective 5.3 Reporting System are input on an ongoing basis by Regional tribal program project officers, as designated by the Regional Indian Coordinators. All persons authorized to input data have individual passwords.

The original documents for the statements and data entered into the fields of the Objective 5.3 Reporting System can be found in the files of the Regional Tribal Project Officers overseeing the particular programs that are being reported on. For example, documents that verify water quality monitoring activities by a particular tribe will be found in the files of the Regional Water 106 Project Officer for the tribe.

The performance measure, "Percent of tribes with delegated and non-delegated programs," tracks the number of: Treatment in a manner similar to a State (TAS) approvals or primacies; implementations of a tribal program; executions of Direct Implementation Tribal Cooperative Agreements (DITCA); and GAP (General Assistance Programs) grants that have provisions for the implementation of solid waste or hazardous waste programs.

EPA Regional project officers managing Tribes with delegated and non-delegated environmental programs input data, classified by tribe, into the Objective 5.3 Reporting System to derive a national cumulative total.

The performance measure, "Percent of tribes with EPA-reviewed monitoring and assessment occurring (cumulative)," reports the number of active Quality Assurance Project Plans (QAPPs).

All ongoing environmental monitoring programs are required to have active QAPPs. Regional tribal program liaisons obtain the information from Regional Quality Assurance Officers and input it into the Objective 5.3 Reporting System. The data are updated continuously and summed at the end of the fiscal year.

The performance measure, “Percent of Tribes with EPA approved multi-media workplans,” tracks the number of tribes with: Performance Partnership Grants (PPGs); Tribal Environmental Agreements (TEAs), Tier I, Tier II, and Tier III; Memoranda of Agreement (MOAs); and Memoranda of Understanding (MOUs), which demonstrate Tribe building. EPA Regional tribal program liaisons input data, which are summed annually. It is possible a tribe will contribute to the measure in more than one way.

The performance measure, “Number of environmental programs implemented in Indian Country per million dollars,” is calculated annually by summing the number of tribes receiving General Assistance Program (GAP) grants, the number of TAS approvals or primacies, the number of DITCAs, and the number of GAP grants that have provisions for the implementation of solid or hazardous waste programs and dividing that sum by the annual GAP appropriation (less rescissions and annual set-asides.)

Methods, Assumptions and Suitability: The Objective 5.3 Reporting System contains all the information for reporting on performance. The measure that tracks delegated and non-delegated programs can be cross-referenced and verified with records from the Integrated Grants Management System. The measure that tracks monitoring and assessment programs can be verified from databases maintained by the Regional Quality Assurance Officers. The measure that tracks multimedia work plans can be verified from official correspondence files between EPA Regions and Tribes, or from project officer case files.

QA/QC Procedures:

Data used in the Tribal Program Enterprise Architecture contains quality assurance and metadata documentation prepared by the originating agency or program. Because the information in the Tribal Program Enterprise Architecture is used for budget and strategic planning purposes, AIEO requires adherence to the Agency’s Information Quality Guidelines. (www.epa.gov/quality/informationguidelines/index.html)

Data Quality Reviews: The certifying official for the information submitted by EPA’s Regional offices to AIEO through the Objective 5.3 reporting System is the Regional Administrator. However, in some cases the Regional Administrator may wish to delegate the signatory authority to some other official such as the Regional Indian Coordinator. The Regional Administrator or his/her designee will be responsible for certifying that the information in the Objective 5.3 Reporting System, and hence the information which supports the performance measures and proposed PART measures is accurate. This procedure generally follows guidance provided in EPA Information Quality Guidelines. (<http://www.epa.gov/quality/informationguidelines/index.html>)

Data Limitations: Because data are input by EPA’s Regional Project Officers on an ongoing basis, there may be slippages between the time a tribal program status has been achieved and the

entering of that data into the Objective 5.3 Reporting System. Even though the Regional Project Officer may enter data on an ongoing basis, at the end of the reporting cycle the Objective 5.3 Reporting System will be “locked down,” with the locked dataset reported for the fiscal year. EPA’s Regional Administrator certifies the accuracy of the locked information

Error Estimate: For the Objective 5.3 Reporting System, errors could occur by mis-entering data or neglecting to enter data. However, the data from each region will be certified as accurate at the end of each reporting cycle; error is estimated to be low, about 1-2 percent.

New/Improved Data or Systems: The Objective 5.3 Reporting System, is a part of the AIEO Tribal Program Enterprise Architecture, and is a part of the same Life Cycle milestones of that system. Presently, plans are to focus on Operations and Maintenance activities for the Tribal Program Enterprise Architecture beginning FY08.

References:

Objective 5.3 Reporting System: https://iasint.rtpnc.epa.gov/TATS/tats_prv/entry_page

User id liue

Password test1

OCFO Information Quality Guidelines: <http://intranet.epa.gov/ocfo/policies/iqg/index.htm>

ENABLING SUPPORT PROGRAMS

FY 2008 Performance Measures:

- **Average time to hire non-SES positions from date vacancy closes to date offer is extended, expressed in working days [PART efficiency measure]**

The data are expressed in the following manner: Average number of days (where the time to extend an offer for each vacancy is averaged); EPA’s fiscal year goal is 45-days

Database: Data are derived from EZ-Hire. This is the database that applicants use to apply for jobs at EPA. This data are tracked internally and reported on a fiscal year and quarterly basis. The data are reported by the servicing human resources office and rolled up into Agency-wide averages.

Data Source: The Office of Human Resources (OHR) EZ-Hire System.

Methods, Assumptions and Suitability: Data on new hires is collected by OHR using the EZ-Hire system. OHR uses EZ-Hire to generate a raw data report on a quarterly basis (after the quarter has been completed). The data are downloaded as an Excel spreadsheet and are tracked by vacancy announcement number and formatted into the various components of the Office of Personnel Management’s (OPM) 45-day Hiring Model. OHR staff review the results, and identify any anomalies that may need further investigation. The draft report is then sent to the servicing HR Offices so the data can be validated, corrected, and ultimately transferred to the OHR to be finalized. HR Offices also work with the Selecting Officials to develop explanatory justifications for those vacancies which exceeded the 45-day timeframe.

QA/QC Procedures: EZ-Hire tracks vacancy announcement activity from the time the announcement opens until a job offer is made to a candidate by the Selecting Official.

Data Quality Reviews: OHR staff review and analyze the raw data, prior to it being provided to the HR Offices for validation. Local HR Offices review and validate the data, identify anomalies or data-entry errors, make corrections, and provide the updated information to OHR so that the report can be finalized. Questions about the data or resolution of issues of concern are frequently resolved through discussion and consultation with OHR.

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: EZ-Hire system provides adequate data for analysis of the average time to hire for non-Senior Executive Service (SES) applicants. However, we anticipate the need for additional programming (to be done by the EZ-Hire Contractor) to enable the system to track additional data required by OPM.

References: EZ-Hire

FY 2008 Performance Measure:

- **Average time to hire SES positions from date vacancy closes to date offer is extended, expressed in working days.**

These data are tracked manually on a weekly basis and reported on a quarterly basis. The data are reported by servicing human resources office and are expressed as an average number of days (where the time to extend an offer for each vacancy is averaged for that servicing HR office)

Performance Database: Data are manually maintained by the Executive Resources Staff (ERS) in a Word format. Data are updated thorough-out the various stages of the hiring process.

Data Source: The Office of Human Resources' Executive Resources Staff.

Methods, Assumptions and Suitability: Data from the weekly report are tracked and reported quarterly. ERS staff reviews the results and further investigates any data anomalies prior to finalizing the quarterly report.

QA/QC Procedures: Data are added as vacancy status changes. The weekly report is reviewed by the ERS Team leader. Questions about the data or resolution of issues of concern are frequently resolved through discussion and consultation within the team.

Data Quality Reviews: ERS staff review and analyze the raw data, prior to being provided to the Team leader for validation. The Team leader reviews the data, identifies anomalies or data-entry errors, and provides the updated information to OHR so that the report can be finalized.

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: The current system is sufficient for tracking the SES hiring activities, given the small number of positions filled annually, about 12 per year.

FY 2008 Performance Measures:

- **Percent increase in the number of non-SES managers and supervisors at the targeted proficiency level (intermediate) for *Interpersonal Skills and Oral Communication***
- **Percent increase in the number of non-SES managers and supervisors at the targeted proficiency level (advanced) for *Interpersonal Skills and Oral Communication***

Database: EPA will use an OPM-supplied database and assessment tool. The database is populated with competency/skills of federal leaders that are deemed necessary for successful performance. It includes survey data resulting from employee self-assessments and supervisory assessments on employee HRM competency/skills.

Methods, Assumptions and Suitability: Survey data will be used to identify current competency/skills of the Agency's leadership population. Assessment data will be compared to the competency/skills EPA determines are necessary for mission accomplishment to arrive at a baseline assessment.

Yearly competency assessments of Agency leaders will be completed and compared to the baseline.

QA/QC Procedures: The Office of Human Resources will utilize a skills assessment to determine if the individual leader is making progress in reaching the targeted level of proficiency level. The assessment will include input from various sources (e.g. peers and supervisors). Leaders may also provide self reports on their own progress.

Data Quality Reviews: N/A

Data Limitations: A true assessment of progress is contingent on obtaining independent, verifiable information which describes the progress made. In the arena of competency assessment/human behavior, only a handful of such tools exist for which the results are valid, verifiable and reliable. In addition, competency development efforts are multifaceted (including training, development assignments, mentoring, and others). Participation in these types of programs is essential to the overall competency building effort.

Error Estimate: N/A

New/Improved Data or Systems:

In FY2006, EPA used the Devine Inventory for a baseline assessment of career SES. For the remaining leaders, the Agency will transition from the baseline instrument, Devine Inventory, to another, yet to be selected, and an emphasis will be placed on making a smooth transition on assessment use.

References: *EPA's Business Case for Leadership as Mission-Critical Occupation for Q1, FY06.* There are no prior data or references available for the actual competency/skills assessment tool.

FY 2008 Performance Measure:

- **Cumulative percentage reduction in energy consumption in EPA's 29 laboratories from the 2003 base**

Performance Database: The Agency's contractor provides energy consumption information quarterly and annually. The Agency keeps the energy consumption data in the "Energy Reporting System." The contractor is responsible for validating the data.

Data Source: The Agency's contractor collects quarterly energy data from each of EPA's laboratories. The data are based on metered readings from the laboratory's utility bills for certain utilities (natural gas, electricity, purchased steam, chilled water, high temperature hot water, and potable water) and from on-site consumption logs for other utilities (propane and fuel oil). The data from the on-site consumption logs are compared to invoices to verify that reported consumption and cost data are correct.

Methods, Assumptions, and Suitability: N/A

QA/QC Procedures: EPA's Sustainable Facilities Practices Branch compares reported energy use at each facility against previous years' data to see if there are any significant and unexplainable increases or decreases in energy quantities and costs.

Data Quality Reviews: N/A

Data Limitations: EPA does not have a formal meter verification program to ensure that an on-site utility meter reading corresponds to the charges included in the utility bill.

New/Improved Data or Systems: N/A

References: N/A

FY 2008 Performance Measures:

- **Number of major EPA environmental systems that use the CDX electronic requirements enabling faster receipt, processing, and quality checking of data.**
- **Number of states, tribes, and territories that will be able to exchange data with CDX through nodes in real time, using standards and automated data-quality checking.**
- **Number of users from states, tribes, laboratories, and others that choose CDX to report environmental data electronically to EPA.**

Performance Database: CDX Customer Registration Subsystem.

Data Source: Data are provided by State, private sector, local, and Tribal government CDX users.

Methods, Assumptions, and Suitability: All CDX users must register before they can begin reporting. The records of registration provide an up-to-date, accurate count of users. Users identify themselves with several descriptors and use a number of CDX security mechanisms for ensuring the integrity of individuals' identities.

QA/QC Procedures: QA/QC have been performed in accordance with a CDX Quality Assurance Plan [*Quality Assurance Project Plan for the Interim Central Data Exchange System*. Document number: EP005T7. Sept. 17, 2001] and the CDX Design Document v.3, Appendix K registration procedures [*Central Data Exchange Electronic Reporting Prototype System Requirements: Version 3; Document number: EP005S3. December 2000*]. Specifically, data are reviewed for authenticity and integrity. The CDX Quality Assurance Plan was updated in FY 2004 [*Quality Assurance Project Plan for the Central Data Exchange*, 10/8/2004; contact: Charles Freeman 202-566-1694] to incorporate new technology and policy requirements and will undergo another revision by December 2006. Automated edit checking routines are performed in accordance with program specifications and CDX quality assurance guidance [*Quality Assurance Project Plan for the Interim Central Data Exchange System*. Document number: EP005T7. Sept. 17, 2001].

Data Quality Reviews: CDX completed its last independent security risk assessment in January 2005, and all vulnerabilities are being reviewed or addressed. In addition, routine audits of CDX data collection procedures, statistics and customer service operations are provided weekly to CDX management and staff for review. Included in these reports are performance measures such as the number of CDX new users, number of submissions to CDX, number of help desk calls, number of calls resolved, ranking of errors/problems, and actions taken. These reports are reviewed and actions discussed at weekly project meetings.

Data Limitations: The CDX system collects, reports, and tracks performance measures on data quality and customer service. While its automated routines are sufficient to screen systemic problems/issues, a more detailed assessment of data errors/problems generally requires a secondary level of analysis that takes time and human resources. In addition, environmental data collected by CDX is delivered to National data systems in the Agency. Upon receipt, the National systems often conduct a more thorough data quality assurance procedure based on more intensive rules that can be continuously changing based on program requirements. As a result,

CDX and these National systems appropriately share the responsibility for ensuring environmental data quality.

Error Estimate: CDX incorporates a number of features to reduce errors in registration data and that contribute greatly to the quality of environmental data entering the Agency. These features include pre-populating data either from CDX or National systems, conducting web-form edit checks, implementing XML schemas for basic edit checking and providing extended quality assurance checks for selected Exchange Network Data flows using Schematron. The potential error in registration data, under CDX responsibility has been assessed to be less than 1 %.

New/Improved Performance Data or Systems: CDX assembles the registration/submission requirements of many different data exchanges with EPA and the States, Tribes, local governments and the regulated community into a centralized environment. This system improves performance tracking of external customers and overall management by making those processes more consistent and comprehensive. The creation of a centralized registration system, coupled with the use of web forms and web-based approaches to submitting the data, invite opportunities to introduce additional automated quality assurance procedures for the system and reduce human error.

References: CDX website (www.epa.gov/cdx).

FY 2008 Performance Measure:

- **Percent of Federal Information Security Management Act reportable systems that are certified and accredited.**

Performance Database: Automated Security Self-Evaluation and Remediation Tracking (ASSERT) database.

Data Source: Information technology (IT) system owners in Agency Program and Regional offices.

Methods, Assumptions, and Suitability: Annual IT security assessments are conducted using the methodology mandated by the Office of Management and Budget (OMB), the National Institute of Standards, and Technology (NIST) Security Self-Assessment Guide for Information Technology Systems. ASSERT has automated and web-enabled this methodology.

QA/QC Procedures: Automated edit checking routines are performed in accordance with ASSERT design specifications to ensure answers to questions in ASSERT are consistent. The Office of Inspector General consistent with §3545 FISMA, and the Chief Information Officer's information security staff conduct independent evaluations of the assessments. The Agency certifies results to OMB in the annual FISMA report.

Data Quality Reviews: Program offices are required to develop security action plans composed of tasks and milestones to address security weaknesses. Program offices self-report progress

toward these milestones. EPA's information security staff review these self-reported data, conduct independent validation of a sample, and discuss anomalies with the submitting office.

Data Limitations: Resources constrain the security staff's ability to validate all of the self-reported compliance data submitted by program systems' managers.

Error Estimate: N/A

New/Improved Data or Systems: N/A

References:

Annual Information Security Reports to OMB: <http://intranet.epa.gov/itsecurity/progreviews/>;
OMB guidance memorandum: <http://www.whitehouse.gov/omb/memoranda/2003.html>;
ASSERT web site: <https://cfint.rtpnc.epa.gov/assert/>; NIST Special Publication 800-26, *Security Self-Assessment Guide for Information Technology Systems*, November 2001: <http://csrc.nist.gov/publications/nistpubs/index.html>; and, Federal Information Security Management Act, PL107-347: http://csrc.nist.gov/policies/FISMA_final.pdf

FY 2008 Performance Measures:

- Environmental and business actions taken for improved performance or risk reduction; environmental and business recommendations or risks identified for corrective action; and return on the annual dollar investment, as a percentage of the OIG budget, from audits and investigations
- Criminal, civil, administrative, and fraud prevention actions

Performance Database: The OIG Performance Measurement and Results System captures and aggregates information on an array of measures in a logic model format, linking immediate outputs with long-term intermediate outcomes and results. OIG performance measures are designed to demonstrate value added by promoting economy, efficiency and effectiveness; and preventing and detecting fraud, waste, and abuse as described by the Inspector General Act of 1978 (as amended). Because intermediate and long-term results may not be realized for several years, only verifiable results are reported in the year completed. Database measures include numbers of: 1) recommendations for environmental and management improvement; 2) legislative, regulatory policy, directive, or process changes; 3) environmental, program management, security and resource integrity risks identified, reduced, or eliminated; 4) best practices identified and implemented; 5) examples of environmental and management improvements made; 6) monetary value of funds questioned, saved, fined, or recovered; 7) criminal, civil, and administrative actions taken, 8) public or congressional inquiries resolved; and 9) certifications, allegations disproved, and cost corrections.

Data Source: Designated OIG staff enter data into the system. Data are from OIG performance evaluations, audits, research, court records, EPA documents, data systems, and reports that track environmental and management actions or improvements made and risks reduced or avoided. OIG also collects independent data from EPA's partners and stakeholders.

Methods, Assumptions, and Suitability: OIG performance results are a chain of linked events, starting with OIG outputs (e.g., recommendations, reports of best practices, and identification of risks). The subsequent actions taken by EPA or its stakeholders/partners, as a result of OIG's outputs, to improve operational efficiency and environmental program delivery are reported as intermediate outcomes. The resulting improvements in operational efficiency, risks reduced/eliminated, and conditions of environmental and human health are reported as outcomes. By using common categories of performance measures, quantitative results can be summed and reported. Each outcome is also qualitatively described, supported, and linked to an OIG product or output. The OIG can only control its outputs, and has no authority, beyond its influence, to implement its recommendations that lead to environmental and management outcomes.

QA/QC Procedures: All performance data submitted to the database require at least one verifiable source assuring data accuracy and reliability. Data quality assurance and control are performed as an extension of OIG products and services, subject to rigorous compliance with the Government Auditing Standards of the Comptroller General¹⁷, and regularly reviewed by OIG management, an independent OIG Management Assessment Review Team, and external independent peer reviews. Each Assistant Inspector General certifies the completeness and accuracy of performance data.

Data Quality Reviews: There have not been any previous audit findings or reports by external groups on data or database weaknesses in the OIG Performance Measurement and Results System. All data reported are audited internally for accuracy and consistency.

Data Limitations: All OIG staff are responsible for data accuracy in their products and services. However, there is a possibility of incomplete, miscoded, or missing data in the system due to human error or time lags. Data supporting achievement of results are often from indirect or external sources, with their own methods or standards for data verification/validation.

Error Estimate: The error rate for outputs is estimated at +/-2%, while the error rate for reported long-term outcomes is presumably greater because of the longer period needed for tracking results and difficulty in verifying a nexus between our work and subsequent actions and impacts beyond our control. Errors tend to be those of omission.

New/Improved Data or Systems: The OIG developed the Performance Measurement and Results System as a prototype in FY 2001 and constantly revises the clarity and quality of the measures as well as system improvements for ease of use. During FY 2006, we gave staff briefings on the application of OIG measures and the OIG Performance Measurement and Results System. We expect the quality of the data to continue improving as staff gain greater familiarity with the system and measures, and we will enhance this system by linking it to a follow-up process to better track actions and impacts. We also anticipate creating linkages to customer satisfaction results and resource investments, to provide a full-balanced scorecard with return on investment information for accountability and decision making.

¹⁷Government Auditing Standards (2003 Revision), General Accounting Office, GAO-03-673G, June 2003; Available on the Internet at www.gao.gov/govaud/ybk01.htm, last updated December 18, 2006

References: All OIG non-restricted performance results are referenced in the OIG Performance Measurement and Results System with supporting documentation available either through the OIG Web Site or other Agency databases. The OIG Web Site is www.epa.gov/oig.¹⁸

¹⁸ U.S. EPA, Office of Inspector General, Audits, Evaluations, and Other Publications, Available on the Internet at www.epa.gov/oig , last updated December 12, 2006