

United States
Environmental Protection
Agency

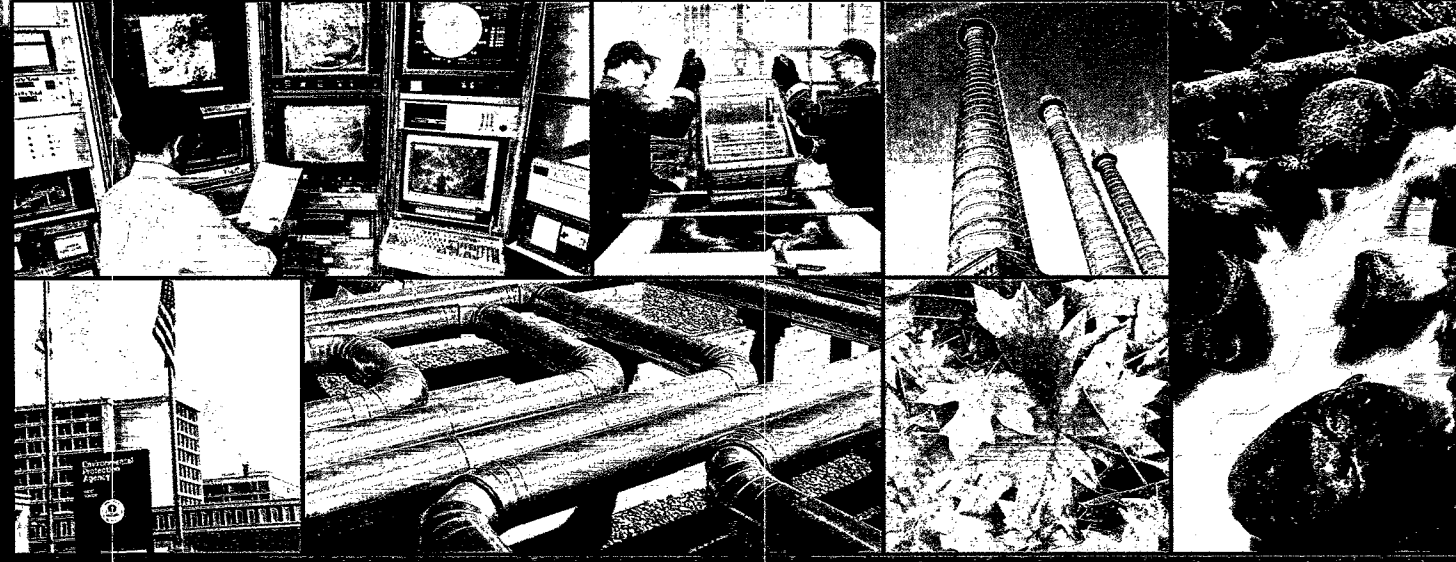
Office of
Enforcement and
Compliance Assurance (2221)

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Enforcement and Compliance Assurance

FY98 Accomplishments Report



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June 1999

Foreword

May 1, 1999

This past year has witnessed notable progress in making EPA's enforcement and compliance programs more effective in protecting public health and the environment. Since the reorganization of OECA in 1994, we have been striving to build EPA's capacity for effective enforcement action at the same time that we develop new approaches to achieving compliance. The principal building blocks of an integrated enforcement and compliance assurance strategy are now in place and the results are encouraging. As an introduction to our Fiscal Year 1998 *Enforcement and Compliance Assurance Accomplishments Report*, I would like to highlight just a few of our diverse accomplishments over the past year.

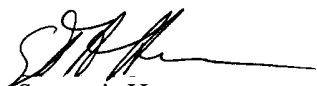
EPA maintained a strong and fair enforcement program in FY98. We expanded our efforts to give industry incentives to voluntarily disclose and correct violations. We also worked hard to give small businesses the information and assistance they need to maintain compliance with the law. This three-pronged approach — enforcement, compliance incentives, and compliance assistance — is reaping great dividends in terms of protecting the public and the environment.

Our FY98 record of referrals — 677 criminal and civil cases, with over \$180 million assessed in penalties and fines — represents the second highest combined totals in EPA's history. Perhaps more importantly, the settlements we achieve are bringing about significant environmental improvements. Settlements in FY98 alone have contributed to the reduction of five million pounds of ozone-depleting CFCs, seven million pounds of asbestos, 188 million pounds of carbon monoxide, and 23.6 million pounds of nitrogen oxide in the environment.

EPA's extensive set of compliance assistance tools helps businesses and communities all across the country comply with environmental requirements by offering "plain English" guides to environmental requirements, translations of requirements into several languages, sector notebooks, and national Compliance Assistance Centers. EPA added five new centers, bringing to a total of nine industry-specific, Internet-based Compliance Assistance Centers that are up and running.

These are but a few of the noteworthy accomplishments we realized in FY98. We look back with pride on these activities and with gratitude to our dedicated staff. In this last year of the 20th century, we look forward to a renewed effort to provide the best possible living environment to all Americans.

Sincerely,



Steven A. Herman

Assistant Administrator

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

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List of Acronyms

| | |
|---------------|--|
| CAA | Clean Air Act |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CFC | Chlorofluorocarbons |
| CWA | Clean Water Act |
| DMR | Discharge Monitoring Report |
| DOJ | Department of Justice |
| EJ | Environmental Justice |
| EPA | Environmental Protection Agency |
| EPCRA | Emergency Planning and Community Right-to-Know Act |
| FIFRA | Federal Insecticide, Fungicide, and Rodenticide Act |
| FY | Fiscal Year |
| IDEA | Integrated Data for Enforcement Analysis |
| NEIC | National Enforcement Investigation Center |
| NESHAP | National Emission Standard for Hazardous Air Pollutants |
| NPDES | National Pollution Discharge Elimination System |
| NPL | National Priorities List |
| NSPS | New Source Performance Standards |
| NOV | Notice of Violation |
| OCEFT | Office of Criminal Enforcement, Forensics, and Training |
| OECA | Office of Enforcement and Compliance Assurance |
| PCB | Polychlorinated Biphenyl |
| PRP | Potentially Responsible Party |
| RCRA | Resource Conservation and Recovery Act |
| SDWA | Safe Drinking Water Act |
| SEP | Supplemental Environmental Project |
| SNC | Significant Noncompliance |
| TRI | Toxics Release Inventory |
| TSCA | Toxic Substances Control Act |
| UAO | Unilateral Administrative Order |
| UST | Underground Storage Tank |

Executive Summary

1.1 Overview of FY98 Accomplishments

Fiscal year 1998 (FY98) saw a strong record of enforcement and compliance assurance activity, close to the previous year's record level of achievements. Some categories of activity — such as inspections, administrative penalty order complaints, and numbers of criminal cases initiated — logged a substantial increase. The numbers of civil cases settled or referred, on the other hand, recorded slight declines. Compliance assistance activity is tracked less formally than enforcement, but also recorded significant accomplishments in FY98. Following are highlights of the Office of Enforcement and Compliance Assurance's (OECA) activities and accomplishments.

Environmental Results

- ▶ **Pollutant Reductions:** For the third year, EPA is reporting performance measure data on pollution reductions achieved when enforcement actions are taken. For the FY98 cases reporting pollutant reductions, total suspended solids (TSS) and fecal coliform were the two pollutants most frequently reduced through an EPA enforcement settlement.
- ▶ **Most Common Chemicals Reduced:** For the FY98 civil cases reporting amounts of pollutant reduction, the three largest pollutant reductions were for contaminated soil, biochemical oxygen demand (BOD), and wetlands fill material. During FY98, chlorofluorocarbons were reduced by over five million pounds, asbestos by more than seven million pounds, carbon monoxide by 188 million pounds, and nitrogen oxide by 23.6 million pounds. The top 10 amounts of pollutant reductions reported are shown in Exhibit 1-1.
- ▶ **Qualitative Environmental Impacts:** Qualitative impacts were reported for 64% of FY98 civil settlements. The most frequent benefits reported were human health protection (42%) and ecosystem protection (31%). At the statute level, Safe Drinking Water Act (SDWA) settlements had the highest proportion protecting human health benefits (72% of SDWA cases), Toxic Substances Control Act (TSCA) settlements had the highest proportion of worker protection benefits (35% of TSCA cases), and Clean Water Act (CWA) settlements showed the greatest ecosystem protection (73% of CWA cases).

- ▶ **Changes in Facility Operations:** About 46 percent of civil enforcement settlements required violators to change the way they manage their facilities or reduce emissions or discharges into the environment, while another 54 percent required violators to improve their environmental management systems, take preventive action to avoid future non-compliance, or enhance the public's right-to-know. See Exhibits 1-2 and 1-3 for details on complying actions.
- ▶ **Criminal Case Outcomes:** For the first time, there is information on the qualitative environmental impacts of criminal cases. Of the criminal investigations/cases concluded in FY98 that reported an environmental benefit, the most frequently reported benefit was human health protection (28%), followed by ecosystem protection (18%).

Enforcement Cases and Penalties

- ▶ **Civil and Administrative Settlements:** Overall, EPA concluded 3,479 formal actions or settlements in FY98, EPA's second highest level.
- ▶ **Civil Referrals:** EPA submitted 411 civil case referrals to the Department of Justice (DOJ) in FY98; \$91.8 million in civil penalties was assessed. The number of cases represents a 4% drop from FY97 but a 40% increase over FY96 cases. (Exhibit 1-4)
- ▶ **Criminal Program:** In FY98, 266 criminal cases were referred to DOJ and \$92.8 million in criminal fines was assessed. The criminal program set annual records for defendants charged (350) and investigations initiated (636).
- ▶ **Administrative Orders Initiated:** EPA increased its use of administrative penalty orders in FY98, issuing 1,400 complaints — a 7% increase over FY97 levels and the second highest total in this decade.

Exhibit 1-1: Top 10 Pollutants Reduced, FY98

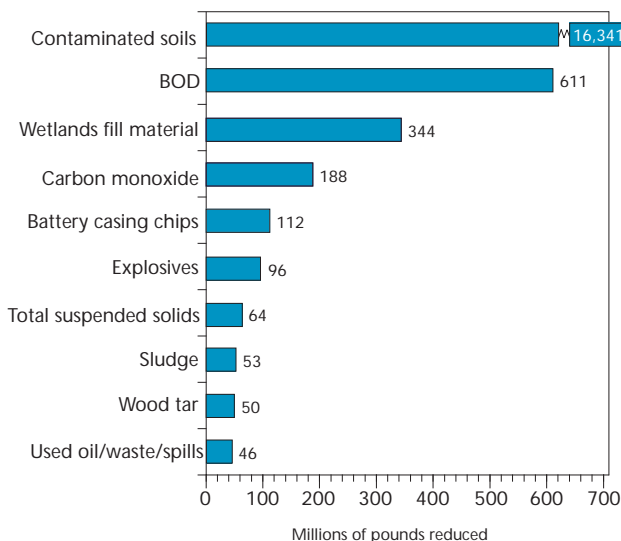
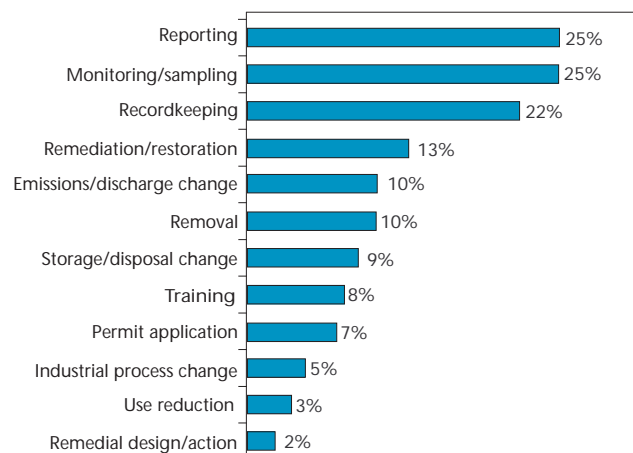


Exhibit 1-2: Types of Compliance Activity, FY98 Civil Cases



Note: Based on 3,103 of the 3,479 settlements for which complying actions were reported. Many settlements reported multiple complying actions.

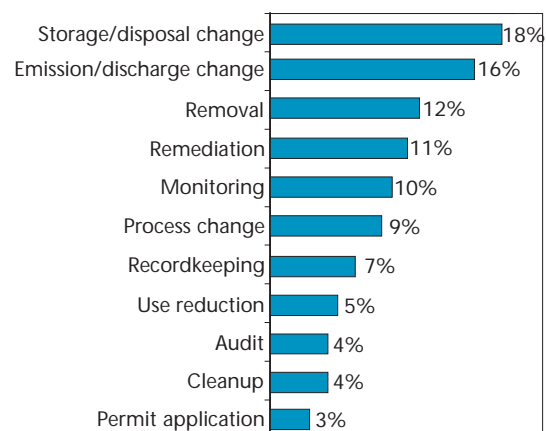
- ▶ **Making Polluters Pay:** Polluters spent more than \$2 billion to correct violations, take additional steps to protect the environment, and clean up Superfund sites — over \$85 million more than was collectively spent the previous year. The FY98 estimated value of injunctive relief (\$2 billion) was at its highest total since EPA began to estimate the value in 1995; it was 38% higher than in FY96 and 4% higher than FY97 (see Exhibit 1-5). Clean Water Act settlements were responsible for the highest amount of injunctive relief (\$860 million or 43% of the total) and supplemental environmental project (SEP) value (\$42 million, or 46% of the total).
- ▶ **Penalties:** Since 1974, EPA has assessed fines and penalties amounting to over \$1.5 billion. In FY98, the Clean Air Act (CAA) was responsible for 53% of criminal penalties (\$49 million) and 44% of civil judicial penalties (\$28 million). The Resource Conservation and Recovery Act (RCRA) garnered the most administrative penalties (20%) at \$5.5 million.
- ▶ **Federal Facilities:** FY98 was a watershed year for enforcement at federal facilities, with EPA's exercise of newly-clarified enforcement authorities under the SDWA, CAA, and the lead-based paint notice provisions of the TSCA, as well as an innovative compliance initiative with the Department of the Interior. Nationwide, 30 multi-media inspections were performed at federal facilities during FY98 in a coordinated effort with EPA Regions and state/local inspectors. Twenty-two of the inspections were conducted at Defense Department facilities.

Supplemental Environmental Projects

SEPs are environmentally beneficial projects that may be proposed by a violator during the settlement of an enforcement action. EPA examines whether a violator is committed to, and has the ability to, perform a SEP when determining the appropriate settlement penalty. Although violaters are not legally required to perform a SEP, their cash penalty may be lowered if they choose to perform an acceptable SEP. An acceptable SEP must reduce risks to, improve, or protect public health or the environment.

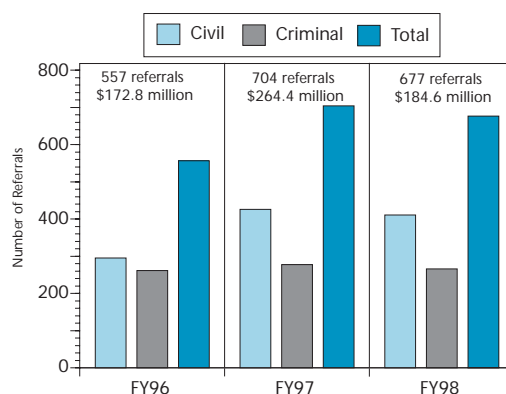
- ▶ **Numbers of SEPs:** SEPs continue to be included as part of the settlement of administrative penalty actions and, to a lesser extent, judicial settlements. In FY98, EPA settlements produced 221 SEPs, lower in number than in FY97 but higher in monetary value (\$90.8 million). Over the last three years, 20% of all judicial and administrative penalty orders included a SEP. In FY98, 14% of such actions included a SEP. (See Exhibit 1-6.)

Exhibit 1-3: Types of Compliance Activity, FY98 Criminal Cases



Note: Based on 417 criminal investigations/cases concluded in FY98

Exhibit 1-4: Referrals, Fines, & Penalties, FY96-98



FY98 figures are the second highest in OECA's history. EPA referred 677 civil and criminal cases to the Department of Justice and assessed \$184.6 million in fines and penalties.

Exhibit 1-5: Value of Injunctive Relief, FY96-98

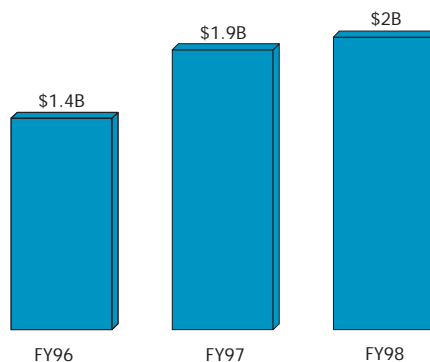
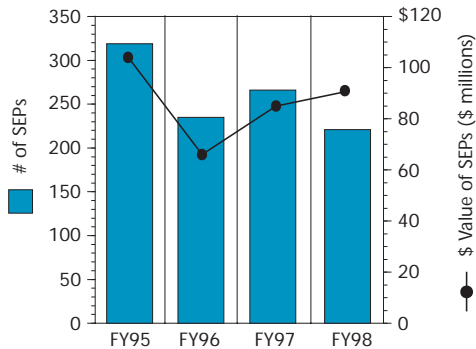
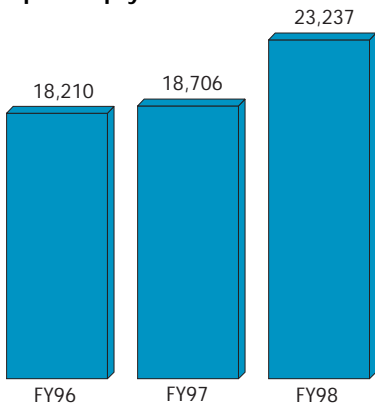


Exhibit 1-6: EPA's Use of SEPs in Settlement of Formal Enforcement Actions, FY95-98



- ▶ **Types of Cases Producing SEPs:** The use of SEPs is most prevalent in the Emergency Planning and Community Right-to-Know Act (EPCRA) and RCRA programs. In FY98, 36% of EPCRA and 23% of RCRA penalty actions included a SEP. While only 10% of CWA enforcement actions included a SEP, CWA cases continue to obtain the highest dollar value SEPs of any one program, and were responsible for 46% of the FY98 total SEP value and 36% over the last three years.
- ▶ **Environmental Benefits:** Pollution prevention continues to be the most frequent category of SEPs. EPA estimates that 60% of SEPs offered human health or worker protection benefits, while 52% offered ecosystem protection.

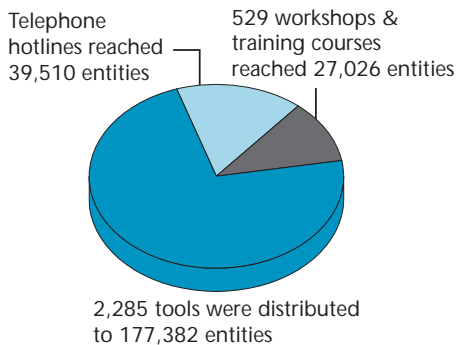
Exhibit 1-7: Inspections Up Sharply in FY98



Inspections and Noncompliance Rates

- ▶ **Inspections:** In FY98, EPA's Regional staff conducted 23,237 inspections under the various environmental statutes, a 19% increase over FY97 levels. (See Exhibit 1-7.)
- ▶ **Significant Noncompliance:** This report includes tentative data on noncompliance with major statutes. Significant noncompliance (SNC) rates are given in Chapter 2 for the pilot sectors included in the Sector Facility Indexing Project. Beginning in FY99, OECA will be implementing new measurement systems as part of the National Performance Measures Strategy (see box on next page), and will report on SNC duration and recidivism in the FY99 Annual Accomplishments Report.

Exhibit 1-8: Regional Compliance Assistance Activities, FY98



Compliance Incentives

- ▶ **Audit Policy:** As a part of EPA's compliance incentive policies and strategies in FY98, at least 200 companies disclosed potential violations at 950 facilities under the auspices of the Agency's self-disclosure (audit) policy and 63 companies have settled those cases by correcting violations at 390 facilities and taking steps to prevent their recurrence. Since the inception of the audit policy, a total of 430 companies have disclosed violations at 1,788 facilities and relief was granted to 164 companies at 540 facilities that returned to compliance.
- ▶ **Targeted Initiatives:** EPA has undertaken several initiatives targeted to specific industries, that combine the audit policy with incentives such as reduced penalties or penalty caps. FY98 efforts were targeted at the food products, industrial organic chemicals, and telecommunications industries.

Future Improvements in Measurement: National Performance Measures Strategy

In FY98, OECA proceeded with the initial stages of implementing the National Performance Measures Strategy (NPMS) as a way of measuring the results of EPA's enforcement and compliance assurance activity. Among the enhanced measures are compliance rates for selected regulated populations, pollutant reductions and other outcomes from enforcement actions, behavioral changes resulting from compliance assistance, and average time for significant violators to return to compliance. These measures will foster analysis of program performance and improve effectiveness by identifying activities and strategies that achieve the best results.

NPMS will also help meet the goals of the Government Performance and Results Act (GPRA), which requires federal agencies to report on performance using outcome-based measures.

In December 1997, EPA issued a report summarizing over 20 public meetings with stakeholders and a set of 12 measures known as the Performance Profile. (Both the Profile and the report can be found on the OECA website at [http://es.epa.gov/oeca/perfmeas/.](http://es.epa.gov/oeca/perfmeas/)) During 1998 and now into 1999, EPA has been developing definitions, designing information collection and reporting processes, modifying existing data systems, and conducting pilots projects to test the measures. Several NPMS measures are discussed in Chapter 2; future Annual Accomplishments Reports will use the full set of measures to provide a more comprehensive assessment. Below are listed the NPMS measures and the timeframe in which they will be activated.

Performance Profile: NPMS Implementation Timetable

Measures Already Being Used (Possible Refinements in FY2000)

- Set 2 Environmental and human health improvements from enforcement
- Set 5 Number of self-policing efforts from using compliance incentive policies
- Set 10 Facilities/entities reached through compliance assistance

PHASE I - April 1, 1999 Implementation for FY99 Reporting (3rd & 4th Quarters)

- Set 6 Average duration of time for significant violators to return to compliance
- Set 7 Percentage of significant violators with recurrent significant noncompliance within a 2-year period
- Set 8 Number of investigations conducted
- Set 9 Number of notices of violation by media
- Set 11 Capacity-building efforts provided to state, local, or tribal programs

PHASE II - October 1, 1999 Implementation for FY2000 Reporting

- Set 1 Statistically valid compliance rates for selected regulated populations
- Set 3 Improvements resulting from compliance assistance
- Set 4 Improvements resulting from integrated initiatives
- Set 8 Number of records reviews
- Set 9 Number of self-policing settlements concluded

Compliance Assistance

- ▶ **Numbers of Facilities Reached:** In FY98, EPA's Regional offices collectively reached approximately 250,000 regulated entities through compliance assistance outreach in priority industry sectors and environmental media. The highest amount of compliance assistance activity occurred through the distribution of compliance assistance tools, which reached over 175,000 facilities. (Exhibit 1-8.)
- ▶ **Compliance Assistance Centers:** Working in partnership with businesses and municipalities, EPA created five new National Compliance Assistance Centers for chemical manufacturing, local governments, paints and coatings, printed wiring board, and transportation sectors. This increased the total number of compliance assistance centers to nine. In FY98, the six centers that were in operation most of the year logged over 190,000 visits to their websites by small businesses, assistance providers, government, and the public, and responded to over 3,600 calls and questions via e-mail and telephone assistance lines. See Chapter 2 for more details.
- ▶ **Sector Notebooks:** EPA published nine new Sector Notebooks — a series of industry-specific multimedia profiles that help owners and operators of regulated industries understand their regulatory obligations and identify ways to run their businesses more economically and efficiently. There are now a total of 27 Sector Notebooks. To date, over 300,000 Notebooks have been distributed in printed and electronic formats to audiences in the United States and abroad.

Public Access

- ▶ **Sector Facility Indexing Project:** During FY98, EPA completed the pilot phase of the Sector Facility Indexing Project, which compiles and makes environmental data publicly available on 653 facilities in five key industrial sectors — automobile assembly, pulp manufacturing, petroleum refining, iron and steel production, and primary smelting.

1.2 | Guide to This Report

Chapter 2 of this report presents the key accomplishments and activities of OECA in FY98, using as a framework the goals of EPA's strategic plan and the concepts embodied in the Government Performance and Results Act (GPRA). Chapter 3 discusses priority industry sectors; Chapter 4 discusses priorities within specific environmental media.

Chapter 5 highlights major enforcement cases and achievements during the year, and Chapter 6 concludes with a presentation of key program achievements in compliance assistance. An appendix contains historical data for EPA's enforcement program.

Meeting EPA's Strategic Goals

EPA's Strategic Plan charts a course for protecting human health and the environment. To transform this ambitious mandate into concrete actions with measurable results, EPA has identified 10 goals, each of which is a high priority for all Agency offices. One of the goals — Goal 9, which mandates compliance with environmental laws — is the responsibility of OECA and relates almost exclusively to OECA's mission. Two other goals also represent important parts of OECA's mission: Goal 7 expands public involvement in environmental protection by giving citizens easy access to information about their local environment, and Goal 5 ensures that wastes will be managed in an environmentally protective manner and that polluted sites will be restored. This chapter briefly highlights each of these goals and discusses OECA's accomplishments in FY98 that support them.

2.1 | Goal 9: A Credible Deterrent to Pollution and Greater Compliance with the Law

As its basic mission, OECA seeks to ensure full compliance with laws intended to protect human health and the environment. OECA staff work to identify and reduce noncompliance, maintain a strong enforcement presence, and increase the use of compliance assistance tools and incentives policies.

Over the past five years, EPA has developed new tools such as compliance assistance (i.e., providing information and guidance about environmental requirements to regulated entities) and compliance incentives (i.e., policies to encourage self-policing through identification, correction, and disclosure of violations by regulated facilities). These new tools join a strong program of compliance monitoring (through inspections and investigations) and civil and criminal enforcement actions, to form a national program which applies the appropriate tool

or combination of tools to address environmental problems and patterns of noncompliance. A strong enforcement effort is the foundation of the national program, providing a deterrent effect which motivates regulated entities to seek assistance and use incentive policies, and providing fairness in the marketplace to ensure that noncomplying facilities do not gain an unfair competitive advantage over facilities that have dedicated resources to compliance.

The FY98 record of accomplishments illustrates how both traditional and innovative approaches are being used to achieve the compliance necessary to protect public health and the environment. The following sections discuss some of these FY98 accomplishments in terms of the two objectives that support Goal 9. In light of the vital role states play in implementing programs, one of our most important efforts has been establishing more effective partnerships with states to improve our collective compliance and enforcement capacity.

Objective 1: Identify and reduce significant noncompliance in high priority areas while maintaining a strong enforcement presence in all regulatory program areas.

OECA's first objective envisions a targeted effort to reduce significant noncompliance (SNC) in high priority areas while simultaneously maintaining the necessary strong enforcement presence across the board. Significant noncompliance refers to the most egregious violations under each program or statute. The priority areas focus on environmental and noncompliance problems which might be based on a geographic location, an industry sector, or a specific set of statutory requirements. Perhaps more than any other single objective, Objective 1 embodies the essence of OECA's mission. The components of this objective are discussed separately below.

Reducing Significant Noncompliance in High Priority Areas

OECA concentrates on two types of high priorities — industry sectors and environmental media. Chapters 3 and 4 provide more detail on activities in each of these priority sectors. Although overall compliance rates or SNC rates are not yet available for each of the priority industry sectors, in FY98 OECA completed a pilot project — the Sector Facility Indexing Project — to compile two-year SNC rates for five key industries. A large part of the success of this project rests on EPA's concerted efforts to identify the universe of facilities in each sector. The compliance information, which is available online (<http://www.epa.gov/oeca/sfi>) and updated regularly, is summarized in Exhibit 2-1, which shows the wide variability in SNC rates in FY98 as well as historically in these sectors.

For environmental media, EPA's traditional databases on permits and enforcement actions provide rough compliance rates, some of which are of particular cause for concern. In FY98:

- ▶ **NPDES-Permitted Major Sources:** 27% of facilities classified as major National Pollutant Discharge Elimination System (NPDES) sources were in significant noncompliance with their water permits in at least one quarter in FY98; another 27% were in a less severe category of reportable noncompliance.

Exhibit 2-1: SNC Rates for Five Priority Sectors, Sector Facility Indexing Project

| Industry | Number of Facilities | Percentage of Facilities in Significant Noncompliance as of June 1998 | | | Historical Noncompliance* | | | |
|-----------------------------------|----------------------|---|--------------|--------------|---------------------------|------------|------------|------------|
| | | Air | Water | RCRA | Air | Water | RCRA | Total |
| AUTOMOTIVE ASSEMBLY | 58 | 11.8% | 0.0% | 1.7% | 0.9 | 3.0 | 2.3 | 4.0 |
| IRON AND STEEL MILLS | | | | | | | | |
| <i>Integrated Mills</i> | 23 | 72.7% | 39.1% | 30.4% | 5.0 | 5.4 | 5.7 | 7.9 |
| <i>Mini Mills</i> | 91 | 21.2% | 2.7% | 4.5% | 1.5 | 2.7 | 1.7 | 3.9 |
| NONFERROUS METALS | | | | | | | | |
| <i>Aluminum Smelting/Refining</i> | 23 | 26.1% | 4.3% | 4.3% | 1.1 | 2.3 | 1.6 | 4.1 |
| <i>Copper Smelting/Refining</i> | 14 | 27.3% | 12.5% | 9.1% | 1.0 | 2.0 | 3.2 | 3.4 |
| PETROLEUM REFINING | 179 | 45.0% | 11.8% | 14.1% | 2.1 | 2.4 | 3.4 | 4.8 |
| PULP MANUFACTURING | 244 | 19.0% | 4.7% | 0.0% | 1.1 | 1.9 | 0.6 | 2.7 |

Note: SNC data are based on inspected facilities. *Average number of quarterly periods, June 1996-June 1998, with one or more violations or noncompliance events.

- ▶ **CAA Majors:** EPA data suggest that 7% of air sources were significant violators in FY98. However, review by the Inspector General suggests that violations are underreported. OECA's targeted initiatives also suggest much higher rates of noncompliance with the Clean Air Act's crucial New Source Review requirements.
- ▶ **RCRA:** Approximately 20% of combustors and land disposal facilities are in significant noncompliance. About a third of tank owners and operators do not meet Underground Storage Tank (UST) program requirements.
- ▶ **SDWA:** One quarter of drinking water systems are not in compliance with public health standards.

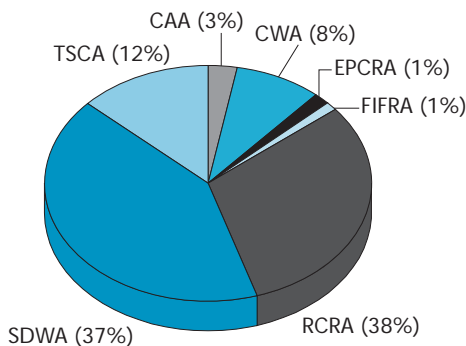
Over the next two years, EPA will be using several new measures to provide a more sophisticated understanding of significant noncompliance of high priority facilities. The measures will show the length of time it takes for companies in significant noncompliance to make environmental improvements that return them to compliance, as well as recidivism rates. In addition, OECA will be developing statistically significant compliance rates for sectors and media priorities, drawing on data in the media-based data systems supplemented by random inspection data. The data will be critical for establishing baseline performance rates for priority areas and for determining progress over time.

Maintaining a Strong Enforcement Presence

Maintaining a strong enforcement presence is a joint imperative for EPA and the states. States carry out the vast majority of environmental inspections. This report tracks only EPA data. In FY98, EPA significantly increased the number of inspections by 19%; nevertheless, the 23,000 inspections carried out are a small fraction of the universe of regulated facilities. Exhibits 2-2 and 2-3 provide a rough picture of the universe of facilities that need to comply with environmental statutes and the statutes under which they typically fall.

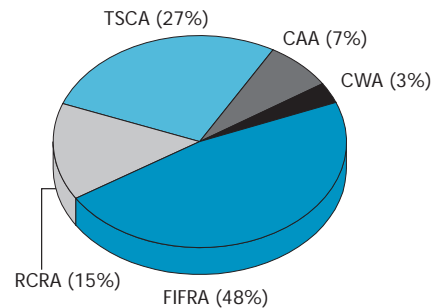
OECA has begun tracking investigations as a significant and separate type of intervention, usually more technically detailed and systematic than inspections. Another important measure of enforcement presence is how EPA responds to citizen complaints. In FY98, EPA began implementing two pilot programs in Regions 2 and 5 to collect data on the number of informal enforcement actions taken. Such actions are defined as notices of violation or noncompliance or deficiency warning letters (see box on next page). These actions contribute significantly to compliance when followed by formal enforcement actions if response is inadequate. Informal enforcement actions and responses to citizen complaints will both be reported in next year's annual report.

Exhibit 2-2: Core Regulated Facilities That Need to Comply with Environmental Statutes



| Core Regulated Facilities | | |
|------------------------------|------------------------|------------------|
| CAA | Stationary sources | 39,961 |
| CWA | NPDES | 89,455 |
| | Pretreatment Users | 30,000 |
| EPCRA | TRI Reporters | 22,085 |
| FIFRA | Producers/Registrants | 16,124 |
| RCRA | Haz. Waste Management | 429,080 |
| SDWA | Drinking Water Systems | 173,272 |
| | Underground Inj. Wells | 405,657 |
| TSCA | Core TSCA | 183,000 |
| TOTAL CORE FACILITIES | | 1,366,634 |

Exhibit 2-3: Other Regulated Entities That Need to Comply with Environmental Statutes



| Other Regulated Entities | | |
|---------------------------------------|---------------------------|-------------------|
| CAA | Mobile Sources Program | 360,585 |
| | Asbestos Demolition | 94,885 |
| | Dry Cleaners | 33,863 |
| CWA | Stormwater | 200,000 |
| | CAFOs/AFOs | 6,600/? |
| | Wetlands | — |
| FIFRA | Farms/Applicators | 3,080,740 |
| RCRA | Underground Storage Tanks | 969,652 |
| TSCA | Asbestos | 1,300,000 |
| | PCBs | 500,230 |
| TOTAL OTHER REGULATED ENTITIES | | 6,546,555* |

(excludes 12.8 million lead sites under TSCA)

Exhibit 2-4: EPA Civil Referrals to DOJ, FY89-98

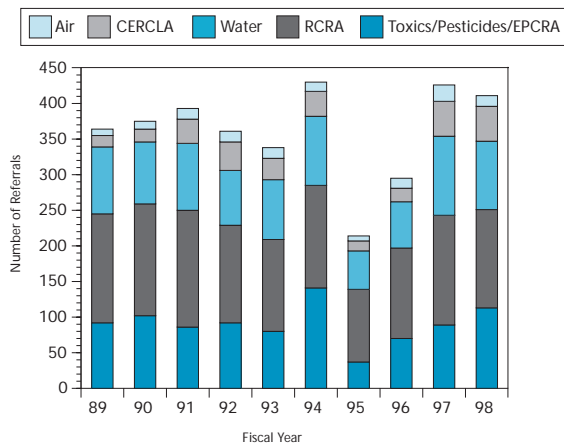
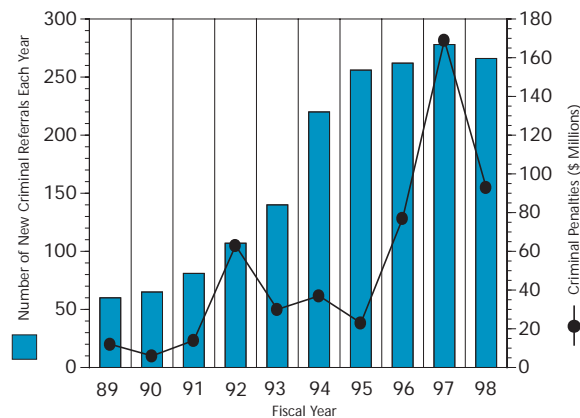


Exhibit 2-5: EPA Criminal Program Shows Sustained Growth in Key Outputs Over 10-Year Period



Number of Informal Enforcement Actions Taken by Region 2 in FY98 (by Statute)

- CAA:** 8 notices of violation; 124 notices of deficiency
- CWA:** 187 warning letters
- TSCA:** 91 notices of noncompliance
- FIFRA:** 2 warning letters; 1 stop sale, use, or removal order
- RCRA:** 90 warning letters

Beyond the initial response and inspection stage, EPA’s enforcement program as a whole is intended to maintain a strong presence in the regulated community — first, by insisting that violators pay for and correct the damage they caused and prevent future problems, and second, by deterring others from violating environmental laws. Continuing the momentum from last year’s record level of enforcement, EPA referred the second largest number of civil and criminal enforcement cases in its history to DOJ and assessed the second largest total amount of civil and criminal penalties in any one-year period in its history.

Exhibit 2-4 shows the number of referrals of civil cases to DOJ over the last 10 years; Exhibit 2-5 shows the sustained growth of the criminal program, in terms of numbers of cases and penalties assessed, over the last 10 years as well. In FY98, EPA referred 266 criminal cases and assessed \$92.8 million in criminal fines. On the civil side, EPA referred 411 cases — the third highest one-year total in history — and assessed \$91.8 million in civil penalties. Included among these actions are the first-ever penalty orders at federal facilities using new and clarified enforcement authorities under four different environmental statutes.

Exhibit 2-6: Pollutants Most Frequently Reduced

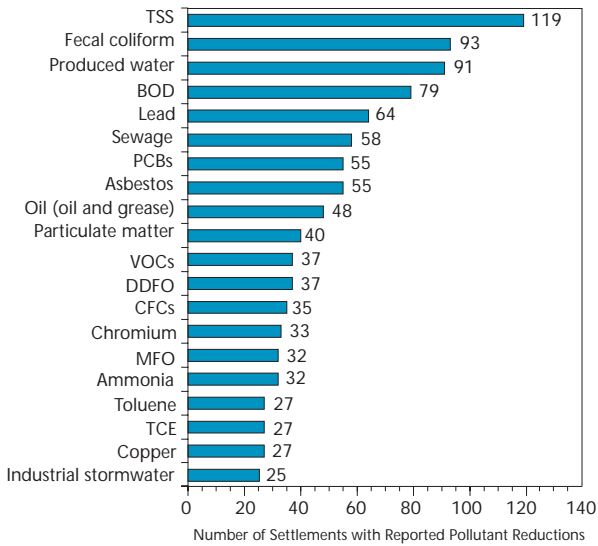
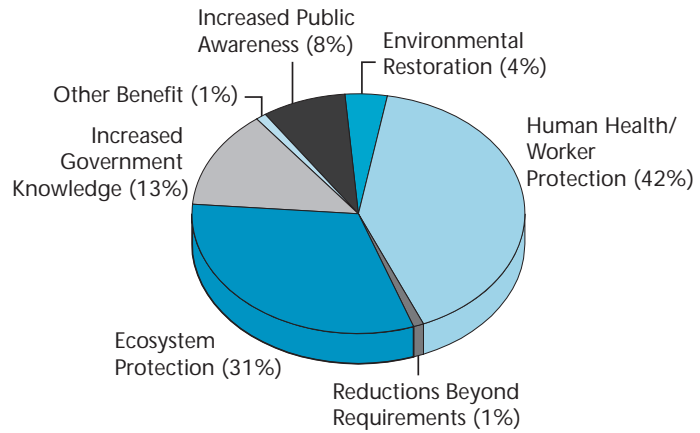


Exhibit 2-7: Environmental Impacts of FY98 Civil Enforcement Actions



Note: Based on 2,214 cases for which benefits were reported.

Tallying the Environmental Effects of Enforcement

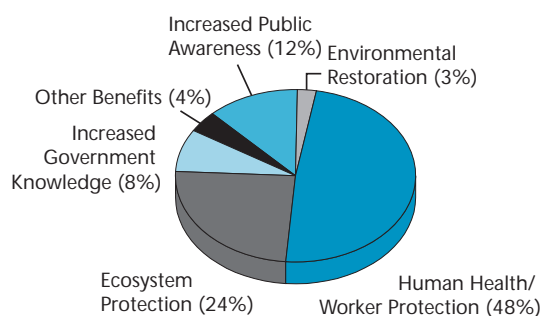
Data collected by EPA indicate that the enforcement actions settled in FY98 helped protect human health and the environment. EPA's criminal enforcement agents, working with the U.S. Customs Service, reduced ozone-depleting CFCs by more than five million pounds, a tenfold reduction over the previous year. Asbestos, a known carcinogen, was reduced by more than seven million pounds. Carbon monoxide and nitrogen oxide, both pollutants which can cause severe respiratory problems, especially among the young, the elderly, and people with compromised immune systems, were reduced by 188 million pounds and 23.6 million pounds, respectively. Exhibit 2-6 shows the pollutants most frequently reported reduced through an EPA enforcement settlement.

As a result of EPA enforcement, polluters spent just over \$2 billion to correct violations, take additional steps to protect the environment, and clean up Superfund sites — more than \$85 million dollars over what was spent the previous year. Exhibits 2-7, 2-8, and 2-9 show the environmental impacts of FY98 civil enforcement actions, SEPs, and criminal cases, respectively.

Objective 2: Promote the regulated community's voluntary compliance with environmental requirements through compliance incentives and assistance programs.

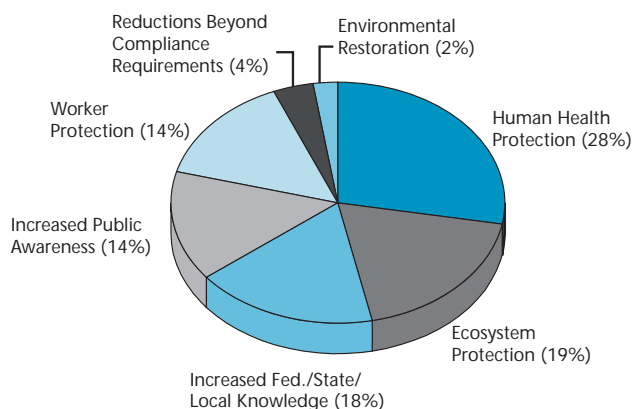
While enforcement cases often take the limelight, compliance incentives and assistance programs can be equally important in educating and motivating the regulated community to comply with the law and shoulder their environmental responsibilities.

Exhibit 2-8: Environmental Impacts of FY98 EPA SEPs



Note: Based on 474 benefits reported for 189 SEPs.

Exhibit 2-9: Environmental Impacts of FY98 Criminal Cases



Note: Based on 542 benefits reported for 420 investigations/cases concluded during FY98.

Promoting Voluntary Compliance Through Compliance Incentives

Audit Policy: EPA's Audit/Self-Policing Policy was developed in 1994-95 to encourage voluntary auditing and self-disclosure of environmental violations, to provide penalty mitigation for responsible environmental behavior, and to set forth a positive alternative to state audit privilege and/or immunity laws, which undermine law enforcement and the public's right-to-know. Under the Audit Policy, if companies voluntarily discover, promptly disclose, and expeditiously correct violations found through voluntary environmental audits or a compliance management system, EPA does not seek gravity-based penalties and generally does not recommend corporate criminal prosecution.

Approximately 430 regulated entities have identified and disclosed violations at 1,788 facilities under the Audit Policy, leading to numerous environmental improvements (reduced pollution, reduced likelihood of spills, safer management of PCBs and other hazardous wastes). EPA has settled 141 cases under the Audit Policy, including 124 cases resulting in no penalty.

In FY98, OECA initiated an evaluation of the Audit Policy to study its effectiveness and to recommend appropriate revisions. Results of the evaluation to date have been positive. For example:

- ▶ Disclosure rates — both in terms of the number of entities reporting and the number of violations disclosed — have increased every year since the effective date of the policy.
- ▶ In some instances, voluntary disclosure by one company has alerted EPA to potential industry-wide problems. For example, following GTE's disclosure of EPCRA and CWA violations at 314 of its facilities, EPA undertook to heighten awareness of environmental requirements across the telecommunications industry.
- ▶ In a voluntary, anonymous survey of 252 disclosing entities, 44 of the 50 entities responding (88%) stated that they would use the Audit Policy again; 84% would recommend the Audit Policy to clients/counterparts.

“EPA’s Audit Policy creates an incentive for comprehensive self-auditing.”

— Audit Policy Survey

“It enhances compliance, environmental performance and depolarization of regulators and the regulated community.”

— Audit Policy Survey

The Audit Policy in Action: U.S. v. GTE Corporation

In January 1998, the largest settlement under EPA’s Audit Policy was reached when GTE Corporation agreed to resolve 600 violations at 314 facilities in 21 states.

GTE disclosed 511 violations of EPCRA, for failing to notify state agencies and local fire departments of sulfuric acid filled batteries at 229 GTE telecommunications sites across the country. This information is needed by state and local response authorities to protect communities and firefighters in case of a chemical spill or release. Another 89 violations were noted for failure to develop required spill prevention plans under the Clean Water Act for diesel fuel stored at the facilities. Such plans are required to help prevent or mitigate spills and keep hazardous chemicals from polluting streams, rivers and other bodies of water.

After discovering noncompliance at several facilities, GTE promptly notified EPA of the violations pursuant to EPA’s self-disclosure policy and undertook a company-wide audit at 10,000 sites nationwide. After self-disclosure, GTE worked closely with EPA to ensure that all the violations were corrected. Under the terms of the settlement, GTE filed the required EPCRA reports with the appropriate state and local agencies, and is implementing spill prevention plans at the facilities. The company paid a \$52,264 penalty, which is equal to the amount of money saved by the company during its period of non-compliance. Since the company voluntarily disclosed and corrected the violations, EPA waived another \$2.38 million in potential penalties.

EPA is making improvements to the text of the policy, including broadening the prompt disclosure period, and clarifying that a facility may satisfy the “independent discovery” condition even where inspections or investigations have commenced at, or information requests have been issued to, other facilities owned by the same parent corporation. EPA also encourages the use of disclosure checklists in order to reduce the time needed to process Audit Policy cases. EPA is particularly interested in encouraging use of the Audit Policy by companies with multiple facilities. Such disclosures leverage government resources, allow regulated entities to review their operations holistically, and benefit the environment. For the same reasons, sector-based enforcement initiatives involving the Audit Policy may figure prominently in EPA’s future enforcement and compliance efforts.

Targeted Incentives: EPA has undertaken several incentives initiatives targeted to specific industries. Often, these efforts combine the audit policy with other incentives such as reduced penalties or penalty caps. Examples include:

- ▶ **Telecommunications:** As follow-up to the GTE settlement, EPA sent letters in FY98 to a number of large telecommunications corporations inviting them to consider the audit policy to resolve potential environmental concerns, and heightening their awareness of their environmental responsibilities. Several companies have come forward and agreed to disclose and correct violations.

-
- ▶ **Organic chemicals:** In August 1998, EPA launched a Compliance Incentive Program for the Industrial Organic Chemical sector (SIC Code 2869). Facilities were informed that they had six months to perform voluntary environmental audits of their operations and identify to EPA potential areas of noncompliance uncovered by the audit. In accordance with EPA's audit policy, participating facilities may receive substantially reduced penalties for disclosed violations.
 - ▶ **Food Products:** Under a special time-limited EPA initiative targeted to the food products industry, nearly 200 companies submitted hazardous chemical information required under EPCRA and were able to receive reduced penalties for reporting their violations. As of Feb. 1, 1998, 170 food products companies had paid individual fines of \$2,000 (totaling \$340,000), which is significantly lower than they would have paid had they not participated in the initiative.

Reaching the Regulated Community with Compliance Assistance

OECA implemented several pilot projects in FY98 to collect more comprehensive and outcome-oriented data on the effects of its compliance assurance activities. Exhibit 2-10 on the following page summarizes information currently available on FY98 activities in priority industry and media sectors. Among the highlights:

- ▶ Distribution of tools to the regulated community accounted for the largest number of regulated entities reached by compliance assistance activities, with over 177,000 tools distributed, including over 18,000 to the auto service and repair sector alone.
- ▶ TRI reporting and other requirements of EPCRA Section 313, as well as stormwater requirements, generated the largest number of calls to EPA Headquarters and Regional hotlines — over 22,000 for those two programs, and close to 40,000 for the FY98 total.

At the present time, EPA has only limited data on the effects of compliance assistance activities on environmental results. As part of NPMS implementation, OECA is developing a consistent method for tracking outcomes of compliance assistance. As a result, future reports will contain information in the following categories:

- ▶ Changes in awareness or understanding, which reflect an increased knowledge of regulatory or nonregulatory environmental issues, including reporting and monitoring requirements, regulatory schedules, and pollution prevention opportunities.
- ▶ Behavioral changes, which include improvements in compliance and other actual changes that a regulated entity undertakes as a result of compliance assistance.
- ▶ Environmental and human health improvements, which represent specific environmental and human health improvements at specific facilities resulting from compliance assistance activities. An example would be the number of pounds of pollutant emission reductions at a facility resulting from the adoption of a control technology explained in a training video.

Exhibit 2-10: Compliance Assistance Summary Data (includes all EPA Regions)

| Area | Telephone Hotlines | Workshops/ Meetings/Training | | Tools Developed In-House | Tools Distributed | On-site Visits |
|---------------------------------|-------------------------|------------------------------|-------------------------|--------------------------|---------------------------|-------------------------|
| | | No. of Activities | No. of Entities Reached | | | |
| | No. of Entities Reached | No. of Activities | No. of Entities Reached | No. of Activities | No. of Activities Reached | No. of Entities Reached |
| SECTOR-BASED | | | | | | |
| Agricultural Practices | 175 | 26 | 199 | 3 | 3833 | 0 |
| Auto Service & Repair | 1550 | 11 | 348 | 9 | 18460 | 192 |
| Chemical Preparation * | 100 | 15 | 280 | 29 | 1775 | 1 |
| DOI Facilities | 3 | 6 | 31 | 1 | 544 | 5 |
| Dry Cleaning | 220 | 16 | 816 | 12 | 1451 | 192 |
| Industrial Organics * | 135 | 13 | 509 | 7 | 1905 | 0 |
| Municipalities | 75 | 12 | 1595 | 9 | 425 | 87 |
| Sector-based Totals | 2258 | 99 | 3778 | 70 | 28393 | 477 |
| MEDIA-BASED | | | | | | |
| CFC Regulation | 1975 | 4 | 200 | 6 | 2065 | 0 |
| New Air Toxics Regulations | 410 | 3 | 400 | 3 | 2020 | 0 |
| EPCRA Section 313 | 12564 | 79 | 4396 | 20 | 62813 | 6 |
| EPCRA Section 301-312 | 2182 | 15 | 570 | 5 | 4378 | 0 |
| TSCA Section 1018 | 2848 | 53 | 5920 | 6 | 11771 | 46 |
| TSCA Section 402/404 | 269 | 11 | 500 | 7 | 2645 | 0 |
| CWA CAFOs | 100 | 48 | 2620 | 2 | 6010 | 97 |
| CWA Urban Wet Weather | 10200 | 38 | 1315 | 12 | 47876 | 5 |
| SDWA Amendments of 1996 | 125 | 75 | 1735 | 2 | 3 | 108 |
| SDWA-PWSS for Microbials | 74 | 14 | 1820 | 1675 | 996 | 164 |
| SDWA-UIC | 1705 | 20 | 448 | 10 | 2105 | 1579 |
| RCRA Generators | 4751 | 47 | 2319 | 124 | 919 | 202 |
| RCRA Combustion/Fuel Blenders | 0 | 3 | 125 | 0 | 0 | 0 |
| RCRA Organic Air Emissions Rule | 49 | 20 | 880 | 343 | 5388 | 0 |
| Media-based Totals | 37252 | 430 | 23248 | 2215 | 148,989 | 2207 |
| COMBINED TOTALS | 39510 | 529 | 27026 | 2285 | 177382 | 2684 |

*Chemical Preparation and Industrial Organics were combined by one region, so activities in these sectors may be double counted.

Compliance Assistance Centers: EPA's nine national Compliance Assistance Centers are intended to help small businesses and small governmental entities understand and comply with their regulatory obligations. The centers' Internet sites and toll-free assistance lines provide comprehensive environmental regulatory and technical information in convenient and user-friendly forms. Designed and operated by cooperative partnerships of public and private organizations, the centers offer "plain English" summaries of regulations, access to state regulations, emission calculation tools, vendor directories, and numerous technical resources. EPA created five new Compliance Assistance Centers in FY98, serving the chemical industry, local government, paints and coating, printed writing boards, and transportation. See box for information on all nine centers.

*"Use of the
centers
appears to
influence
action."*

Compliance Assistance Centers: How to Reach Them

CCAR-Greenlink®: the Automotive Compliance Information Assistance Center

<http://www.ccar-greenlink.org>
1-888-GRN-LINK (476-5465)

ChemAlliance

<http://www.chemalliance.org>
1-800-672-6048

Local Government Environmental Assistance Network

<http://www.lgean.org>
877-TO-LGEAN (877-865-4326)

National Agriculture Compliance Assistance Center

<http://es.epa.gov/oeca/ag>
1-888-663-2155 or 913-551-7207

National Metal Finishing Resource Center

<http://www.nmfrc.org>
1-800-AT-NMFRC

Paints and Coatings Resource Center

<http://www.paintcenter.org>

Printed Wiring Board Resource Center

<http://www.pwbrc.org>

Printer's National Compliance Assistance Center

<http://www.pneac.org>
1-888-US PNEAC (1-888-877-6322)

Transportation Compliance Assistance Center

<http://www.transource.org>
1-888-459-0656

Six centers that were in operation through most of the year logged over 190,000 visits to their websites by small businesses, assistance providers, government, and the public. These visits generated over 1.9 million hits and over 450,000 separate page views, including compliance documents. The centers also responded to over 3,600 calls and questions via e-mail and telephone assistance lines. The most popular features of the websites were the technical data bases, fact sheets, and compliance documents.

Use of the centers appears to influence action. In an online survey of users, 83% reported taking one or more of the following actions as a result of using a Compliance Assistance Center: contacting a vendor; requesting technical assistance; contacting a regulatory agency; changing a process; obtaining a permit; or changing the handling of a waste. Of those using the centers to help understand federal regulations, 72% of respondents rated the centers either as useful or very useful. Over 85% of surveyed users visit a center at least once a month. Nearly one-third of those surveyed visit at least once per week.

2.2 | Goal 7: Expansion of Americans' Right to Know About Their Environment

Goal 7 is based on the premise that all U.S. citizens have a “right to know” about pollutants in their environment. Enabling citizens to become involved and informed decision makers is an important part of OECA’s comprehensive approach to protecting the environment. This approach is particularly important for minority, low-income, and Native American communities that suffer a disproportionate burden of health consequences from poor environmental conditions.

Objective: Increase the quality and quantity of education, outreach, and data availability.

Information is only valuable and useful if the people who need it have access to it. Until recently, compliance and enforcement information was generally available only through a Freedom of Information Act request or through commercial information retrieval services. Too often, this resulted in the requestor receiving boxes of computer printouts and reports which were difficult and time-consuming to understand and synthesize. Of late, EPA has embarked on many innovative Internet-based initiatives that are designed to provide useful information to the public in a form that is easily accessible and user friendly.

Enhancing Public Access

Sector Facility Indexing Project: In FY98, EPA completed the pilot phase of the Sector Facility Indexing Project (SFIP), which makes it easier for the public to access a wide range of environmental information about regulated facilities. SFIP currently contains records for five industry sectors (automobile assembly, pulp manufacturing, petroleum refining, iron and steel production, and primary smelting and refining of nonferrous metals) that comprise a total of about 650 facilities. These records had been publicly available but were difficult for government and public users to access because they were spread across many different databases. SFIP integrates the information in one place, so that it can be used to better understand overall facility environmental performance. The data include information on past inspections and enforcement actions, the size of facilities, annual releases of chemicals into the environment, compliance with federal regulations, and spill incidents. Background information on the location of facilities and demographic data about communities near the facilities are also included.

The SFIP database has multiple uses. While SFIP does not rank or order the information, users can view and sort the data in a number of ways. Users can select standardized report formats or create their own analyses. Government agencies can use the information as a planning tool. Facilities can benchmark their data against those of other similar facilities, or simply monitor their own regulatory performance. Environmental and community groups now have usable information on the environmental performance of individual facilities. SFIP has proven to be a valuable tool for sector-level analysis. SFIP has been used by EPA, state agency staff, and public interest groups to undertake a wide variety of sector analyses and facility comparisons that were not formerly possible due to inconsistent definitions of facilities, inadequate identification of permits, inability to access the most current compliance information, or lack of confidence in the compliance data.

EPA publicly released the SFIP data on May 1, 1998, via the Internet (<http://www.epa.gov/oeca/sfi>) and made hard copy reports available in September 1998. In its first 11 months, the website logged approximately 52,000 user sessions and 305,000 hits. Since its release, the data have been updated regularly. These frequent updates keep the information current and maintain the high quality of data. Prior to the public release of SFIP, EPA worked for three years to identify the facilities in SFIP and to assure the accuracy and usefulness of the data. Also, EPA conducted an unprecedented data quality assurance review, in which each facility included in the project's database was invited to review and comment on its data; 62% of the facilities responded. EPA and the states then reviewed the responses and made changes to the data as appropriate.

Environmental Monitoring for Public Access and Community Tracking (EMPACT): The President's EMPACT Initiative focuses on improving data collection and data quality and on deploying new technologies for real time and automated measurement, monitoring, and information delivery.

EMPACT aims to provide timely, accurate, and understandable environmental information to the public. By 2001, Americans in the largest metropolitan areas in the country will have an easy way to answer questions like:

- ▶ “What is the ozone level in my city this morning?”
- ▶ “What is the water quality at my beach today?”
- ▶ “How high is the ultra violet radiation in my metropolitan area today?”
- ▶ “What is the level of contamination in the groundwater at the hazardous waste site in my community?”

In FY98, OECA began work on an EMPACT project related to wastewater discharges. The goal is to notify the public of any 24-hour noncompliance with the NPDES permitting program of the Clean Water Act and explain the environmental and health significance of this noncompliance so that community residents can make educated decisions on the use of local water resources.

OECA's EMPACT project will automate the noncompliance reporting process and provide timely information to communities through the Internet. A key feature of the project is development of a ranking system similar to the “ozone alerts” given in most metropolitan areas during the summer. All of the FY98 project plans were accomplished, including: (1) developing procedures for receipt, storage, and reporting of the 24-hour noncompliance events, (2) developing a Noncompliance Event Database, (3) evaluating the environmental and public health risk assessment of sample noncompliance events and developing an approach for communicating the risk to the public, and (4) developing a Web page to communicate the information. A pilot project was conducted in Houston, and will be expanded to other metropolitan areas in FY99.

IDEA Win: The Integrated Data for Enforcement Analysis system (IDEA) is the most comprehensive single-source of environmental performance on regulated facilities within EPA. IDEA offers comprehensive historical profiles of inspections, enforcement actions, penalties assessed, toxic chemicals released, and emergency hazardous spills for each EPA regulated facility. This single point of access provides information from EPA's air, water, hazardous waste, TRI, and emergency response notification systems. In addition to usage by EPA staff and contractors, 16 government agencies and private companies accessed the IDEA database, running 917 queries. During FY98, EPA staff prepared Version 2.0 of the IDEAWin software for Windows-based computers. Formally released on November 12, 1998, the software includes various enhancements, including a category for facilities that have never been inspected, new options for creating user-specified reports, plain English report names, and additional standard report formats.

Tackling Environmental Justice Through Enforcement Cases

Dumping of Asbestos-Contaminated Construction Debris Near Middle School (U.S. v. Philadelphia Construction and Equipment, Inc. et al.): On December 11, 1997, Howard Parsons, General Manager of Grant Paper Company, was found guilty of charges stemming from the illegal disposal of construction debris contaminated with asbestos at a dumpsite located less than a mile from Cobbs Creek Turner Middle School (approximately 900 pupils). Families with young children reside in and participate in recreational activities in the affected African-American neighborhood. It was determined that Grant Paper Company was responsible for the dumping and was aware that its factory contained over 7,000 feet of asbestos prior to its demolition. The Grant Paper Company, a subsidiary of BUNZL, USA, subsequently pled guilty to Clean Air Act violations and remediated the dump site at a cost of \$1.5 million as part of their probation. On July 21, 1998, Parsons was sentenced to 15 months imprisonment and 3 years supervised release, and ordered to pay \$42,000 in restitution. During his release he is required to restore the residential property he used as the disposal site to acceptable use and to pay each of the families living in the area \$2,000.

Illegal Methyl Parathion Sprayer Jailed: In 1996, EPA and the state lead agencies for pesticides enforcement identified a disturbing pattern of pesticide misuse incidents across many states. Restricted use pesticides — primarily ethyl and methyl parathion — were being diverted from the agricultural sector into urban, low-income neighborhoods for control of pests such as spiders, rats, and roaches. When sprayed indoors, these pesticides retain their toxicity for long periods. This illegal use was the suspected cause of several deaths and injuries. In FY98, Ruben Brown was sentenced to two years in federal prison as a result of his illegal spraying of methyl parathion in thousands of homes in Chicago. Brown, an unlicensed exterminator, pled guilty to two counts of using methyl parathion to kill roaches in residences. Several thousand homes were inspected by EPA and state and local agency staff, and dozens of homes were identified as requiring clean-up. Residents were temporarily relocated during the clean-up work.

New Orleans SEP: As part of a \$200 million settlement reached in April 1998 addressing spills of raw sewage from its antiquated sewage collection system into nearby waters, the City of New Orleans will spend \$2 million on a supplemental environmental project to improve water quality along Lincoln Beach. This park was created to serve African-Americans who were barred by law in the 1960s from admission to the then white-only Pontchartrain Beach amusement park.

Promoting Environmental Justice

Environmental justice means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial or government operations regardless of race, color, national origin, or income. OECA maintains an active presence in environmental justice efforts, through grants, initiatives, and casework. Several cases with a strong environmental justice component are highlighted on the previous page.

In outreach efforts, OECA developed an “EJ Quarterly” newsletter during FY98 to serve as a conduit for the exchange of information between EPA and environmental stakeholders. The newsletter has a current circulation of over 3,000 subscribers, and features articles, news items covering the full range of environmental justice issues, meeting information, biographical sketches, and more. A Spanish-language brochure on SEPs is being prepared to help inform the Hispanic community of how to become involved in these projects.

One current area of emphasis focuses on potential environmental violations occurring in the Mississippi River Basin. Throughout FY98, EPA participated with the Department of Justice, the U.S. Coast Guard, and other federal and state entities in environmental task forces located within the Basin. Using traditional law enforcement techniques, as well as scientific and data intelligence, EPA opened investigations focusing on the elimination of illegal pollutant discharges along the Mississippi River and its tributaries. These investigations frequently target sources that threaten ecosystems and environmental justice communities.

EPA’s State and Tribal Environmental Justice Grants Program is intended to help states and tribes comply with Title VI of the Civil Rights Act of 1964, and promote environmental justice in the development and implementation of their environmental programs. In FY98, EPA awarded five grants of \$100,000 each to four states (Vermont, New Jersey, Tennessee, and Texas) and an Indian tribe (Kalispel in Washington State).

2.3 | Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response

Goal 5 tasks EPA with ensuring that wastes are stored, treated, and disposed of in ways that prevent harm to people and to the natural environment. It also delegates to EPA’s enforcement program part of the responsibility for cleaning up previously polluted sites, restoring them to uses appropriate for surrounding communities, and responding to and preventing waste-related or industrial accidents. The enforcement program addresses this goal by applying the fastest, most effective waste management and cleanup methods available, while involving affected communities in the decision-making process.

Superfund Enforcement: Surpassing Last Year’s Performance

The Superfund enforcement program achieved results in FY98 that surpassed the previous year’s performance. Significant cases are reported on in Chapters 4 and 5. Statistics on cases and settlements are as follows:

-
- ▶ **PRP Commitments:** In FY98, OECA secured commitments from potentially responsible parties (PRPs — parties that can be held responsible for response costs under section 107 of CERCLA) exceeding \$1 billion. Of this amount, PRPs signed settlements for more than \$806 million in future cleanup work, and approximately \$230 million in past costs. Since the inception of the Superfund program, the total value of private party commitments (future and past) is approximately \$15.5 billion (\$13.1 billion in response settlements, and \$2.4 billion in cost recovery settlements).
 - ▶ **PRP Actions:** In FY98, PRPs continued to initiate approximately 72% of new remedial actions at National Priorities List sites. PRP commitments for remedial design and remedial action response work exceeded \$618 million during FY98. Remedial response settlements in FY98 consisted of: 37 cases referred to DOJ, 26 unilateral administrative orders with PRP compliance, and 8 other administrative orders on consent or consent agreements for response work.
 - ▶ **De Minimis Settlements:** To promote enforcement fairness and resolve small party contributors' potential liability under Section 122(g) of CERCLA, the Superfund enforcement program concluded 34 *de minimis* settlements at 26 sites with over 2,200 parties in FY98. Through the end of FY98, EPA has achieved over 400 *de minimis* settlements with more than 18,000 parties.
 - ▶ **Prospective Purchaser Agreements:** EPA's "Guidance on Agreements with Prospective Purchasers of Contaminated Property" has stimulated the development of sites where parties otherwise might have been reluctant to take action. With prospective purchaser agreements (PPA), bona fide prospective purchasers are not held responsible for cleaning up sites where they did not contribute to or worsen contamination. In FY98, 24 PPAs were signed, bringing the total to over 90 agreements reached in the program to date.
 - ▶ **Orphan Share Reform:** EPA made orphan share offers at all eligible remedial and removal sites in FY 98. (These are shares of Superfund liability attributable to non-viable or defunct parties.) The reform was expanded to allow for orphan share compensation offers during cost recovery negotiations. During the past three fiscal years (FY96-98), EPA has offered approximately \$145 million in orphan share compensation at 72 sites.
 - ▶ **Administrative Orders:** In FY98, EPA signed a total of 125 administrative orders on consent, and issued 88 unilateral administrative orders. Also in FY 98, the enforcement program reached 18 ability to pay settlements.
 - ▶ **Past Cost Cases:** The Agency addressed 194 "past cost" cases (cases for recovery of EPA's past cleanup costs), including statute of limitation cases, all valued at more than \$200,000 each. Of these cost recovery actions, 61 were CERCLA Section 107 referrals to DOJ, 25 were administrative settlements, 34 were consent decrees, 3 bankruptcy referrals, and 71 were decision documents to write-off past costs.
 - ▶ **Cost Recovery:** During FY98, EPA achieved a total of 187 cost recovery settlements estimated at \$230 million, and collected approximately \$320 million in past costs. To date the program has achieved approximately \$2.4 billion in cost recovery settlements and collected over \$2.1 billion in past costs.

Alternative Dispute Resolution Becomes Standard Operating Procedure

Alternative dispute resolution (ADR) has become standard operating procedure not only at EPA, but at other federal agencies and in the court system as well. ADR includes mediation, arbitration, and a wide range of techniques involving the use of neutral parties to resolve disputes and obtain community participation. Significant strides were made in FY98 in incorporating ADR mechanisms into EPA's enforcement program, through case use of ADR, case support systems, training, provision of ADR services, and outreach to the regulated community. The ADR Specialists Network offers ADR-experienced staff as consultants to other EPA and DOJ staff on the effective use of ADR in enforcement actions.

Using ADR to Settle Long-Standing Cases: General Electric in Pittsfield, Massachusetts

In September 1998, EPA and the Department of Justice announced an agreement in principle with the General Electric Company (GE) for cleanup and environmental restoration of the Housatonic River in Massachusetts and associated areas, cleanup of the approximately 254-acre GE plant facility, brownfields redevelopment of a portion of the site, compensation for natural resource damages, and government recovery of past and future response costs. The mediated agreement involved EPA Region 1, EPA Headquarters, the Department of Justice, federal and state natural resource trustees, environmental agencies from the Commonwealth of Massachusetts and State of Connecticut, and the City of Pittsfield.

The GE Pittsfield/Housatonic River Site has been subject to numerous investigations dating back to the early 1980s. Since 1990, GE has been engaged in cleanup activities at the site and associated areas under a Massachusetts consent order. Since 1994, cleanup has been conducted under an EPA RCRA corrective action permit. Cleanup under this RCRA permit was slow and laborious, and the Region's ability to oversee GE's activities was limited by funding constraints in the RCRA program. The slow pace of remediation increased the human health and ecological risks resulting from extensive PCB contamination in the area. In September 1997 EPA proposed the site for inclusion on the Superfund National Priorities List. The site received a score of 70.71 on the Hazard Ranking System where the minimum score for inclusion on the list is 28.5.

Negotiations with GE began in October 1997. With the assistance of two mediators, the government met its goal of obtaining a settlement which would restore the Housatonic River, remediate areas contaminated with PCBs, and allow for redevelopment of part of the GE plant site under a brownfields agreement with the City of Pittsfield. At the request of Region 1, the Massachusetts Office of Dispute Resolution facilitated establishment of a Citizen's Coordinating Council to serve as a focal point for community participation in the cleanup. The Council includes leaders from Berkshire County's political, environmental, community and business sectors.

U.S. v. ASARCO, Inc.

In December 1997, EPA reached a historic agreement with ASARCO, Inc., an international mining and smelting company. This innovative agreement successfully combines settlement of three enforcement actions brought under two different environmental statutes to leverage multimedia environmental change throughout the corporation's national operations. The synergy created through this agreement is resulting in far greater protections to human health and the environment than could have been achieved through litigation of the three claims separately.

The agreement requires ASARCO to institute a very structured, detailed and court-enforceable environmental management system (EMS) at each of its 32 operating facilities, affecting over 6,000 ASARCO employees in seven states. The EMS should significantly reduce the chances of future environmental violations and reduce ASARCO's environmental releases. ASARCO currently ranks third nationally among parent companies in total air, water, and land contaminant releases. The agreement is also unique because it calls for the company to treat certain materials at various facilities as hazardous, despite their equivocal status under the law. Finally, as in other environmental settlements, ASARCO is required to correct violations, remediate environmental harms related to those violations, and to pay a penalty; the company will also restore a wetlands as a supplemental environmental project.

Under the settlement, the company will pay a \$6.38 million penalty, spend up to \$250,000 to establish an environmental project, and spend up to several hundred thousands of dollars for injunctive relief. The final costs of the injunctive relief, particularly the corrective action required at ASARCO's East Helena smelter, will not be known until the investigative stage of the process is complete; the EMS is estimated to cost \$20 million over the five year life of the decree. The EPA ASARCO team came from Headquarters, EPA Regions 8 and 9, and from the Department of Justice.

During FY98, EPA Regional offices supported PRP allocation settlement efforts through ADR at more than 40 sites. Regional support for the use of ADR continues to grow substantially, with all EPA Regional offices using or supporting PRP use of ADR to assist settlement efforts. Awareness of ADR as a tool for increasing the efficiency of future disputes also continued to increase during FY98, with mediation included in the dispute resolution provisions of many judicial and administrative settlement documents.

Multimedia Enforcement Strategies

OECA's multimedia enforcement program evaluates violations, risks and remedies across all of the environmental programs in a deliberate and coordinated manner. Multimedia enforcement allows EPA to leverage its resources to obtain broader environmental results than a single-media approach would permit, and is particularly effective in dealing with industry sectors, ecosystems, facilities with multiple statutory violations, and companies with multiple locations in different states and Regions.

EPA's National Enforcement Screening Strategy (NESS) is intended to identify and remedy significant violations by large corporations of multiple environmental statutes at multiple facilities across the country. NESS is designed to complement, but not duplicate, the individual enforcement efforts of EPA Regions, states and local governments. Through this effort, EPA seeks to effect change at a corporate level that will result in improved compliance across all of a company's facilities. One of the major cases settled in FY98 through the NESS strategy is described in the box on page 25.

Priority Industry Sectors

Priority Industry Sectors

- Agricultural practices/
Concentrated animal
feeding operations
(CAFOs)
- Automotive service
and repair shops
- Coal-fired power
plants
- Dry cleaning
- Industrial organics
- Chemical
preparations
- Iron and steel
- Municipalities
- Petroleum refining
- Primary nonferrous
metals
- Pulp mills

3.1 | The Sector Approach

Over the past few years, OECA has identified a number of industry sectors that require special attention. A sector-based approach allows EPA to think broadly about the nature of the compliance problems facing a particular industry, and to identify an appropriate mix of tools to address the problems. Selecting priority sectors also conforms to the directives of the Government Performance and Results Act and is a prime element of EPA's Memorandum of Agreement between OECA and the Regional offices.

Factors considered in selecting sectors include: compliance history, Regional and state concerns, size of the sector, and potential environmental and human health risk posed by releases.

For FY98-99, 11 sectors were selected as priorities, as shown in the sidebar. Seven of the sectors are discussed in this chapter in detail, with shorter write-ups on the other four. Most of these sectors became a priority in FY96 with work continuing through 1999. In FY 2000 only petroleum refining will continue as a priority sector; some of the other sectors will continue with ongoing projects, and the rest will enter a maintenance phase. OECA has reduced the number of sectors it will focus on in FY 2000 in order to concentrate national resources on a few key areas to allow the Regions and states greater flexibility in addressing their priority areas.

3.2 | Petroleum Refining

Petroleum refining is one of the leading manufacturing industries in the U.S. in terms of commercial transactions (\$158 billion in 1996). The sector was selected as a priority because of the magnitude of its air pollution problems and its high record of noncompliance. Between 1996 and 1998, the sector had a significant noncompliance (SNC) rate of 45% for air; 12% for water; and 14% for RCRA. During 1996 and 1997, 96% of petroleum refineries were inspected, resulting in enforcement actions at 49% of the facilities.

Facilities Profile: There are relatively few facilities in this sector, but each facility tends to be large, handling approximately 105,000 barrels of crude oil per day. Currently, 169 operable domestic refineries are spread among nine of the 10 EPA Regions, down from over 320 in the early 1980s. Facilities tend to be more concentrated along the Gulf Coast and near heavily industrialized areas of the east and west coasts. Seventy-six refineries are within three miles of population centers containing over 25,000 people and 44 are within three miles of centers containing 50,000 or more people.

Fuel products account for over 87% of the refining sector’s output. Refineries also produce chemical feedstocks and finished nonfuel products (solvents, waxes, asphalt, etc.). Refinery input is primarily crude oil (162 of the refineries have crude distillation capacity).

Pollutants Profile: The vast majority of refinery releases are air emissions (75%). In a comparison of 496 other industry categories included in EPA’s AIRS database, petroleum refining ranked first in emissions of volatile organic compounds (VOCs), second for sulfur dioxide, third in nitrogen dioxide emissions, and fifth for carbon monoxide. Releases reported on the 1996 Toxics Release Inventory (TRI) averaged 493,162 pounds released per facility, and over 88 million pounds for the sector as a whole.

Compliance Profile: Refineries are routinely and regularly inspected and many of the inspected facilities have had multiple enforcement actions taken against them. Roughly 80% of refineries are inspected on an annual basis for air, 65% for water, and 62% for RCRA. The rate of significant noncompliance has increased for air and water over the last five years, while decreasing for RCRA over the same period.

Activities and Accomplishments

Inspections and Enforcement: The refining sector has been a priority sector for the national compliance and enforcement program since 1996. During 1996 and 1997, most field efforts focused on traditional inspections followed by enforcement as necessary. In FY98, there were 698 inspections at petroleum refining facilities, 5 referrals, 11 administrative penalty orders, 36 concluded cases, and penalties assessed in the amount of \$2.42 million. Other enforcement data for the last three fiscal years are summarized in Exhibit 3-1.

| Actions | 1996 | 1997 | 1998 |
|---|-----------------------|-----------------------|-----------------------|
| Injunctive Relief (Value of activities to return company to compliance) | \$.12 million | \$8.08 million | \$5.81 million |
| Number of Facilities with Compliance Actions Required | 12 | 38 | 28 |
| Number and Value of SEPs | 3 SEPs/\$0.15 million | 7 SEPs/\$2.68 million | 6 SEPs/\$1.07 million |

The administrative and judicial settlements EPA reaches with the major petroleum refining facilities require non-complying facilities to correct their underlying operational and permit violations in addition to paying their penalty assessments and fulfilling their supplemental environmental projects (SEPs). Exhibit 3-2 lists the types of complying actions required of refineries in FY98.

Significant Cases: Recent significant cases included a multimedia action against **Texaco Refining** for violations at its Bakersfield, CA refinery; a \$1.1 million settlement with **Coastal Eagle Point Oil Company, Eagle Point Cogeneration Partnership and Coastal Technology, Inc.** (New Jersey); a complaint filed against **Phillips Petroleum** for violating its sulfur dioxide emission limit since 1994 at its Woods Cross, Utah, refinery; the largest-ever EPCRA 313 enforcement case for Region 6, settled in May 1998 against **Sinclair Oil Corporation, Tulsa Refinery, Oklahoma**; and a criminal indictment against **M&S Petroleum** which dumped hazardous wastes at a closed refinery and then abandoned it, leaving more than 1.5 million gallons of waste onsite. That investigation was handled cooperatively by the Mississippi Department of Environmental Quality, EPA, the FBI, and the U.S. Department of Transportation.

Strategic Approach: A sector strategy was developed in FY98 which focuses EPA's efforts on specific problems at refineries. The overall goals of the sector strategy are to:

- ▶ Reduce emissions from refineries
- ▶ Bring the refineries into long-term compliance (with the issues investigated)
- ▶ Ensure more consistent interpretations and enforcement of regulations.

As part of a more strategic approach, EPA is concentrating on air pollution problems, but is shifting away from inspections towards more targeted, and more resource-intensive, air investigations. As a result of this shift, there were fewer referrals in 1998, but indications are that they may increase again in 1999 as the results of investigations are developed into referrals.

Following are the key compliance problems in this sector and the strategic approach that is expected to lead to pollution reduction and long-term compliance. The first four elements involve investigations by the Regions; the last is a compliance assistance program that will be directed from Headquarters.

1. **NSR/PSD Compliance and Permitting:** Although average refinery size has increased by 58 percent in the last two decades, relatively few petroleum refineries have applied for and obtained pre-construction and operating permits for physical expansions under EPA's New Source Review/Prevention of Significant Deterioration (NSR/PSD) program. Investigations are focusing on noncompliance with the permitting process, particularly for fluidized catalytic cracking units, the single largest air emission source at petroleum refineries. In FY98, 21 investigations were initiated.

Exhibit 3-2: Actions Required of Non-complying Petroleum Refineries, FY98



2. **Leak Detection and Repair (LDAR):** Leak detection and repair requirements under various air regulations require facilities to identify equipment and components subject to monitoring, ensure that open-ended lines are capped, and monitor the equipment for leaks. However, monitoring by EPA typically identifies leak rates that are 2 to 10 times higher than rates identified by the refinery.
3. **Refinery Fuel Gas Combustion Devices:** These devices represent a significant source of refinery emissions of sulfur dioxide. In FY98, 23 reviews of excess emissions reports were initiated.
4. **Benzene Waste:** Enforcement experience has found widespread refinery noncompliance and erroneous calculations of total annual benzene in wastestreams, resulting in uncontrolled and unaccounted-for benzene emissions. EPA will distribute a compliance assistance package to refiners, establish a baseline, and conduct detailed investigations, including sampling, to determine refinery compliance.
5. **Slotted guide poles:** Significant emissions reductions could be gained through the installation of controls that reduce or eliminate the use of slotted guidepoles for product sampling and other purposes, which permit vapors to be emitted to the atmosphere.

3.3 | Primary Nonferrous Metals

The primary nonferrous metals sector is comprised of 51 smelting and refining facilities operating throughout the United States. This sector has been identified as a national priority since FY96 because of the volume of pollutants released by its facilities and its high rate of noncompliance. Some areas of the country are unable to meet national ambient air standards because of releases from smelters. Some of the smelters are individually responsible for not meeting lead and sulfur dioxide standards in their regions. The sector ranked seventh in overall noncompliance during FY97 and FY98. About 70% of primary nonferrous metal facilities inspected during this time frame were out of compliance with at least one of their permits, and approximately 30% of inspected facilities were in significant noncompliance.

Facilities Profile: Most of the smelters and refineries in this sector are owned by fewer than 20 large companies. Of the 51 facilities, 23 are aluminum, 21 copper, 3 lead, and 4 zinc. Aluminum, copper, lead, and zinc are also the four most widely used nonferrous metals in the U.S. Over half the facilities in this sector are found in Regions 6, 9, and 10.

Pollutants Profile: Categorization as a “primary” nonferrous facility refers to the source material. Primary smelting and refining produces metals directly from source material that is more than 50 percent ore. Secondary smelting and refining produces metals from scrap and process waste. The pollution resulting from these operations varies depending upon the metal and the type of recovery technology used. The two metal recovery technologies generally used to produce refined metals are pyrometallurgy, which uses heat, and hydrometallurgy, which uses aqueous solutions. Air and water are affected most by these processes. Air pollutants include sulphur dioxide, fluoride, and particulate matter containing lead, copper, zinc, arsenic, mercury, and cadmium. Water pollution results primarily from wastewater containing sulfuric acid and caustic. Other wastes requiring treatment, storage, and/or disposal include spent aluminum potliners, waste slurry/sludge, slags, and tailings, which are regulated by RCRA as hazardous waste.

Compliance Profile: Since 1996, approximately 89 percent of primary nonferrous metals facilities have been inspected annually for compliance with either air, water, or hazardous waste laws — averaging four inspections per facility each year. Most of the inspections monitored compliance with the Clean Air Act, followed by inspections for the Clean Water Act and RCRA. As Exhibit 3-3 shows, SNC rates have improved since FY97, but as of the end of FY98, about 33% of facilities were in significant noncompliance with the Clean Water Act, and over a quarter were in significant noncompliance with the Clean Air Act .

Primary *copper* smelters and refineries had the highest average pollutant release of any facility reporting to the 1996 TRI. The sector as a whole ranked second for air pollutant and TRI air releases.

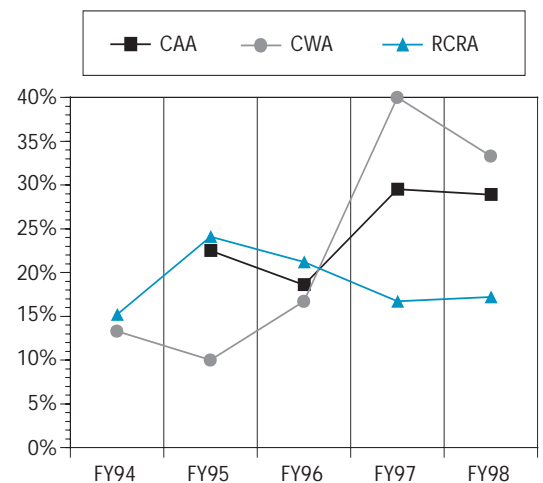
To help uncover the root causes of noncompliance, OECA conducted a “root-cause” analysis of ten primary and secondary nonferrous metal facilities. The study focused on surface water, RCRA, and air compliance problems; the processes involved; the types of enforcement actions taken by regulators; and probable causes for the noncompliance. The study is being expanded to address additional facilities, and findings will be used to identify and address specific environmental compliance problems.

Activities and Accomplishments

Strategic Approach: In 1998, OECA and the EPA Regions began developing a strategy for improving this sector’s compliance rates and reducing its total emissions, discharges, and releases. The initial approach is to ensure that all primary smelters are accurately classified; that applicable regulatory provisions for each smelter are clearly identified; and that timely enforcement action is pursued when significant violations remain unresolved. Five specific problem areas have been identified:

- ▶ **Proper identification of facilities:** Regions and Headquarters staff have worked on identifying all facilities in this sector through SIC code verification efforts and TRI analysis since 1996. The sector is being tracked in the Sector Facility Indexing Project.
- ▶ **Potential misapplication of the Bevill Exclusion:** Some facilities may be combining an array of non-metallic industrial waste with their Bevill-excluded wastes generated by mining/smelting operations. The goal of this activity is to ensure that RCRA inspectors and the regulatory community fully understand the Bevill exclusion as it applies to this industry and ensure that all wastes not covered under Bevill are managed appropriately.
- ▶ **Permit coverage:** Regions and states will be asked to ensure that each facility has a complete permit, accurately reflecting the source’s size, regulatory requirements, and full range of activities.
- ▶ **SNC rate:** The strategy identifies a goal of decreasing SNC in this sector from 30% to 10% nationwide.

Exhibit 3-3: Rates of Significant Noncompliance Among Primary Nonferrous Facilities



Note: Based on facilities inspected during the current or previous year.

- ▶ **Use of imminent and substantial endangerment authorities:** Where appropriate, EPA will consider using imminent and substantial endangerment authorities to address unacceptable risks to human health and the environment.

Inspections and Enforcement: During FY98, EPA and the states conducted 223 inspections and took 21 enforcement actions at primary nonferrous metal facilities. From FY96 to FY98, EPA and the states concluded 37 enforcement actions against facilities in this sector, assessing just over \$4 million in federal penalties and \$1.65 million in SEPs. Four facilities — ALCOA and Reynolds in New York, Asarco in Nebraska, and Kennecott in Colorado — are part of state or federal Superfund cleanup actions.

Compliance Assistance: Some compliance assistance efforts were initiated during the course of the year. Training was developed on Beville requirements pertinent to RCRA waste at these facilities, and courses open to industry representatives began in FY99. EPA Region 4 has begun developing a pollution prevention strategy for this sector now that the overall noncompliance rate for facilities in this Region has dropped below the target level.

3.4 | Industrial Organics and Chemical Preparations

Industrial organic facilities (SIC 2869) manufacture more than 166 different chemicals (usually carbon compounds derived from petroleum and natural gas sources) used for intermediate or end products; shipments in 1996 totaled \$75.67 billion. The sector has the second highest noncompliance rate among priority sectors and the largest number of accidental chemical releases.

Chemical preparation facilities (SIC 2869) comprise 106 distinct industries primarily engaged in manufacturing miscellaneous chemical formulas for sale. Within the chemical industry, this sector had the greatest number of facilities with TRI releases in 1994. Between 1990 and 1995, EPA and states inspected just over 3% of the facilities, finding 505 violations across 77 facilities.

Facilities Profile: Estimates of the total number of facilities in each of these sectors are based on “known” facilities with an EPA ID number and facilities located from commercial sources. The industrial organics industry has an estimated 1,400 known facilities; the chemical preparations industry has about 2,700 known facilities. Facilities are located in almost every EPA Region, but primarily in Regions 2, 4, 5, 6, and 9, and are significantly represented in environmental justice communities. Although chemical plants are commonly thought of as large operations, more than 60% of the facilities have nine or fewer employees.

Pollutants Profile: The abundance of petrochemicals and other chemicals used and the diversity of products and processes means that no one pattern of pollution or waste management characterizes these sectors. In the industrial organics sector, close to half of the waste released to the environment is injected into underground (Class I) injection wells, with

another third released to the air. This sector is the largest source of chemical releases reported to TRI within the chemical industry, and ranked fourth highest nationally in the amount of releases of TRI chemicals. In the chemical preparations sector, facilities often use such items as heavy metals (e.g., barium, lead, mercury, chromium, and oxides of these metals), ethylene and propylene glycols, and strong acids and caustics.

Compliance Profile: A 1996 study¹ indicated that compliance monitoring remained fairly constant between 1990 and 1994 across all statutes. However, EPA and state inspectors are not reaching the entire universe. Facilities that were inspected showed repeat violations, particularly of RCRA, CWA, and CAA.

Because many facilities in these two sectors have fewer than 10 employees, they are exempt from TRI reporting and are not usually targeted for EPA inspections. Prior to 1996, both sectors had low rates of inspections (3% for chemical preparation facilities, 12% for industrial organics between 1990 and 1995). Since 1996, inspections for both industrial organics and chemical preparations manufacturing facilities have increased substantially. For the industrial organics facilities listed in EPA databases, inspections have covered about half the facilities, with an average of just over two inspections per facility. For the chemical preparation facilities in EPA databases, inspections have covered about 30% of the field, with an average of one inspection per facility.

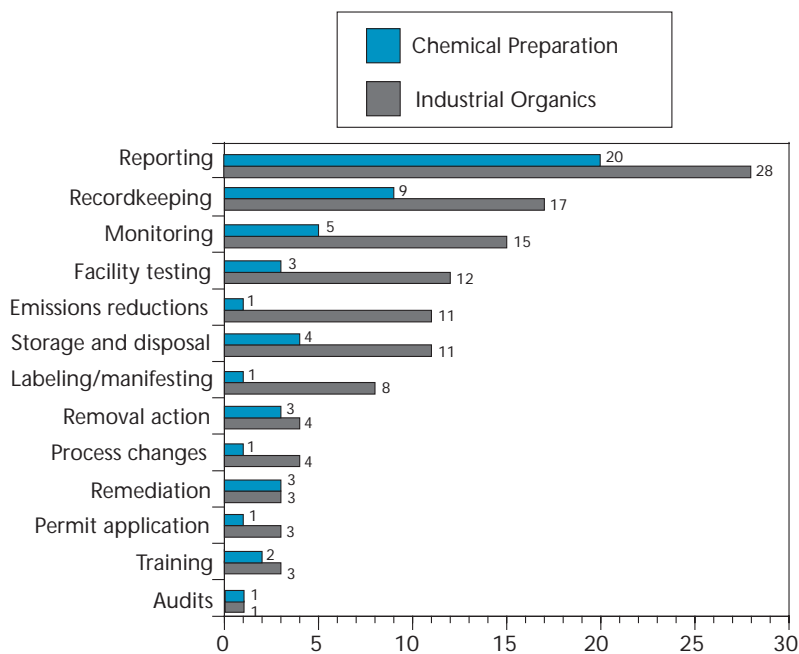
| Exhibit 3-4: Industrial Organics and Chemical Preparation — FY98 Enforcement Data | | |
|---|---------------------|----------------------|
| Activity | Industrial Organics | Chemical Preparation |
| Injunctive Relief (Value of activities to return company to compliance) | \$2,956,800 | \$177,070 |
| Number of Facilities with Compliance Actions Required | 82 | 40 |
| Value of SEPs | \$23,500 | \$684,700 |

Activities and Accomplishments

Inspections and Enforcement: In FY98, 2,500 EPA inspections were conducted at industrial organics facilities, and 900 at chemical preparation facilities. (The majority of inspections, however, are conducted by states.) Thirty-two civil actions were settled with industrial organics companies, yielding \$1.3 million in penalties; 21 civil actions against chemical preparation facilities were settled, with \$198,285 in penalties. Since 1996, 97 civil actions have been settled in the industrial organics industry, totaling over \$5 million in penalties. Activities to return to

¹U.S. EPA. *Chemical Industry National Environmental Baseline Report, 1990-1994* (EPA 305-R-96-002).

Exhibit 3-5: Actions Required of Noncomplying Chemical Industry Facilities, FY98



compliance were valued at \$60 million, with another \$7 million invested in SEPs. In the chemical preparation industry, 49 civil actions have been settled since 1996, totaling over \$495,407 in penalties, \$575,570 in injunctive relief, and SEPs of just under \$700,000. Data for FY98 are reported in Exhibit 3-4 on the previous page. Exhibit 3-5 shows the types of actions to correct underlying operational and permit violations that chemical facilities were required to undertake in FY98.

Compliance Assistance: Through a multimedia integrated sector strategy, many compliance assistance tools were developed and distributed to help facilities comply with regulations. These include audit protocols, the CAA Hazardous Organic NESHAP Tool, Chemical Industry Compliance Improvement Tool, and the Industrial Organic Process-Based Self Assessment Tool. Results from compliance assistance, combined with a targeted outreach program to encourage use of the Audit Policy, yielded over 57 self-disclosures from facilities.

In FY98, the EPA Regions responded to over 135 hotline inquiries from this sector, sent out compliance assistance mailings to over 2,400 facilities; held workshops that reached over 500 entities; and developed and distributed over 30 different tools to an estimated 2,000 entities. The opening of ChemAlliance, a “virtual” compliance assistance center for the chemical industry, has brought free compliance assistance and regulatory information to any chemical company with Internet access.

National Compliance Initiative for the Organic Chemical Industry

Region 5 is participating in the national Compliance Incentive Program to help facilities in the industrial organics sector determine whether they are in compliance with federal environmental requirements and to resolve any discovered violations. Under the Compliance Incentive Program, facilities will have six months to perform voluntary environmental audits of their operations and identify to EPA potential areas of noncompliance uncovered by the audit. In accordance with EPA's audit policy, participating facilities may receive substantially reduced penalties for disclosed violations. Beginning in January 1999, EPA and/or the states will initiate increased inspections in this sector.

As part of Region 5's multi-media strategy for this sector, a concerted effort was made in FY98 to identify and evaluate a large number of sources identified in commercial databases but not in EPA's databases. Visual verification surveys were conducted at 140 sites, of which 25 were identified as high priority sites. Multi-media screening inspections were conducted at 14 sites in FY98 with regional staff from the air, hazardous waste, and EPCRA programs; the remainder will be conducted in FY99. Letters were then sent to 186 facilities in the industrial organic chemicals sector to promote compliance; targeted facilities received compliance assistance materials, plus an invitation to participate in a compliance incentive program under EPA's audit policy.

Strategic Approach: During 1996-1997, EPA developed a multimedia sector strategy to improve compliance in these sectors through a mix of traditional and innovative tools. Activities included: identifying and verifying all potentially regulated facilities; using a mix of compliance assistance, monitoring, incentive, and enforcement projects; developing compliance assistance tools to help regulators and the regulated community; and maximizing use of EPA and state resources to achieve higher enforcement efficiency.

Below are highlights of the five projects included in the strategy that began in FY98 and that will continue in FY99/2000. (Note: Documents mentioned are available through the National Service Center for Environmental Publications at 1-800-490-9198 and electronically at <http://www.EPA.gov/oeca/ccsmd/ogp/oga.html>.)

- ▶ **Compliance Incentive Program:** This multimedia project is marketing EPA's audit policy to approximately 960 industrial organic facilities across nine EPA Regions. In August 1998, EPA mailed letters with compliance assistance and audit policy information encouraging facilities to self-disclose violations to EPA by January 31, 1999. Twenty companies, representing 45 facilities, disclosed violations covering most major statutes. To help facilities conduct audits to determine compliance with regulations, 13 media specific audit protocols are being developed. Four protocols (covering RCRA generators, RCRA treatment, storage, and disposal facilities, CERCLA, and EPCRA) have been completed, with over 2,000 copies distributed. The remaining audit protocols will be completed in FY99.

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- ▶ **Universe Verification Project:** The purpose of this project is twofold: (1) to help EPA and states expand their presence in the regulated community by focusing on facilities in high priority areas that would not otherwise be reached; and (2) to improve national and local database information through a systematic verification process. Once facilities are confirmed by Regions and states as a chemical sector facility, EPA determines the appropriate activities to help these facilities improve compliance. To date, follow-up activities have included single and multimedia inspections, compliance assistance, and enforcement. To help Regions and the regulated community locate resources that may help in improving compliance, EPA developed the Chemical Industry Compliance Improvement Tool (EPA #305-B-98-101). In FY99, EPA will update its database based on the Regions' work on this project.
 - ▶ **EPCRA 312 Project:** Section 312 of EPCRA requires that facilities that store hazardous chemicals in the community report the identity and quantity of those chemical to the State Emergency Planning Commission (SERC) and the Local Emergency Planning Committee (LEPC) so that contingency plans for accidental releases may be developed. This project focuses on three priority areas. First, in the past year, EPA notified 2,005 facilities in the industrial organic sector of their obligation to submit reporting forms to their LEPCs and SERCs. EPA also made these facilities aware, through compliance assistance outreach efforts, of similar obligations under Section 112(r) of the CAA, which requires facilities to develop risk management plans for chemicals used on-site. Finally, EPA verified facility affiliations through a series of mass mailings in March, June, and August 1998. This effort resulted in the proper identification of 1,573 facilities confirmed to have received materials. In FY99, EPA will confirm with the states whether facilities have in fact submitted the required reporting forms to determine the impact of the compliance assistance efforts.
 - ▶ **Air Toxics (HON) Inspection Tool and Training:** This national project provided training to 350 federal and state inspectors in Regions 2-7 to support inspections at 250 HON sources. A HON Inspection Tool (EPA #305-B-97-006) was also published and 450 copies were distributed to industry and government users.
 - ▶ **Root Cause Analysis Pilot Project:** EPA and the Chemical Manufacturers Association (CMA) developed this project to identify and evaluate the root causes of noncompliance with regulations, recommendations for improving compliance, and the effect of environmental management systems on compliance. An EPA/CMA report presents an overview of responses to a survey of chemical industry representatives about the root and contributing causes of noncompliance that were identified in federal civil judicial or administrative actions. The findings will be useful for both industry officials and regulating agencies. Regions 1, 2, 5, and 6 provided input on the evaluation of the survey responses and the development of the report. The report will be completed in FY99.

3.5 | Agricultural Practices/CAFOs

Agricultural practices are the most widespread source of pollution in the nation's surveyed rivers, and rank as the number one cause of impaired rivers, streams, and lakes. Within the agricultural sector, the 450,000 animal feeding operations (AFOs) represent one of the largest sources of polluted runoff. AFOs are livestock-raising operations where animals such as beef cattle, hogs, chickens, and turkeys are kept and raised in confined places. AFOs are a priority under the President's Clean Water Action Plan issued in February 1998 and the Unified National Strategy for Animal Feeding Operations issued in March 1999 by USDA and EPA.

At least 6,600 and possibly up to 10,000 of these facilities are considered to be Concentrated Animal Feeding Operations (CAFOs) because of the large number of animals present at the facility or the method of discharge from the facility. In recent years, as the livestock industry has consolidated into fewer and larger operations (particularly in the case of poultry and hogs), the effects of polluted runoff from CAFOs on water quality have assumed increasing importance.

Over the years, EPA relied on the zero discharge effluent limitation of the CAFO effluent guideline and general permits to address potential environmental risks. Recent events (such as massive spills of hog manure in North Carolina and the *Pfiesteria* outbreaks in Mid-Atlantic estuaries) suggest that current regulatory and voluntary efforts have failed to adequately address the environmental and health problems associated with AFOs. These environmental and human health problems persist and, in some areas of the country, have intensified as the size and density of AFOs have increased with changes in the industry, yet little is known about the universe of facilities that fall under the definition of AFO and CAFO. The Vice President's Clean Water Action Plan specifically calls for a strategy to address pollution resulting from animal feeding operations.

Facilities Profile: Most CAFOs are small operations with no more than a handful of employees. Revenues may range from \$500,000 to several million dollars for the larger operations. CAFOs are distributed across the United States (primarily in Regions 2-10), with a heavier concentration in the mid-plains, eastern seaboard, and western coastal regions. Although regulations have been in place covering CAFOs for 20 years, EPA does not have a comprehensive listing of all these facilities. Because many of the facilities that have a discharge do not apply for permits, historically few permits have been issued. Because there are few permitted facilities, there are few inspections of the facilities that fall into the regulated universe.

Pollutants Profile: AFOs can pose a number of risks to water quality and public health, mainly because of the amount of animal manure and wastewater they generate. Manure and wastewater from AFOs can contribute nutrients (e.g., nitrogen, phosphorus), sediment, pathogens, heavy metals, hormones, antibiotics, and ammonia to the environment. Excess nutrients in water overstimulate the growth of aquatic weeds and algae, which then clog the waters and deplete the water of dissolved oxygen needed by other living organisms. The result can be harmful algal blooms, fish kills, and contaminated drinking water from nitrates and pathogens. Excess nutrients in water also may result in outbreaks of microbes such as *Pfiesteria piscicida* found in the Chesapeake Bay and in North Carolina.

CAFOs produce quantities of manure that are a risk to water quality and public health whether the facilities are well managed or not. Because the amount of manure stored is so large, a spill while handling manure or a breach of a storage system can release large quantities of manure and wastewater into the environment, causing catastrophic water quality impacts and threatening public health.

Compliance Profile: CAFOs are considered to be “point sources” under the Clean Water Act, subject to NPDES (National Pollutant Discharge Elimination System) permit requirements if they cause pollutants to be discharged to waters. Currently, only about 2,000 CAFOs have NPDES permits (often supplemented by state permits). At the majority of non-permitted facilities, the typical violations found by inspectors are discharges without a permit; however, because discharges often occur only when it rains, the inspector may only be able to note that the facility has the potential to discharge (e.g., lagoons are too full, inadequate storage, etc.).

Activities and Accomplishments

Compliance Assistance: The National Agriculture Compliance Assistance Center awarded a \$300,000 grant to a consortium of land grant universities to develop and implement a livestock environmental issues curriculum and implementation project.

Inspections and Enforcement: In FY98, EPA Regions conducted 339 compliance inspections. EPA has concluded a total of 93 enforcement cases against this sector in the last three years.

Significant Cases: In May 1998, Region 7 reached settlement on an administrative penalty order that had been issued to **DeCoster Farms** of Iowa in late FY97. The violation involved application of 2.5 million gallons of manure to a field drained by an agricultural drainage well. The state ordered the well temporarily plugged on the same day the manure was being applied, but sample results showed that some of the manure had entered the drainage well prior to plugging. The settlement requires DeCoster Farms to pay a \$7000 fine, implement best management practices at this well and 13 other agricultural drainage wells owned by the company, and close all 14 wells within three years.

Strategic Approach: OECA’s CAFO sector strategy calls for:

- ▶ **Consistent compliance/enforcement across Regions and states:** The strategy calls for state development and implementation of compliance/enforcement strategies and inspections of priority CAFOs by 2001 and all others by 2003. In 1998 OECA supported this goal by conducting NPDES CAFO inspector training for approximately 92 Regional and state staff in Regions 3, 4, and 5. Each EPA Region is working with its NPDES states to develop and implement state-specific CAFO strategies. To date, 12 states have developed CAFO compliance/enforcement strategies.

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- ▶ **Improved risk assessment, information, and environmental indicators:** OECA initiated projects (e.g., \$95,000 grant to the Environmental Law Institute to identify state databases which contain CAFOs) to identify the CAFO universe and develop information and data to assist Regional and state efforts to target compliance assistance, inspection, and permitting activities. OECA also developed a CAFO model administrative order.

3.6 | Automotive Service and Repair Shops

The automotive service and repair sector comprises the largest number of conditionally exempt and small quantity generators of any industrial/commercial sector. The types of pollutants, the widespread location of these shops, and the sheer number of automotive repair shops led to designating this sector as a priority sector in 1996. According to an industry survey conducted in FY97, noncompliance is likely to be found in up to 74% of the industry.

Facilities Profile: By EPA and industry estimates, there are roughly 500,000 shops located throughout the United States. These shops are located in every part of the country, from urban and suburban communities to rural locales.

Pollutants Profile: Pollutants generated include petroleum and ethyl-based liquids, halogenated and non-halogenated solvents, and chlorofluorocarbons (CFCs). Potential impacts to the environment and human health occur when these materials are mishandled, either during the repair process or in final disposal. Improper repair results in CFCs being emitted into the atmosphere, reducing the ozone layer that protects the Earth from harmful ultraviolet radiation. Improper handling and disposal of petroleum, solvents, and ethyl liquids can contaminate water supplies and release VOCs into the atmosphere, contributing to ground level ozone.

Activities and Accomplishments

Compliance Assistance: Since the total number of automotive service and repair shops is very large, and the typical shop is quite small, EPA is unlikely to reach the vast majority of auto service and repair shops with traditional inspections and enforcement action. Instead, the Agency's primary focus is on compliance assistance. A key element in that effort is the continuing presence of CCAR-GreenLink®, the Automotive Compliance Assistance Center, which reaches an unlimited number of shops over the Internet with plain language explanations of environmental rules.

One compliance assistance effort launched by the Office of Compliance focused on the franchise shops of national/regional chains (e.g., Sears, Goodyear, Pep Boys, Midas) where one would have expected compliance to be higher than at the smaller, independent shops. OC staff met to discuss the survey results with the Automotive Maintenance and Repair Association (AMRA) whose members include the national/regional chain shops. Many of the members of the AMRA have notified their respective stores about maintaining compliance with environmental regulations.

Baseline Compliance Survey of Automotive Service and Repair Shops

In conjunction with the Coordinating Committee for Automotive Repair, OECA sponsored a baseline survey of compliance levels in the automotive service and auto body repair industry. This project used statistical sampling techniques and evaluated auto shops on all applicable environmental statutes rather than individual environmental programs. Five community colleges assisted in the survey of 440 shops, using a questionnaire based on the Consolidated Screening Checklist for Automotive Repair Facilities that OECA completed in FY97. The questionnaire covered most, but not all, applicable federal requirements and no state-specific requirements.

Using a rough analogy to educational grades, of the 440 shops participating in the survey, 26% would receive at least a B grade for compliance (scoring above 80% on their answers to the questionnaire); 58% would receive a C or D grade (scoring between 51% and 80%); and 16% would fail, with scores of 50% or less.

The survey indicated no difference in levels of compliance for auto repair shops based on their location (urban/suburban vs. rural). Contrary to expectations, no significant differences were found in compliance levels across three different types of auto shops surveyed: franchise, independent auto, and independent collision/paint shops. (New car dealers did appear to be more compliant with regulatory requirements — 61% scored at an A or B level — but the sample size of new car dealers was not large enough to make statistically valid inferences.)

A follow-up national survey will be conducted in FY99 to determine if levels of compliance have changed from the baseline survey. EPA will use the baseline and follow-up studies to measure the effectiveness of its compliance assistance programs (including CCAR-GreenLink®), and to identify areas within the industry that require improvement.

In FY98, compliance assistance staff in the 10 EPA Regions handled 1,550 telephone assistance calls, reached 348 automotive shops through workshops and meetings, distributed compliance assistance tools to 18,460 entities, and made 192 on-site visits. Regional compliance assistance activities during FY98 included:

- ▶ **Region 1** launched a newsletter, *Details*, distributed to over 14,000 auto body and repair shops in New England. The New England Environmental Assistance Team (NEEATeam) made 108 on-site visits in connection with a geographic priority, the Lower Charles River watershed; responded to 250 hotline requests; and reached 300 entities with workshops and conferences. Tools developed included a checklist for auditing and a plain-language, comprehensive compliance manual, entitled Collision Repair Auto Shop Help (CRASH) Course, distributed to 1,500 auto shops in partnership with the Massachusetts Office of Technical Assistance.
- ▶ **Region 2** participated in two seminars with the Greater New York Dealers Association providing federal compliance information on hazardous waste, water and air regulations. EPA's small business and audit policies were discussed as well as other assistance tools

Region 9's Green Business Program

Since January 1996, Region 9 has been providing support to local governments in several San Francisco Bay Area counties to implement the Green Business Program. The program is testing a new inspection and compliance model which consolidates compliance requirements and provides resource conservation and pollution prevention information to small businesses. Businesses that pass this unique compliance inspection program are rewarded through a local recognition program. Four California counties — Alameda, Contra Costa, Napa and Sonoma — have implemented the program, starting with automotive service and repair shops. Contra Costa was the most recent county to join, in FY98, with 23 auto repair shops participating in the program. OECA has provided funding to develop a program guidance manual for other interested communities and to create a national “Road Show” through the Joint Center for Sustainable Communities (a partnership of the U.S. Conference of Mayors and the National Association of Counties). The “Road Show” will include the Green Business Program as one of several local models which will be marketed to other communities across the U.S.

available to the participants. Twenty-five seminars were held throughout the Region discussing the December 1998 UST upgrade deadline. Additionally, the Region mailed reminders to all regulated facilities in New York and the US Virgin Islands. New Jersey and Puerto Rico mailed reminders to facilities within their respective borders.

Inspections and Enforcement: Headquarters and many of the Regions monitor automotive shops through the underground injection control, chlorofluorocarbons, fuels, RCRA, and UST programs. In FY98, the Regions conducted more than 2,300 inspections in these program areas. Some of these inspections were conducted at automotive service and repair shops. Also, 192 enforcement actions were concluded in FY98 with more than \$500,000 in assessed penalties.

Significant Cases: In FY98, in one of the largest environmental actions ever taken against the state of Connecticut, EPA settled its complaint against the **Connecticut Department of Transportation (CT-DOT)** for a penalty of \$334,548 for hazardous waste violations at Bradley Airport in Windsor Locks and two other repair and maintenance facilities in Wethersfield and Rocky Hill. The consent agreement also required CT-DOT to properly label its hazardous waste containers; conduct hazardous waste management training for appropriate personnel; conduct weekly inspections of the facility for malfunctions and deterioration, operator errors, and discharges; conduct proper hazardous waste determinations for all wastes generated at the facility; take precautions to prevent accidental ignition or reaction of ignitable waste; and notify receiving facilities of the land disposal restrictions for waste shipped offsite.

3.7 | Dry Cleaning

The dry cleaning sector was one of the first sectors identified as a national priority by OECA. The cumulative environmental impact from thousands of dry cleaning facilities located in population centers can be significant. Dominated by “mom and pop” businesses and with a heavy concentration of owners/operators who do not speak English as their first language, dry cleaners may not fully understand the environmental regulations impacting their business.

After five years of implementing a 1993 EPA air toxics rule, including providing compliance assistance and conducting inspections, EPA believes that the dry cleaning sector has improved its awareness and understanding of its environmental regulatory responsibilities as well as its level of compliance. As a result, this sector will not be considered a national priority sector in the FY 2000/01 Memorandum of Agreement. Based on Regional inspection findings, most of the requirements related to emissions control equipment installation and retrofitting have been addressed, although additional compliance improvements for recordkeeping and reporting requirements need to be achieved.

Facilities Profile: Most of the 25,000-35,000 facilities in this sector are small businesses which ordinarily do not have the resources to obtain, read, and interpret the numerous environmental regulations that apply to them under RCRA, CWA, SDWA, and CAA. A large percentage of the owners/operators do not speak English as their first language. Thirty percent of the cleaners are owned/operated by Korean Americans. Commercial dry cleaners are distributed in a six to one ratio of urban to rural locations. Industrial laundries (that primarily clean uniforms) tend to be located in medium to small cities; and the small number of coin-operated dry cleaning units in laundromats tend to be found in rural areas.

Pollutants Profile: The most commonly used cleaning solvent in this sector is perchlorethylene (perc), which is a carcinogen that readily volatilizes in the air and can contaminate soil and water if improperly handled. Perc dominates in commercial dry cleaning establishments, while petroleum solvents are used in the majority of industrial machines. The 1993 EPA air toxics standard for perc dry cleaners requires both existing and new facilities to use designated vapor control technologies and undertake leak detection and equipment repair to prevent fugitive emissions.

Compliance Profile: Dry cleaners, which are categorized as service industry establishments, are not required to report to TRI. Moreover, most dry cleaners are not traditionally tracked by EPA compliance and enforcement databases. As part of the FY98/99 MOA, each Region was asked to evaluate the baseline compliance status of 1% of the dry cleaning sector in the Region. All Regions have already met or exceeded this inspection goal. Generally, the Regions found high rates of compliance for air toxics requirements such as proper installation of control equipment (usually in the 80% to 90% range). Lower rates of compliance — at times as low as 30% — were found for recordkeeping and monitoring requirements. The high percentages of compliance were usually determined to result from compliance assistance visits and inspections.

Activities and Accomplishments

Compliance Assistance: Once dry cleaners were identified as a national priority sector, OC developed and distributed various compliance assistance projects to heighten dry cleaners' awareness of environmental regulations. This included a Plain English Guide, Plain Korean Guide, and a Dry Cleaners Compliance Videotape. To assist the Regions and states in providing front-line assistance and inspections, OC developed a Dry Cleaning Compliance Strategy, a Compendium of Educational Materials, and a Multimedia Inspection Manual for Dry Cleaners.

Regional and state compliance assistance has been offered to the dry cleaning sector, usually through the Clean Air Act Section 507 Small Business Technical Assistance Programs. Outreach included mailings of plain language materials explaining the regulations, seminars, training courses, trade shows, on-site compliance assistance visits, and promotion of hotlines and web sites. Partnerships were developed with trade associations to increase the effectiveness of outreach efforts. EPA has distributed over 7,000 materials. All ten EPA Regions and many states have held multiple seminars for dry cleaners. One Region televised its outreach program to an audience of over 2,000 dry cleaners.

Region 2 Dry Cleaners Initiative

With approximately 4,500 dry cleaners in Region 2, and with an estimated 70,000 residents in New York City living in apartment buildings which also house dry cleaners, a major effort to enhance dry cleaner compliance remained a top priority in Region 2 in FY98. The full range of compliance and enforcement tools has been applied to this sector, beginning with seminars for dry cleaners given in cooperation with trade groups, environmental organizations, and the state and local regulatory and compliance assistance agencies. The seminars provide information, both in English and in Korean, on the applicable regulations, pollution prevention opportunities, alternative technologies, and Region 2's Small Business Compliance Incentive Program for dry cleaners. The region also visited 130 dry cleaners to offer on-site compliance assistance in FY98. Only 25 facilities (less than 20%) agreed to participate in this voluntary program, which includes a full compliance review using the multimedia checklist from the Multimedia Inspection Guidance for Dry Cleaning Facilities, with the allowance of a correction period if violations are detected. Three facilities which accepted the offer of compliance assistance in FY98 were found to be in complete compliance. Enforcement activities are an essential complement to compliance assistance and compliance monitoring. In FY98 Region 2 issued 28 administrative orders under the Clean Air Act, and 33 RCRA notices of violation.

Working in Partnership with States on Compliance Assistance

Region 4 established a partnership with the State of Georgia to conduct a compliance assistance initiative for perc dry cleaners, consisting of inspections and a series of workshops throughout the state. The initiative was publicized through a press release and a joint letter from Region 4 and Georgia that was distributed to all the identified perc dry cleaners. Voluntary compliance assistance audits were offered by the Small Business Assistance Program and both agencies participated in the annual conference of the Southeastern Fabricare Association.

Region 4 and Georgia conducted 249 inspections of facilities that were possibly subject to the dry cleaning regulation. Of the 249 inspections, 165 were perc dry cleaners, 65 were pick-up stores and 19 used alternate cleaning processes. Of the perc facilities inspected, 16% were in full compliance, 12% had one violation, and 72% had multiple violations. Georgia distributed self-certification forms to facilities in violation and requested that they return the form upon reaching compliance. Forms were received from 56% of the 138 dry cleaners, indicating that they have corrected deficiencies observed during the inspections. The state conducted follow-up inspections on the dry cleaners that did not submit the self certifications to ensure compliance. All were eventually returned to compliance.

In FY98 alone, the EPA Regions responded to 220 hotline inquiries from dry cleaning establishments, held 16 workshops that reached over 800 entities; conducted 192 on-site visits; and developed and distributed 12 tools to 1,450 entities.

Inspections and Enforcement: The emphasis on outreach and compliance assistance followed by inspection and enforcement has produced useful results. Most of the violations found more recently are for failure to comply with recordkeeping and monitoring requirements. For example, after several years of conducting outreach and one-on-one audits with 260 dry cleaners, Region 8 found a 42% increase in their compliance rate. Region 8 estimated that compliance with Clean Air Act air toxics regulations and initial outreach activities would result in a 44% annual reduction of perc emissions from process vents and fugitive sources in the Region's 685 dry cleaners, and a further 1.5% reduction after Region 8's audit outreach and enforcement.

Significant Cases: Dudley Laundry Co. is a dry cleaning establishment located in downtown Norfolk, Nebraska, which generates several waste streams in its dry cleaning processes. Approximately 25 years ago, Dudley used Stoddard Solvent as its cleaning agent, but switched to tetrachloroethylene. In the past, Dudley stored the Stoddard Solvent and kerosene in storage tanks which were removed in 1989. The groundwater, which is used for drinking water in Norfolk, recently has been found to be contaminated with benzene, trichloroethylene, Stoddard Solvent, and other contaminants that have been traced to past and current disposal practices of Dudley. The Region has issued an order pursuant to Section 7003 of RCRA which requires

Dudley to take certain interim and final remedial actions to identify the nature and extent of the contamination and then to abate the groundwater contamination.

3.8 | Other Sectors

Iron and Steel

There are currently 117 iron and steel mills operating in the U.S., including 27 integrated mills (coke-making and basic oxygen furnaces) and 90 mini-mills (electric arc furnaces). Most of the plants are located in the Great Lakes area, corresponding to EPA Regions 3 and 5. The industry has a very high rate of noncompliance. Of the integrated mills inspected in FY96 and 97, 96% were out of compliance with one or more statutes, and 65% were in significant noncompliance.

During FY98, OECA addressed two main areas for this sector. First, the Office of Compliance continued work on the root cause analysis of compliance and enforcement data gathered on a representative sample of 34 steel mills located in Region 5 (including Michigan, Illinois, Ohio and Indiana) and in Pennsylvania. Second, OECA developed a sector strategy for iron and steel, in conjunction with Regions 3, 5, and 6. The strategy identifies the most relevant compliance and environmental problems that need attention and actions that can be taken by Headquarters and the Regions. Nine key compliance and environmental problems are identified in the strategy:

- ▶ Groundwater contamination from slag disposal
- ▶ Contaminated sediments from steel making
- ▶ Electric arc furnace dust (K061)
- ▶ Unregulated sources
- ▶ SNCs resulting from reoccurring and single peaks violations
- ▶ Mini-mills not conducting baseline testing
- ▶ Lost knowledge of facility infrastructure
- ▶ Inadequate contractor management
- ▶ Violations of RCRA administrative procedures.

The three Regions continued to implement their commitments under the MOA process during the course of the year.

Pulp Mills

Currently, 283 pulp mills are operating in the United States, with a heavy concentration in Regions 4 and 5. Of the 90% of facilities inspected in FY96 and 97, 61% were out of compliance with one or more statutes and 12% were in significant noncompliance. Over the last two years, however, SNC rates have risen to 19% for air and 4.7% for water.

FY98 saw the completion of a final draft of the Kraft Pulp Mill Compliance Assessment Guide. This process-based, multimedia inspection manual will assist federal and state inspectors, compliance assistance providers, auditors, and industry personnel in evaluating a pulp mill's compliance with major environmental regulations. By explaining the various processes found at these facilities, applicable regulations, and appropriate inspection techniques, the guide enables users to more easily target potential compliance problems and identify the underlying causes.

Region 3 investigated nine pulp mills for Clean Air Act violations stemming from un-permitted facility expansion. These investigations, which followed extensive research into the production maximization trend in the pulp industry, revealed significant compliance problems at 8 of the 9 mills. The Region has prepared civil cases against the facilities which will prevent the release into the atmosphere of thousands of tons per year of sulfur dioxides, nitrogen oxides, and total reduced sulfur. In order to capitalize on the work done by the Region, a seminar is being jointly conducted by OECA and Region 3 for other EPA Regions and states. The seminar will provide technical training on the pulp manufacturing process, emissions, applicable regulations, and successful investigation methods.

Coal-Fired Power Plants

The Coal-Fired Power Plants Sector Strategy is a joint effort of OECA and Regions 3, 4, and 5, and has a primary goal to achieve significant NOx emission reductions at targeted power plants in these three Regions by raising the rate of compliance with Clean Air Act requirements. Under OECA's leadership, the sector strategy was finalized in FY98 and several key activities were completed by OECA and the three Regions. These include: (1) a review of state environmental and public service commission files for all targeted plants; (2) issuance of extensive information requests to some plants and boiler manufacturers; and (3) field inspections at four plants in Region 3, and two plants each in Regions 4 and 5.

Region 8 also worked on this sector in FY98, trying to identify any deficiencies in assessing air pollution control equipment and continuous emission monitoring performance for all coal-fired power plants in the Region by reviewing recent state air inspection reports and excess emission report data. Most of the state inspection reports and some of the excess emission reports were reviewed, and some significant deficiencies have been identified. Follow-up work with the states has begun to correct the deficiencies.

Municipalities

There are approximately 39,000 local general-purpose governments in the United States. Analysis of air, water, and waste data as of October 1996 shows that the municipalities (sanitary services including municipal operations, SIC Code 4950) were fourth in noncompliance. Municipal governments face a host of environmental requirements, often with limited resources, and new regulations (stormwater, MACT standards for POTWs, etc.) will require even greater efforts. Three major compliance assistance activities were undertaken in FY98 for this sector:

- ▶ **The Local Government Environmental Assistance Network:** LGEAN is designed to help local government officials stay on top of the latest environmental requirements and technologies. Opened in October 1998, LGEAN (<http://www.lgean.org>) is coordinated by the International City/County Management Association in partnership with Water Environment Federation, Air & Waste Management Association, American Water Works Association, Solid Waste Association of North America, Environmental Council of States, and the National Association of Counties. LGEAN is one of EPA's nine Compliance Assistance Centers and offers an efficient and user-friendly contact point for environmental compliance and assistance information for state and local officials, inspectors, and regulators.
- ▶ **Profile of Local Government Operations:** This profile presents information operation- by-operation, rather than rule by rule, making it easier for local governments to understand applicable environmental regulations, develop a comprehensive compliance plan, and identify pollution prevention opportunities. The profile also provides other useful information such as a compliance baseline, summary of enforcement actions, and an overview of local government management and financial structures. The profile is available via LGEAN.
- ▶ **Implementing ISO 14001 Environmental Management Systems at the Municipal Level:** Seven municipalities, a county, and a state prison system have said yes to the ISO 14001 Environmental Management System (EMS) under a two-year project to assist small and medium-sized public sector organizations to develop and implement an ISO 14001 EMS. Each participating municipality has selected a facility/organization (a "fenceline") in its community to implement the EMS. Municipalities and fencelines include:

| City/County | Facility Implementing EMS |
|--|-------------------------------|
| Town of Londonderry, New Hampshire | Public Works |
| City of Lowell, Massachusetts | Wastewater Treatment Facility |
| Wayne County, Michigan | Wastewater Treatment Facility |
| City of Indianapolis, Indiana | Public Works |
| Massachusetts Dept. of Corrections | Corrections Facility |
| City of Gaithersburg, Maryland | Public Works |
| Lansing Board of Water & Light, Michigan | Electric Generating Facility |
| City of Scottsdale, Arizona | Municipal Government |
| New York City, New York | Transit Authority |

This pilot project is intended to demonstrate that the EMS approach for managing environmental activities is equally applicable to local government operations as to private sector entities. The municipalities have participated in two intensive implementation workshops and are now working through the planning phase of the ISO 14001 standard (section 4.3). Some of the activities in this phase include: developing procedures for identifying aspects and impacts associated with the organizations activities, products, and services; developing a procedure for setting objectives and targets; providing training and awareness at each relevant level and function; implementing the EMS procedures; and developing environmental management programs.

Media-Specific Priorities

In FY98, EPA made progress in addressing priority problems related to specific environmental media under EPA's statutory mandates. The 25 priority areas that were slated for special attention in FY98-99 are shown in the sidebar. This chapter reviews highlights in selected priority areas.

4.1 Clean Air Act

The Clean Air Act (CAA) protects and enhances the quality of the nation's air by regulating stationary sources of air emissions, which include manufacturers, processors, refiners and utilities. Major sources are required to install pollution control equipment and to meet specific emissions limitations. In addition, the CAA mandates controls on air pollution from mobile sources by regulating the composition of fuels and emission-control components on motor vehicles. In FY98, EPA announced two major settlements with the Ford Motor Company and American Honda to settle allegations that the companies installed illegal defeat devices in certain vehicles in violation of the Clean Air Act. (See Chapter 5 for details.)

Title V Permits

In FY98, EPA Regions continued their review of Title V permit applications to identify noncomplying facilities and the submission of required compliance schedules. In contrast to previous years, the Title V permit program now consolidates all major sources' Clean Air Act requirements into a single document and requires sources to certify compliance annually. Title V is expected to provide the main focus of the air enforcement program for the future.

NSR/PSD and Synthetic Minors

In FY98, EPA placed special emphasis on violations of the New Source Review/Prevention of Significant Deterioration (NSR/PSD) regulation to prevent further air quality degradation. As an example, in September, Region 2 announced a settlement with Esso Virgin Islands, Inc., for violating requirements of the New Source Performance Standards for bulk gasoline

Media-Specific Priorities

Clean Air Act

- Title V permits
- Synthetic minors
- Air toxics
- CFCs

Clean Water Act

- Wet weather
- CAFOs

Emergency Planning and Community Right-to-Know

- Section 313 TRI expansion
- Section 313 TRI data quality
- Industrial organic chemicals initiative
- Federal facilities enforcement

FIFRA (pesticides)

- Antimicrobials
- Urban pesticides
- Adverse effects

RCRA (hazardous waste)

- Generators
- Organic air emissions rule
- Combustion/fuel blenders
- USTs
- Transportation issues

Safe Drinking Water Act

- Public water system microbials
- Safe drinking water information system
- SDWA amendments
- UIC Class V wells

— continued on the following page

Superfund

Reduction of transaction costs

Construction completion

Federal facilities compliance

TSCA (toxic substances)

Asbestos

Lead-based paint

PCBs

terminals. The settlement requires the company to carry out a compliance plan that includes new operating procedures and the installation of a mechanical/electronic system to limit the fuel loaded at any time to ensure compliance with the standard for total organic compounds.

EPA also addressed synthetic minor permit violations in many sectors. Targeting of the refinery and power generation industries resulted in several case referrals to DOJ (see Chapter 3). Region 3 has also been active in investigating the pulp and paper industry, which also has led to several referrals to DOJ.

Air Toxics

In FY98, air enforcement focused on inspecting sources of air toxics (often referred to as HON sources), and compliance assistance to states and sources for newly-promulgated air toxics regulations. The HON sources were specifically targeted for enforcement action due to the high toxicity of their pollutants. EPA Regions also continued to identify other high-risk air toxic sources using risk and exposure criteria, and conducted investigations and inspections of those sources. Compliance assistance activities reached over 2800 entities, including 410 telephone calls and distribution of tools to 2,020 entities.

In FY98, EPA Region 3 brought the first judicial case against a HON source, Standard Chlorine, which was settled successfully by a penalty of \$349,500. In addition, numerous administrative penalty actions were brought against chrome-plating sources because of the high noncompliance rate in this sector. EPA Region 5's case against Diamond Chrome Plating for alleged violations of the chrome plating standard at its facility in Howell, MI, resulted in the company replacing two emission control systems at a capital cost of at least \$300,000.

CFCs

Chlorofluorocarbons have been used as refrigerants in cars, homes, and offices, and as foam blowing agents and cleaning/degreasing substances by commercial/industrial facilities. The Clean Air Act requires that use of these chemicals be phased out and not imported. Meanwhile, users of these chemicals must recycle CFCs extracted from refrigerators/air conditioners and label their products to identify them as being manufactured with stratospheric ozone depleters, among other requirements. EPA has focused on areas of greatest potential harm, such as violations of the importation restrictions. Inspections at auto shops continued to be coordinated by EPA's mobile source enforcement branch, which allows for fuel requirements and CFC recycling to be checked at the same time. As a result of EPA enforcement settlements, CFCs were reduced by more than five million pounds during FY98.

Enforcement of regulations phasing out CFCs and other ozone-depleters is important to ensure that the United States meets its obligations under the Montreal Protocol — the international treaty to protect the ozone layer. Enforcement focuses on ensuring deterrence through targeted, highly publicized enforcement actions. For example, in FY98 EPA Region 4 filed administrative

complaints against seven companies for CFC violations. The complaints sought a total of more than \$100,000 in civil penalties for violations ranging from the failure to use certified technicians while servicing refrigerated appliances and auto and residential air conditioners to the use of unacceptable substitute refrigerants.

Compliance assistance activities in FY98 reached 4,240 entities with information on CFC regulations, including telephone assistance to 1,975 callers and tools distributed to 2,065 recipients.

4.2 | Clean Water Act

The Clean Water Act prohibits any discharge of pollutants to waters of the United States, except in compliance with specific sections of the law. The National Pollutant Discharge Elimination System (NPDES) enforcement program targets those entities discharging pollutants without permits or in violation of their permits. Historically, the program has focused its attention on the approximately 6,900 major facilities ('majors'). However, increased attention is being placed on other aspects of the CWA program, including wet weather sources and minor facilities that are or could be causing significant water quality impacts.

Wet Weather

Run-off from wet weather (i.e., overflows from combined sewers, sanitary sewers, discharges and run-off from concentrated agricultural feeding operations (CAFOs), and storm water run-off) is a leading cause of water quality impairment and represents a significant threat to public health. Sewer overflows contain bacteria and other pathogens which cause illnesses and lead to beach and shellfish bed closures. CAFOs pose a number of risks to water quality and public health because of the amount of animal manure discharges and run-off generated, particularly as a result of storm events. Efforts to control wet weather flows have been underway for several years.

Two major wet weather flow cases were settled in FY98 with the City of Atlanta (see box on page 53) and the City of New Orleans (see Chapter 5 for details), in support of EPA's sanitary sewer overflow (SSO) and combined sewer overflow (CSO) enforcement priorities.

In compliance assistance activities, the Regions have reached close to 60,000 entities regarding CWA urban wet weather issues, including 10,200 telephone assistance calls, workshops involving 1,315 attendees, and tools distributed to over 47,000 recipients.

Concentrated Animal Feeding Operations (CAFOs)

See Chapter 3 for a detailed discussion of this priority sector.

The “Clean Charles” Initiative in Region 1

Working with the Massachusetts Department of Environmental Protection and the Charles River Watershed Association, Region 1’s “Clean Charles” initiative combines enforcement and compliance assistance with the goal of restoring fishable/swimmable conditions in the Lower Charles River by Earth Day 2005. In FY98, Region 1 sent a letter and supplemental compliance assistance information to 3,100 businesses/institutions located in the Lower Charles River watershed to educate them on storm water permitting requirements and to encourage those not subject to the requirements to make voluntary efforts to lessen storm water impacts. The mailing included a cover letter outlining EPA’s Clean Charles 2005 program, monitoring activities, permitting requirements, examples of voluntary measures, and a description of the Region’s Partners for Change recognition program. The letters also described opportunities for compliance assistance which EPA had developed specifically for Charles River facilities. These included customized assistance materials for auto-related facilities, creation of a “report-a-sheen” oil spill reporting hotline, and development of a innovative storm water technology trade show.

Many facilities took advantage of compliance assistance opportunities provided by the Region. Some environmental consulting firms developed compliance seminars specifically targeted to Charles River facilities. The advertisements for these seminars (“Urgent!! Are you ready? EPA’s Charles River Initiative Enforcement Inspections begin May 1, 1998”) provided repeated reminders to the regulated community of EPA’s field presence, and of the need to ensure compliance. When EPA conducted inspections in May, inspectors observed that the Charles River facilities had taken significant steps to review their operations and ensure that they were in compliance with environmental requirements. Anecdotal evidence indicates that similar activities took place in many of the facilities EPA did not inspect — i.e., that the deterrent effect of EPA’s inspections was multiplied by the early alert to the entire regulated community. In a few cases, significant violations were found, and enforcement actions are being developed. A second round of inspections is planned to ensure a sustained commitment to compliance.

Water quality in the Charles has improved dramatically as a result of both the enforcement and compliance assistance efforts. When EPA’s initiative began in 1995, the Lower Charles failed standards for recreational boating an average of 223 days per year. That figure has since been reduced by two-thirds, to 77 days per year. The number of days that the Lower Charles meets swimming standards has more than doubled, from 69 to 164 days per year. The Lower Charles, once home to the most popular swimming beach in Greater Boston, is on the road to recovery.

City of Atlanta, Georgia

The City of Atlanta owns and operates three wastewater treatment plants, eight combined sewer overflow (CSO) facilities (two additional facilities are reported by the City as separated), and a 2,100 mile collection system (21 square miles of which are combined). Additionally, Atlanta accepts wastewater from surrounding municipalities.

In April 1997, EPA and the Georgia Environmental Protection Division (EPD) announced the commencement of a joint enforcement effort against the City of Atlanta. A full evaluation of all wastewater programs was undertaken by EPA and EPD beginning in May 1997 (wastewater treatment facilities, laboratory, sludge handling and disposal, pretreatment, collection system, CSO facilities, and storm water). EPA and EPD uncovered numerous and systematic violations of the CWA, the NPDES permits, and violations of Georgia laws and regulations.

On September 24, 1998, consent decrees were entered resolving violations of federal and state laws at all of the City's CSOs. This represents the combined enforcement efforts of EPA, DOJ, EPD, the State Attorney General's Office, and citizen plaintiffs representing the Upper Chattahoochee Riverkeeper Fund, Inc., the Chattahoochee Riverkeeper, Inc., and W. Robert Hancock, Jr. Under the terms of the settlement agreement, the City has agreed to pay a \$2.5 million civil penalty, to implement a corrective remedial action plan to bring its CSOs into compliance with the CWA and state law, and to implement a \$25 million "Greenways" and stream cleanup supplemental environmental project. The City has agreed to complete all remedial action necessary to bring its CSOs into compliance with the CWA and state law by July 1, 2007, unless EPD and EPA agree to an extension.

EPA, DOJ, and EPD are currently involved in negotiations with the City of Atlanta regarding a final remedy for the wastewater treatment facilities and collection system. A supplemental consent decree encompassing remedial relief for the wastewater treatment facilities and collection system will be filed with the court once negotiations are complete.

4.3 | EPCRA

EPA and the public rely on the Toxics Release Inventory (TRI) mandated by the Emergency Planning and Community Right-to-know Act (EPCRA) for information on chemicals entering the environment. EPA must ensure that companies report data accurately and within required timeframes. Priorities include providing compliance assistance for additional industries that have recently been brought into the TRI reporting framework, and a compliance monitoring/enforcement bulletin on TRI data quality. In FY98, EPA launched a combined Headquarters/Regional initiative aimed at industrial organic chemical facilities (SIC Code 2869) regarding their requirements under EPCRA (Sections 311, 312, and 313) and Section 112(r) of the CAA. In this two-year initiative, the first year focuses on compliance assistance, and the second year on enforcement of EPCRA Sections 311 and 312

requirements. FY98 Regional compliance assistance activities reached over 86,000 entities on EPCRA requirements — fielding over 14,000 telephone calls, involving close to 5,000 attendees at workshops and meetings, and distributing 25 different compliance assistance tools to over 67,000 recipients.

In June 1998, EPA Region 4 announced a settlement with the **Coca-Cola Bottling Company** in Kentucky to resolve alleged violations of EPCRA Sections 311, 312 and 313. The company paid a civil penalty of \$14,838, and agreed to provide \$44,000 worth of equipment to the Hardin County Emergency Planning Committee to enhance emergency response capabilities.

4.4 | FIFRA

Key areas of priority for the pesticide enforcement program under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in FY98 were promoting compliance with antimicrobial product registration requirements and timely reporting of adverse effects.

Antimicrobial Enforcement

EPA and the public rely on pesticide manufacturers to provide accurate information about pesticides and their associated risks. EPA enforcement efforts include monitoring unregistered and ineffective antimicrobial products (disinfectants, tuberculicides, virucides, fungicides, and sanitizers), as well as products making false or misleading public health protection claims, since they pose a potential public health threat when the public is given inaccurate or misleading information. Pursuant to FIFRA, these products must be registered by EPA before they may be sold, held for sale, or distributed in commerce. Of the 5,000 or more registered antimicrobial products, approximately 3,000 make claims of public health protection.

EPA took enforcement actions in FY98 against several companies that sold products that claimed to protect against infectious bacteria and germs, where the product was not specifically registered with EPA for that purpose. Enforcement actions against companies making illegal pesticidal claims in FY98 included:

- ▶ **Lifetime Hoan:** EPA issued a stop sale order to the company and fined it \$66,000 for selling unregistered kitchen gadgets making claims of built-in antibacterial protection along with promotional material citing use in hospitals, restaurants, and commercial kitchens.
- ▶ **Snow River Wood Products:** EPA issued a stop sale order to Snow River and fined it \$26,400 for selling an unregistered cutting board claiming to fight *salmonella* and *E. coli*.
- ▶ **McNeil-PPC:** The company was fined \$100,000 for selling unregistered toothbrushes making antibacterial claims and claims to inhibit the growth of germs.

'Adverse Effects' Enforcement

EPA enforces FIFRA Section 6(a)(2), which requires pesticide registrants to report to EPA any adverse effects from use of their pesticide products. This information allows EPA to update pesticide registration information with information from real-life exposure incidents and studies that were not available at the time of the registration decision. This information can alert EPA if there is reason to believe that a registered pesticide is having unreasonably adverse effects on human health and the environment. In such a case, EPA would need to reassess whether continued registration of the pesticide is warranted or adjustments to the conditions of registration are necessary.

On July 31, 1998, EPA reached a \$180,000 settlement with Novartis Corporation (formerly Ciba-Geigy) for violations of FIFRA section 6(a)(2). Some of the more serious late-reported incidents involved adverse effects of the insecticide Diazinon. Diazinon's adverse effects include cancer, neurological symptoms, and respiratory impediments.

4.5 | RCRA

The Resource Conservation and Recovery Act (RCRA) Subtitle C Program regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. With authorized state programs and through compliance and enforcement activities, EPA is responsible for ensuring that the regulated community complies with standards designed to ensure the safe management of wastes that are toxic, explosive, ignitable, corrosive, or otherwise dangerous to human health and the environment.

EPA continues to find serious violations both at facilities that are subject to regulatory or compliance monitoring scrutiny (such as mineral processing facilities and smaller generators), and at facilities that operate in the 'grayer' areas of regulation, such as recycling operations. Industries with higher than average rates of noncompliance include petroleum refineries, ship building, industrial organics, primary and secondary non-ferrous metals, blast furnaces, and metal products and finishing.

Generators

The RCRA enforcement program has not traditionally focused on the generator universe. However, beginning in FY 1996, increased emphasis was placed on these facilities, which includes more than 20,000 large quantity generators (i.e., facilities that generate more than 100 kg of hazardous waste per month or more than 1 kg of acutely hazardous waste per month). Because many of these facilities are small businesses, EPA used a mix of enforcement tools and provided compliance assistance to specific industry groups. For example, Region 6 held an outreach workshop for the maritime industry where approximately one-third of the facilities were out of compliance. Overall, the Regions reached over 8,000 generators, through telephone calls (4,751), workshops (2,319), and 124 tools distributed to 919 recipients.

Organic Air Emissions (Subpart CC rule)

Compliance Assistance Tool for RCRA Organic Air Emissions Standards: This compliance assistance tool, developed in partnership with the Chemical Manufacturers Association, provides a user-friendly explanation of the requirements of the RCRA organic air emissions standards contained in 40 CFR Parts 264/265, Subpart CC. When the rule was issued, EPA estimated that organic air emissions from hazardous waste treatment, storage and disposal facilities exceeded 2 million tons per year. Full compliance with Subpart CC standards should reduce the level of organic air emissions to approximately 150,000 tons per year and ultimately reduce cancer and other adverse health effects.

Requirements for Organic Air Emissions (Subpart CC rule) became effective Dec. 6, 1996. Because a very large part of the RCRA universe is potentially subject to Subpart CC, the enforcement program focused on identifying those facilities most likely to be regulated by these requirements and that posed high risks. Regional compliance assistance activities in FY98 reached over 6,000 recipients, including distributing 343 compliance assistance tools (brochures, fact sheets, etc.) to 5,388 entities. Compliance assistance efforts were followed up with inspections and at least one case has been referred to DOJ for violations of the Subpart CC air emission regulations.

Underground Storage Tanks (USTs)

The principal focus of the UST program has been the approximately one million petroleum tanks at gas stations and other automotive fuel storage and distribution centers around the country. Designed to protect groundwater from contamination, UST regulations ensure the proper construction and operation of tanks, and ensure the closure of old tanks to reduce the chance of leaks into the surrounding soil and groundwater.

With the Dec. 22, 1998, deadline by which all existing tanks had to be upgraded or begin closure, increased enforcement attention in FY98 was focused on ensuring that underground storage tanks were in compliance with maintaining adequate leak detection and other current regulatory requirements. Although the UST program primarily relied on field citations, the increased enforcement attention resulted in numerous actions taken through the formal administrative enforcement process, including actions at the Puerto Rico Land Authority, several actions at public works facilities in the District of Columbia, and at petroleum wholesalers in Houston, TX. In addition, a judicial action was taken against Fahri Mustafa for violation of the UST regulations. (See Chapter 5 for details on several of these cases.) The Regions and states also continued their compliance assistance efforts to ensure that the regulated community was aware of the December 1998 deadline requirements. In EPA Regions with tribal populations, much attention was directed to USTs on tribal lands. As an example, Region 9 focused on training tribal inspectors, conducting tank inventories, and recruiting state UST inspectors to serve as technical resources for the tribes and territories.

4.6 | Safe Drinking Water Act

The drinking water enforcement program seeks to ensure that the public water systems in the United States comply with all health-based standards, including all monitoring and reporting requirements. The program generally focuses on community water systems (those serving year-round populations) and nontransient noncommunity systems. This program is particularly important because there are direct public health effects from drinking water that does not meet safety standards.

Public Water System Microbials

The effects of contaminated drinking water can be severe, especially on children, the elderly, and persons with compromised immune systems. Adverse health effects of microbial contamination include gastrointestinal distress, fever, pneumonia, dehydration (which can be life-threatening), or death. Serious effects were seen in the Milwaukee outbreak of cryptosporidium responsible for symptoms in over 400,000 persons, 4,000 hospitalizations, and more than 100 deaths. In the summer of 1998, in Austin, Texas, contamination of drinking water wells infected more than 1,300 persons. Region 8 issued two emergency orders under Section 1431 of the Safe Drinking Water Act to address serious threats to public health in the Town of Alpine, Wyoming and the McGee Mobile Home Park, Gillette, Wyoming. The use of the emergency powers of the SDWA has provided valuable information to persons served by these systems and helped to avoid further endangerment to the health of persons served by these systems.

The drinking water regulations that deal with microbial contamination are the Total Coliform Rule and the Surface Water Treatment Rule. These rules have been in effect for many years. EPA's priority for this program continues to include substantial outreach and assistance as well as enforcement activity. In FY98, EPA Regions reached over 3,000 entities on SDWA/PWS microbial issues, including holding 14 workshops or training involving 1,820 attendees. Due to the high level of noncompliance and the direct public health effects of violations, enforcement of microbial regulation remains a high priority for EPA.

Also in FY98, the government settled with the City of New York for violations of SDWA (see Chapter 5). Region 6 continued its efforts to address drinking water problems in the Colonias along the U.S.-Mexico border.

Underground Injection Control (UIC) Class V Wells

The Regions continued to work on identifying Class V wells and closing potentially endangering wells. In addition, through outreach activities, the Regions have entered into partnerships with states and local authorities to identify Class V wells. Region 7 is also conducting outreach to trade organizations and other potential Class V well owners/operators, particularly those related to the automotive and dry-cleaning sectors. These

activities have helped the Region to bolster the injection well inventory and target 'problem wells' for compliance assistance and/or enforcement action. In May 1998, Region 7 reached settlement on a penalty administrative order against DeCoster Farms of Iowa to close several Class V agricultural drainage wells due to potential nitrate and bacteriological contamination.

EPA Region 5 has undertaken an extensive outreach effort to make county health/environmental officials aware of the UIC program, Class V wells, and the risk that these wells pose to underground sources of drinking water. As a result of this outreach, five counties in Michigan have entered into partnerships with EPA to identify Class V wells. The counties visited about 475 sites to identify approximately 129 wells, which resulted in the closure of an unknown number of endangering Class IV/V wells. In Indiana, the UIC program continued to support the environmental "Circuit Rider" program — an environmental specialist who provides cities and towns with free, confidential assistance to address environmental problems. The program promotes local implementation of the Wellhead Protection and UIC Class V programs and provides outreach to small businesses.

Highlights: Enforcement Cases

This chapter presents summary descriptions of selected major civil and criminal cases settled or concluded in FY98.

5.1 Civil Cases

Clean Air Act

American Honda: EPA, DOJ, and the California Air Resources Board settled a case against American Honda Motor Co., Inc. Honda will spend \$267 million to settle allegations that it violated the Clean Air Act (CAA) by selling vehicles with disabled emission control diagnostic systems. The United States alleged that Honda disabled the misfire monitoring device on 1.6 million 1996 and 1997 model year Accords, Civics, Preludes, Odysseys, and Acuras, as well as 1995 Honda Civics. The complaint also alleged that Honda failed to report this fact when applying for Certificates of Conformity, which allow for vehicles to be legally sold if they meet federal emission standards.

The misfire monitoring device is part of an enhanced computer system, known as the On-Board Diagnostic System, which checks a vehicle's emission performance when the vehicle is in use. When the misfire device is disabled during an engine misfire, the system's malfunction indicator light will not operate. Because the vehicle's owner is unaware that the engine needs to be serviced, increased exhaust emissions of hydrocarbons and damage to the vehicle's catalyst may occur.

Under two related agreements with the U.S. government and with California, Honda will extend the emissions warranty for all affected models to 14 years/150,000 miles, provide an engine check and any emissions-related repairs needed between 50,000 and 75,000 miles of use, and provide a free tune-up between 75,000 and 150,000 miles of use, at a cost to Honda of at least \$250 million. In addition, Honda will spend, under the federal and state agreements, \$17.1 million, including \$12.6 million in civil penalties and \$4.5 million to implement environmental projects to reduce pollution.

Civil Cases

Clean Air Act

American Honda
Ford Motor Company
Block Island Power Company
Esso Virgin Islands, Inc.
Trinity America Corporation
Borden Chemicals and Plastics, Inc.
Plum Creek Manufacturing,
Union Oil Company of California

Clean Water Act

Hudson Foods
City of New Orleans
Puerto Rico Aqueduct and Sewer Authority
Gulf Park Water Company, Johnson Properties
ConAgra
Cominco

EPCRA

Royster-Clark, Inc.
Sinclair Oil
Weyerhaeuser

FIFRA

DuPont
Microban Products Company
Atlantic Mills
Safetec of America

— continued on the following page

RCRA

Handy & Harman
Electronics Material
Corp.

Puerto Rico Aqueduct
& Sewer Authority

United States Steel

Petroleum Wholesale
Inc.

Mr. Louis Wyman
Conoco Refinery

Safe Drinking Water Act

New York City

Superfund

Gould Superfund Site

Talache Mine

Sapp Battery Site

Industri-Plex

Sangamo Weston/
Twelve Mile
Creek/Lake

Hartwell PCB
Contamination

Interstate Lead
Company

LCP Chemicals-
Georgia

ICG Iselin Railroad
Yard

Murray Smelter

Libby Groundwater

TSCA

New Jersey Dept. of
Corrections

Safety-Kleen

East Ohio Gas

Ford Motor Company: EPA, DOJ, and the California Air Resource Board reached an agreement whereby Ford Motor Company will spend \$7.8 million to settle allegations that it violated the Clean Air Act by illegally installing a device which defeats the emissions control system in 1997 Ford Econoline vans. About 60,000 vans are affected.

The government's claims against the automaker involve the illegal use of a defeat device, in this case a sophisticated electronic control strategy designed to enhance fuel economy. According to EPA, the system caused smog-causing nitrogen oxide emissions to increase well beyond the limits of the Clean Air Act emission standards when the vans are driven at highway speeds. The consent decree entered on June 8, 1998, requires Ford to recall all of the affected Econolines in order to deactivate the strategy at an estimated cost of \$1.3 million, pay \$2.5 million in civil penalties, purchase 2,500 tons of nitrogen oxide credits valued roughly at \$2.5 million to offset the excess emissions, and spend \$1.5 million on projects designed to reduce future harmful pollutants in the air. The company also voluntarily implemented a special service instruction to dealers to deactivate the strategy in the vans and cooperated with EPA and DOJ during the investigation. About 25 percent of the 60,000 Econoline vans equipped with the strategy have been captured through Ford's special service instruction to date. The remainder of the vans will be recalled.

Block Island Power Company (Rhode Island): To correct long-standing Clean Air Act violations, Rhode Island's Block Island Power Co. (BIPCO) agreed in a federal enforcement settlement to eliminate its diesel generators or install state-of-the-art pollution control equipment on them, thereby reducing the company's smog-causing nitrogen oxide emissions to virtually zero. BIPCO also agreed to pay a \$90,000 fine. Like much of New England, Rhode Island is not meeting national standards for healthy air quality regarding ozone or smog, and BIPCO's pollution reductions will help improve the state's air quality.

BIPCO is the sole utility company on Block Island, about 15 miles off the Rhode Island coast. EPA alleged that BIPCO failed to obtain Clean Air Act New Source Review (NSR) permits for eight electricity-generating diesel generators that BIPCO installed and operated between approximately 1981 and 1993, which caused NOx emissions above NSR statutory and regulatory thresholds. Under a federal court-approved settlement filed in 1998, BIPCO will either install an underwater electric power cable from the mainland that will eliminate the need for the diesel generators, or will retrofit the generators with lowest achievable pollution control technology.

Esso Virgin Islands, Inc. (U.S. Virgin Islands): EPA alleged that Esso Virgin Islands violated Clean Air Act New Source Performance Standards for bulk gasoline terminals. In a settlement entered in federal court on September 25, 1998, the defendant agreed to pay a cash penalty of \$294,200 and to follow a compliance plan that will avoid further violations. The compliance plan includes new operating procedures as well as a requirement that Esso install a mechanical/electronic system to limit the amount of fuel loaded at any given time in order to ensure compliance with the standard for total organic compounds.

Trinity America Corporation, d/b/a Trinity Foam of Carolina, and Trinity Fibers of Carolina, Inc. (North Carolina): EPA Region 4 issued an imminent and substantial endangerment administrative order on October 7, 1997 in accordance with Section 303 of the CAA to prohibit manufacturing operations at Trinity American Corporation, doing business as Trinity Foam of Carolina, and Trinity Fibers of Carolina, Inc. of High Point, NC. EPA confirmed that air emissions of toluene diisocyanate (TDI) and other chemical irritants from the facilities have caused or contributed to adverse health effects experienced by residents living nearby. The two plants closed as a result of the order and the company has elected to relocate. This was the first Section 303 CAA action taken by the Region.

In addition, EPA issued a unilateral administrative order (UAO) to Trinity on June 27, 1997, pursuant to the imminent and substantial endangerment authority provided by Section 1431 of the SDWA. The UAO requires Trinity to sample groundwater wells used for drinking water within a 3/4 mile downgradient and cross-gradient radius from the facility.

On August 11, 1997, Trinity American Corporation filed a notice of the filing of a Petition of Appeal of the UAO. The Fourth Circuit Court of Appeals, in a decision dated August 4, 1998, upheld in every respect EPA's issuance of the UAO pursuant to Section 1431 of the SDWA. The decision is one of only three nationwide addressing Section 1431, and contains precedential language regarding EPA's authorities and thresholds for finding an imminent and substantial endangerment. The Fourth Circuit held that EPA need not demonstrate that individuals are drinking contaminated water to justify issuing an emergency order, that the Agency's authority to take action to protect public health is very broad, and that EPA's requirements for quarterly sampling and provision of safe water are reasonable.

Plum Creek Manufacturing (Montana): On October 22, 1997, a consent decree was entered settling the pending litigation concerning Clean Air Act New Source Performance Standards (NSPS) violations at Plum Creek Manufacturing's facility in Pablo, MT. In the decree, Plum Creek agreed to pay \$300,000 in civil penalties to the United States and to spend an additional \$75,000 on the purchase and delivery of clean, washed, sieved road sanding materials to be treated as a SEP. The sand will be distributed to the Confederated Salish and Kootenai Tribes of the Flathead Reservation, and to state and local entities which maintain roads within the vicinity of the Pablo facility. These entities will use the sand on iced-over roads in winter, reducing the typically high concentrations of particulate matter (PM) emissions into the ambient air in the Pablo area during that time of year. This is expected to result in a decrease in PM concentrations of between 27% and 74% during the time the sanding material is utilized. Plum Creek has also agreed to comply with all applicable NSPS requirements for the life of the Wellons boiler. Plum Creek has accomplished this by means of a new electrostatic precipitator installed at a cost of approximately \$1 million. It has also installed a new continuous monitoring system. Furthermore, Plum Creek will replace an old oil-fired boiler which was used very infrequently with a gas-fired boiler. The gas-fired boiler will emit less than 40 tons of sulfur dioxide per year.

Criminal Cases

U.S. v. H & J Auto Inc.
U.S. v. Louisiana Pacific Corporation
U.S. v. Safewaste Inc.
U.S. v. Saybolt, Inc.
U.S. v. Hess Environmental Laboratories Inc.
U.S. v. Barry Shurelds
U.S. v. Ruben Brown
U.S. v. Frank V. Carlow
U.S. v. Warner-Lambert, Company Inc.
U.S. v. Royal Caribbean Cruise Lines, Ltd.
U.S. v. BFI Medical Waste Systems, Inc.
U.S. v. City Sales Ltd.
U.S. v. American Scientific Technology, Inc.
U.S. v. Neptune Fireworks, Inc.
U.S. v. Holland American Cruise Line
U.S. v. Lam Pine, Inc.
U.S. v. T.T. Barge
U.S. v. T&T Fuels, Inc.
U.S. v. Surpass Chemical Company, Inc.

Union Oil Company of California (Alaska): This case involves Clean Air Act violations at UNOCAL's urea and ammonia plant in Kenai, Alaska. The company operated its facility contrary to procedures resulting in excess emissions of at least 1,200 tons of hydrocarbons in 1995 and 6,600 tons of carbon monoxide between 1987 and 1992. An unpermitted change to the facility also caused a significant increase in particulate emissions. To settle the case, UNOCAL agreed to pay a civil penalty of \$550,000 and to perform two SEPs costing over \$6.6 million. The projects include development and implementation of an operations and maintenance program to monitor combustion efficiency and substantially reduce hydrocarbon and carbon monoxide emissions. UNOCAL also agreed to reduce ammonia emissions by about 1,200 tons per year at a cost in excess of \$6.6 million and to reduce substantially the risk of catastrophic emissions caused by major process upsets.

Clean Water Act

Hudson Foods: On May 8, 1998, Hudson Foods, a subsidiary of the Arkansas-based food processing company Tyson Foods Inc., agreed to a \$6 million settlement to resolve allegations it polluted Maryland waters that flow into the Chincoteague Bay. According to the government, Hudson's Berlin plant discharged wastewater with illegal amounts of fecal coliform, phosphorous, nitrogen, ammonia and other pollutants into Kitts Branch, which flows into Trappe Creek, Newport Bay, and Chincoteague Bay. The government's lawsuit also alleged that Hudson violated pollution monitoring, sampling and notification requirements in its Clean Water Act permit. These requirements include ensuring that testing equipment is accurate, lab tests are performed properly, and sampling records are up to date.

Under the settlement, the company will pay a \$4 million civil penalty and spend \$2 million to stem the flow of water-polluting agricultural run-off from Hudson's and Tyson's processing plants and farms in Maryland, Virginia, Delaware and Pennsylvania. The \$2 million Hudson will spend on environmental projects will reduce nitrate discharges from Tyson and Hudson Food facilities and reduce phosphorous runoff into local waterways. The settlement also requires the food processing companies to assist their poultry growers across the Delmarva Peninsula to develop and implement site-specific nutrient management plans that will help prevent pollution and protect the environmental health of waterbodies throughout the Region.

City of New Orleans (Louisiana): On April 8, 1998, the City of New Orleans agreed to a settlement worth more than \$200 million to address allegations that its sewage collection system spilled raw sewage into nearby waters, as a result of the city Sewerage and Water Board's failure to properly maintain its treatment and collection system, and in violation of the federal Clean Water Act. Under the settlement, the Sewerage and Water Board will renovate its antiquated sewage collection system to prevent future sewage discharges into the Mississippi River and other nearby waters. It also will pay \$1.5 million in civil penalties and spend \$2 million improving water quality along Lincoln Beach, a park that was created to serve African-Americans who were barred by law in the 1960's from admission to the then white-only Pontchartrain Beach amusement park.

City of Atlanta (Georgia): On April 13, 1998, EPA, DOJ, the State of Georgia, and City of Atlanta agreed to a settlement to upgrade Atlanta's sewer system, which regulators and a citizens group have alleged has been spilling partially treated sewage into nearby waters throughout the city for several years. Under the proposed agreement announced at a U.S. District Court hearing, Atlanta will pay a \$2.5 million penalty to resolve alleged federal Clean Water Act violations, spend \$27.5 million cleaning the city's rivers and streams and preserving riverbank property, and replace part of the city's antiquated sewer system at an estimated cost of several hundred million dollars.

Puerto Rico Aqueduct and Sewer Authority (Puerto Rico): On October 16, 1997, Region 2 issued seven §309 (g) Class II administrative penalty complaints proposing the assessment of a total of \$683,500 in Clean Water Act penalties in cases involving the Puerto Rico Aqueduct and Sewer Authority (PRASA). PRASA is a public corporation and an autonomous governmental instrumentality of the Commonwealth of Puerto Rico created for the purpose of providing water and sanitary sewer service to the inhabitants of Puerto Rico. The administrative complaints allege PRASA's failure to implement its industrial pretreatment program by failing to develop plant-specific local limits applicable to industrial users at the seven plants and to place such limits in its industrial user permits. On August 26, 1998, Region 2 entered into a consent order with PRASA settling the cases against the seven wastewater treatment plants. The aggregate penalty amount for all seven plants is \$65,000. In addition, PRASA is required to spend at least \$210,000 on three SEPs which will reduce the possibility of sewer system by-passes, thus reducing the amounts of pollutants which may reach the waters without receiving adequate treatment.

Gulf Park Water Company, Inc., Johnson Properties, Inc., and Glenn and Michael Johnson (Mississippi): On December 30, 1993, DOJ filed a complaint against Gulf Park Water Company, Inc., Johnson Properties, Inc., and Glenn and Michael Johnson for violations of Section 301 of the Clean Water Act. The defendants own and operate a wastewater treatment facility in Gulf Park Estates, Jackson County, MS. Since 1985, the defendants had been violating the CWA by discharging treated wastewater to the Mississippi Sound without the authorization of an NPDES permit.

On April 20, 1997, the U.S. District Judge found all defendants liable for violating the CWA. Therefore, the only issues that remained for trial were the assessment of the penalty and injunctive relief. The trial was held in May 1997. The defendants claimed that they were unable to pay the penalty and presented a financial expert at trial that testified accordingly. The court found that there was conflicting financial information and appointed a special master to evaluate the financial experts' testimony.

On March 11, 1998, the court concluded that although Johnson Properties had a cash flow problem, Johnson Properties and Glenn Johnson had substantial assets and could pay a penalty of \$1.5 million. Since the filing of the complaint, Gulf Park had been physically connected to a Regional wastewater system, but could not discharge to it until it paid the Regional Authority \$44,000. Gulf Park finally paid the fee during the summer of 1997 and began discharging to the Regional wastewater system.

ConAgra (Idaho): After three years of intensive litigation, ConAgra agreed to settle a judicial action EPA brought against the company for Clean Water Act violations at its Armour Meat slaughterhouse in Nampa, ID. The settlement requires payment of a civil penalty of \$1 million. In addition, ConAgra agreed to cease all land application of its wastewater on-site, to build new wastewater treatment ponds costing about \$1.5 million, and to move its cattle feedlot off-site at a cost of about \$1,032,000. The total value of the settlement, including the penalty, injunctive relief, and supplemental environmental project, exceeds \$3.5 million.

Cominco (Alaska): A consent decree was entered on November 25, 1997, resolving Clean Water Act violations that occurred at Cominco's lead-zinc mine in Alaska. It requires payment of a \$1.7 million penalty, and includes several supplemental environmental projects (SEPs) with an aggregate cost exceeding \$3 million. The SEPs include an extensive groundwater monitoring study of the effects of the mine's large tailings pond on the surrounding permafrost, the risks of eventual contamination of ground or surface waters, and the long-term structural integrity of the pond. Smaller SEPs will study the impacts on and protect aquatic life from wastewater discharges.

Emergency Planning and Community Right-to-know Act

Royster-Clark, Inc. (Wisconsin): Royster-Clark agreed to pay a \$12,000 EPCRA §313 penalty on February 23, 1998 and to perform a SEP costing at least \$219,777. The SEP will involve installation of a new process for manufacturing agricultural fertilizer. The new process will eliminate the use of 1,480,000 pounds per year of sulfuric acid, 3,466,000 pounds per year of phosphoric acid, and 750,000 pounds per year of ammonia. Royster-Clark's market for fertilizer is largely in the southeastern U.S., in areas with sandy soil. In the new manufacturing process, the fertilizer will be attached to a molecule of clay, and will therefore be less likely to be washed out by rain and contribute to enrichment of streams. Although the releases of sulfuric acid, phosphoric acid, and ammonia at the Madison, WI, facility were very small, the potential for reduction in water pollution from fertilizer runoff is considerable.

Sinclair Oil Corporation, Tulsa Refinery (Oklahoma): The largest ever EPCRA §313 enforcement case for Region 6 was settled on May 19, 1998. Discovered violations included 10 counts for non-reporting EPCRA §313 chemicals and 28 counts for data quality errors on emissions from Form R. In the consent agreement Sinclair agreed to pay a \$201,968 penalty and implement a \$350,000 supplemental environmental project. The project involves the construction of a 70,000 barrel external floating roof tank to store waste water prior to treatment. Fugitive emissions of VOCs are expected to be reduced by as much as 8000 pounds per year.

Weyerhaeuser Company (Washington): A consent agreement and consent order resolving CERCLA §103(a) and EPCRA §304 violations against Weyerhaeuser Company was filed on March 17, 1998. The underlying complaint charged the company with failure to immediately notify the National Response Center of the accidental release of crude sulfate turpentine, a hazardous substance, and to provide written followup notice to state emergency

response commissions and local emergency planning committees. The release occurred at Weyerhaeuser's Longview, WA, facility. Weyerhaeuser had a prior history of similar violations at the same facility. In the settlement, the company agreed to pay a civil penalty of \$400,000 and to complete a supplemental environmental project at a cost of \$305,710. The supplemental environmental projects requires the provision of emergency response equipment to local emergency response centers and development and operation of an Internet site with current meteorological data from the facility to enable emergency response centers to more rapidly and accurately project the likely spread of any future chemical release. In addition, Weyerhaeuser undertook \$6 million of environmental improvements at the facility in response to EPA's concerns about the repeat notice violations.

Federal Insecticide, Fungicide, and Rodenticide Act:

DuPont: On April 30, 1998, an administrative law judge imposed the largest administrative penalty in EPA's history — \$1.89 million — against DuPont for ignoring EPA orders to stop shipping pesticides with inadequate labels. The labels failed to state that protective eyewear is required when using the product to protect against the risk of accident or injury. DuPont shipped pesticides on about 380 occasions with labels that omitted the protective eyewear warnings required by the Worker Protection Standard rule, which was enacted under FIFRA in August 1992. This is the first case to be tried under the rule. EPA charged DuPont with improperly labeling four herbicides sold and distributed under DuPont's Bladex and Extrazine II product lines. Based on information obtained from DuPont, EPA calculated that the company made more than \$9.4 million from the sale of its mislabelled pesticides.

The Worker Protection Standard requires that all pesticide products sold and distributed after April 21, 1994 display proper warning labels. The rule, which covers more than 3.5 million farm workers and other pesticide handlers, is designed to limit workers' exposure to pesticides, reduce adverse health effects when exposure occurs, and inform and educate workers about hazards associated with occupational pesticide use.

Microban Products Company: On September 18, 1998, an administrative law judge issued a decision finding Microban Products Company liable for making unlawful public health claims in the sale and distribution of its antimicrobial pesticide, Microban Plastic Additive "B" to Hasbro Inc. for use in toys. In its sales promotion material, the company unlawfully claimed that the pesticide would reduce the growth of many common and harmful bacteria by 99.9 percent. A hearing will be scheduled later to decide the appropriate penalty. The ruling ensures that unsubstantiated claims by companies, such as those made by Microban, do not put the public health at risk.

Atlantic Mills (New Jersey): Region 2 issued an administrative consent order in July 1998 resolving a FIFRA enforcement action against Atlantic Mills, Inc. of Lakewood, NJ. The settlement contains two SEPs with a combined worth of more than \$150,000, and assesses a penalty of \$15,000. The Region had filed a complaint against Atlantic Mills, a manufacturer and exporter of pesticides, alleging that on 11 separate occasions in 1997 Atlantic Mills distributed or sold unregistered pesticides in violation of FIFRA. Additionally, Atlantic Mills was charged with two counts of producing a pesticide in an unregistered establishment.

The settlement requires Atlantic Mills to develop and present two different educational programs regarding antimicrobial pesticides. One program, directed to manufacturers and distributors of food service products for which antimicrobial pesticidal claims are made, is intended to increase compliance with FIFRA. The second program, directed to food service operators, is intended to promote and improve sanitation and hygiene in the food service industry.

Safetec of America (New York): In September 1998, Region 2 issued a consent order to Safetec of America, Inc. of Buffalo, NY, in settlement of an administrative penalty action under FIFRA. The consent order requires the company to pay a civil penalty of \$100,500. Safetec violated FIFRA by selling certain products which were not registered by EPA for sale as pesticides. The company made numerous claims — in the labels on the products and in advertising catalogues — of antimicrobial, disinfectant properties for these products, which included surface wipes and towelettes for use in health-care facilities and elsewhere, as well as spill control products, or “encapsulators,” which are used to clean up human bodily fluids in health-care facilities. FIFRA prohibits making such claims for products which have not undergone EPA review for effectiveness and safety. This was one of the first actions by EPA to classify such “encapsulators” as unregistered pesticidal products. In addition, Safetec violated FIFRA by failing to submit in a timely manner an annual report on its pesticide production for 1996.

Pursuant to the consent order, Safetec will comply with FIFRA by removing pesticidal claims from its product labels and catalogue descriptions. The company will also send letters to its distributors which advise them that the label and catalogue changes were made to inform the public that the products are not sanitizers, disinfectants or alternative medical waste treatments. In addition, the company will remove its name and products from state lists of alternative medical waste treatment technologies, since such lists bear evidence of pesticidal intent for those products.

Resource Conservation and Recovery Act

Handy and Harman Electronics Material Corporation (Massachusetts): On March 27, 1998, EPA reached agreement with Handy and Harman Electronic Materials Corporation for the payment of a \$132,125 penalty for hazardous waste and community reporting violations at the company’s facilities in North Attleboro, MA and East Providence, RI. These two facilities manufacture specialty electronic components by electroplating metal with precious metal and non-precious metal solutions. EPA cited the company for the following RCRA violations: improper hazardous waste container management practices; failure to segregate incompatible hazardous waste; failure to properly classify wastes as hazardous; failure to conduct inspections where hazardous waste is stored; failure to provide training to employees who handle hazardous waste; and failure to maintain a current contingency plan to respond to hazardous waste spills. EPA also settled its claims against Handy and Harman under EPCRA. In 1993 and 1994, Handy and Harman failed to maintain complete records for copper, nickel, hydrochloric acid, and sulfuric acid. Additionally, the company failed to accurately report the amount of copper and nickel transferred off-site.

Puerto Rico Aqueduct & Sewer Authority (Puerto Rico): On May 21, 1998, Region 2 issued a consent order in settlement of an administrative proceeding under RCRA §9006 against PRASA for underground storage tank violations at 19 of its facilities in Puerto Rico. PRASA violated the UST regulations by failing to comply with leak detection and permanent closure requirements. As part of the settlement, PRASA complied with leak detection requirements at two facilities and was ordered to permanently close USTs at the remaining facilities. PRASA also agreed to pay a civil penalty of \$95,000 and perform two SEPs valued at \$105,000. The first SEP involves a site assessment and use of innovative technology in an attempt to cleanup a contaminated well located in Juana Diaz, PR. The second SEP involves the installation of telemetric measuring devices in wastewater pump stations at PRASA's sewage treatment systems in Trujillo Alto (Bridge) and Sabana, Llana pump stations in Puerto Rico. The telemetric measuring devices detect pump station malfunctions and thereby reduce the threat of undetected bypasses at these pump stations which could result in thousands of gallons of untreated sewage being discharged.

United States Steel (Alabama): On February 13, 1998, a consent decree was entered settling RCRA violations against United States Steel (USX) in Fairfield, AL, and requiring facility-wide cleanup of contamination. USX had continuously failed to make hazardous waste determinations on its wastestreams, and illegally disposed of hazardous waste without a permit or interim status. In addition, groundwater monitoring at the facility indicated the presence of groundwater contamination from hazardous constituents. The terms of the settlement are that USX will pay a \$1 million civil penalty and perform two SEPs (a PCB-transformer replacement and a brownfields economic redevelopment), the combined values of which will be at least \$1.2 million. For injunctive relief, USX must perform corrective action at the facility; stop the practice of reinserting flush solvent waste from the pipe mill varnish operation back into the varnish operation; stop the practice of disposing of its flush solvent waste from the pipe mill at Exum landfill, a solid waste landfill; isolate the wastes from the pipe mill practice that were disposed of at Exum landfill and fence in the entire landfill; perform an investigation and, if necessary, corrective action at Exum landfill; and perform RCRA closure at the coke plant.

Petroleum Wholesale, Inc. (Texas): On August 26, 1993, and September 9, 1993, EPA and the Texas Natural Resource Conservation Commission jointly inspected facilities owned by Petroleum Wholesale, Inc. (PWI) located at seven facilities in Houston, Texas. Twenty-seven USTs were found to be out of compliance with federal UST regulations, resulting in a total of 80 violations. A consent agreement and consent order was issued on May 15, 1998, to PWI which included a penalty of \$274,000, primarily for failure to conduct adequate release detection for UST systems. Release detection systems are necessary to enable owners and operators to detect releases from USTs in sufficient time to prevent major releases of product into the environment.

Mr. Louis Wyman (Colorado): Region 8 issued a unilateral administrative order under RCRA §7003 to the oil pit operator, Mr. Lou Wyman, who has a commercial oil field waste disposal operations known as Williams Fork Waste Systems located south of Hayden, CO. The entire surface of one pond, which is approximately 1.2 acres in size, is covered with oil. The second pond is also over two thirds covered with oil. The ponds are also filled to capacity

which is in violation of the Colorado Solid Waste Regulations requiring at least two feet of “freeboard.” The facility has no security and inadequate fencing which results in uncontrolled access to pedestrian and vehicular traffic, and wildlife. The facility has received many notices of violations by the state; and has been the subject of local government inquiries, hearings, and abatement actions since the 1980s. The Region has coordinated its action with the Fish and Wildlife Service, the State of Colorado, and Routt County. The UAO requires the operator to clean the ponds and assure that the ponds will be permanently kept clean, address the security and access issues in a variety of ways, and develop a permanent method for maintaining two feet of freeboard.

Conoco Refinery (Colorado): On March 18, 1998, Region 8 filed a complaint against Conoco’s Denver Refinery seeking a penalty for failure to comply with numerous RCRA generator requirements from 1992 to 1995. On August 7, 1998, the parties finalized a consent agreement which requires Conoco to pay a cash penalty of \$112,500 and perform a SEP valued at \$627,500. The SEP — a reduction of sulfur emissions by 200 tons/year — will alleviate citizen concerns regarding odors and minor respiratory problems alleged in a citizen’s suit brought by Colorado Public Interest Research Group. This case represents the coordination of EPA, Conoco, the State of Colorado Air Program, the citizen group, and the community at large.

Safe Drinking Water Act

New York City: On May 20, 1998, New York City agreed to build a filtration plant for its Croton Drinking Water System to reduce the risk of cryptosporidium and other contaminants for its nearly one million residents, including the elderly and young. Under the settlement filed in U.S. District Court in Brooklyn, the City will build the filtration plant no later than September 2006, spend \$5 million primarily on projects to protect the Croton watershed, and pay a \$1 million penalty to resolve an April 1997 lawsuit brought by the federal government. The suit alleged that the City violated the federal Safe Drinking Water Act by failing to filter the Croton water supply. New York State intervened as a plaintiff in the lawsuit and also was a party to the settlement. New York City will monitor the quality and safety of its Croton Drinking Water System until the filtration system is in full operation. The watershed protection measures the City will implement include, purchasing land and replacing faulty septic tanks with sewers, and preventing storm water runoff from contaminating the watershed.

Superfund

Gould Superfund Site (Oregon): On May 14, 1998, a consent decree was entered for cleanup of the Gould Superfund Site in Portland, Oregon. The settling defendants include NL Industries, Gould Electronics, Johnson Controls, Exide Inc., Lucent Technologies, Rhone-Poulenc, Burlington Northern-Santa Fe Railway Co., ESCO Corp., and Schnitzer Investment Corp. The decree requires the defendants to implement a \$15 million remedial action and to reimburse EPA for oversight and response costs totaling more than \$100,000.

Talache Mine Superfund Site (Idaho): On June 22, 1998, EPA issued a CERCLA unilateral administrative order to Monarch Greenback directing time-critical removal activities designed to stabilize waste at the Talache Mine Superfund Site in Atlanta, ID. These interim activities

have been completed. EPA has since directed Monarch Greenback to perform preliminary work on a non-time critical removal. This site consists of two large piles containing tailings from historic gold mining operations, and areas where tailings have been released in the past (for instance, in May 1997, at least 35,000 cubic yards of contaminated tailings were discharged into an adjacent wetland, and then into tributaries of the North Fork of the Boise River). The tailings contain significant concentrations of arsenic and other hazardous substances.

Sapp Battery Site (Florida): On October 2, 1997, a summary judgment was entered in favor of the United States in the case of *U.S. v. Ben Shemper & Sons, Inc.; M. Bernstein Metal Co.; Dynamic Metals, Inc.; Gulf Coast Recycling, Inc.; Southern Scrap Metals; and Taracorp, Inc.* Defendants were held jointly and severally liable for response costs incurred at the Sapp Battery Superfund Site, as well as prejudgment interest totaling almost \$4 million. The defendants were also held liable under CERCLA for all future response costs at the site. In addition, defendant Ben Shemper & Sons, Inc. was found liable for failure to comply with an administrative order directing cleanup of the site.

The Sapp Battery Site is a former battery-cracking facility near Cottondale, FL. From 1970 to 1980, tens of thousands of spent batteries were cut open to recover lead for resale. Over the years, severe acid and heavy metals contamination occurred at the site. The site was listed on the NPL in 1982. In 1991, after 10 years of study, cleanup, and settlement negotiations, EPA issued a CERCLA §106 order to some 225 PRPs. As a result, several dozen major PRPs entered into a consent decree with the United States to fund and undertake the cleanup at the site. Many others entered into *de minimis* settlements. Six of the PRPs that did not enter into the consent decree became the subject of this case.

Industri-Plex Superfund Site (Massachusetts): This site is a successful example of EPA's effort to achieve both the remediation and the reuse of a Superfund site. The site includes approximately 245 acres, of which about 110 acres contain heavy metals (lead, arsenic, and chromium) in the soils. Additionally, benzene and toluene hotspots exist in a portion of the groundwater. The remedy for the site is construction of a variety of covers over the contaminated soils, measures to address the groundwater contamination, and institutional controls. A group of responsible private parties is performing and paying for the remedy. Construction of the covers was completed in 1998. Groundwater cleanup is ongoing, and institutional controls to ensure the long term protectiveness of the remedy are being completed.

At the same time that remediation has been proceeding, significant portions of the site are being developed or redeveloped for economic reuse. As part of the consent decree, EPA, the responsible parties, and the City of Woburn formed a custodial trust to hold title to, manage and develop about 120 acres of the site contributed by the prior owner as "payment" of his share of the remediation costs. The trustee has worked actively to promote development of that property. EPA has entered into prospective purchaser agreements with purchasers of three different parcels of the site that protect those parties from Superfund liability. One agreement is with a private company that is operating a recycling center. A second is with three state agencies who are constructing and operating a Regional transportation center (RTC) consisting of a commuter rail station, a commuter express bus facility with service to Logan Airport and downtown Boston, and a new interchange from the adjacent Interstate highway

onto the site. The third is with a private company that will be constructing and operating a large retail store. A fourth agreement with a private company to develop an office park on yet another parcel of the site is currently being negotiated. In addition, the City of Woburn is upgrading and extending the main road that runs through the site.

Reuse offers considerable environmental benefits. In constructing the RTC, the three state agencies will be installing a cap three feet thicker than required by EPA. The RTC also will remove 2400 vehicles daily from entering Boston, reducing traffic and helping the state comply with the Clean Air Act. Additionally, keeping viable companies and state agencies operating on the site helps ensure that the protective covers will be properly maintained and repaired.

Sangamo Weston/Twelve Mile Creek/Lake Hartwell PCB Contamination (South Carolina): This site comprises Lake Hartwell, certain tributaries, and seven properties in Pickens County, SC. The Sangamo Plant manufactured capacitors containing PCBs. PCBs and other hazardous substances were disposed of on the Sangamo plant and at the satellite properties. Effluents containing PCBs were also discharged into surface waters. Two significant actions were taken at this site in FY98:

- ▶ A complaint was filed in District Court in May 1998 seeking recovery of all past costs incurred at the site through FY97. A consent decree entered on September 23, 1998 requires the defendant to pay the United States \$5,635,286 for past response costs incurred for the site plus interest.
- ▶ A unilateral administrative order was issued for Operable Unit Two, which comprises the sediment, surface water, and biological migration routes downstream from the Sangamo Plant and satellite disposal areas that have site-related PCB-contamination. A Record of Decision had been issued for this site in 1994. The respondent, Schlumberger Resource Management Services, Inc., began to voluntarily perform work at the site with EPA oversight but a formal agreement could not be reached. Upon resolution of outstanding cost issues at the site, Region 4 issued the UAO on September 25, 1998 which requires Schlumberger to implement a fish consumption advisory and a public education program, to perform annual aquatic biota and sediment monitoring to determine PCB levels in fish and other aquatic life, and to pass sediments through three impoundments to facilitate burial of PCB-impacted sediments further downstream. The estimated cost of this remedy is approximately \$55 million.

Interstate Lead Company Superfund Site (Alabama): In an April 1997 consent decree, a group of large quantity generators — the ILCO Site Remediation Group — agreed to perform and fund the complete design/remedial action for the site, at an estimated cost of \$59,440,500. The ILCO Site Remediation Group received orphan share compensation in the form of a \$14 million credit against outstanding past response costs and agreed to reimburse the government for the balance of \$1.82 million. The consent decree also provided that proceeds from *de minimis* settlements would be split evenly between EPA and the ILCO Site Remediation Group with EPA's share to be applied against outstanding past costs.

On April 4, 1998, EPA Region 4 entered into an AOC with 210 *de minimis* parties at the site. Under the terms of the settlement, approximately \$2.14 million will be collected toward past cleanup activities at the site and future response costs. This amount will be split equally between EPA and the ILCO Site Remediation Group. EPA's share will be used to reimburse the Superfund for outstanding past costs and the ILCO Site Remediation Group's share will go into a special account to fund future work at the site.

A CERCLA §122(h) ability-to-pay settlement for recovery of response costs was entered into between EPA and the City of Leeds and the ILCO Site Remediation Group on September 2, 1998, which includes an agreement to reimburse EPA and the City of Leeds \$25,000 each.

LCP Chemicals-Georgia Site (Georgia): On March 23, 1998, an agreement and administrative order on consent for removal action under CERCLA Sections 104, 106, and 122 with three PRPs at the site was deemed final following expiration of the requisite period of notice and comment. Under the terms, EPA preauthorized \$1.7 million in mixed funding for the final stage of removal action to be performed at the site by the respondents; the agreement and administrative order also comprised \$4.6 million in past costs incurred by EPA during prior removal activities at the site.

The site consists of about 500 acres of tidal saltwater marsh and about 50 acres of upland. Following the February 1994 shutdown of the chemical plant, EPA issued unilateral administrative orders for removal to the PRPs at the site. Three of the PRPs receiving a unilateral order thereafter undertook extensive removal activities in the upland portion of the site, and performed focused studies and general investigations site-wide. These same three PRPs are the respondents to the 1998 agreement and administrative order; it is estimated that their overall removal response costs could eventually total \$40 million.

ICG Iselin Railroad Yard Site, Jackson (Tennessee): On November 20, 1997, EPA entered into a prospective purchaser agreement (PPA) with the Tennessee Wildlife Resources Agency (TWRA) to facilitate the purchase and preservation of wetlands and bottomland hardwood forests adjacent to the ICG Iselin Railroad Superfund Site. The site was placed on the NPL on December 16, 1994 and is a non-Fund financed state enforcement lead project under a 1994 agreement between EPA and the Tennessee Department of Environment and Conservation. TWRA is purchasing the 355-acre property lying south/southwest of the site to manage in perpetuity solely in conformance with state law which includes uses for complimentary educational and recreational purposes which are passive and noncommercial. EPA believes that this PPA (which provides a covenant not to sue) will benefit the citizens of Tennessee.

Murray Smelter (Utah): The site, located immediately to the south of Salt Lake City, in Murray, UT, is the location of the former Murray and Germania Smelter facilities. The smelters, which operated from the late 1800s until 1949, caused soil and ground water contamination through stack emissions and poor handling and storage of flue dust and arsenic trioxide. The former owner and operator of the facility, Asarco Inc., performed a site investigation and feasibility study under a 1995 administrative order. These studies, which were approved by EPA, were the foundation for a Record of Decision for the site, which was issued on April 1,

1998. The ROD calls for excavation and off-site disposal of extremely high level arsenic bearing soils, excavation and disposal of lower level arsenic bearing soils in an on-site repository, excavation and replacement of high lead level soils in specific residential areas, and natural attenuation (including institutional controls) of ground water.

EPA worked with Asarco, the City of Murray, the State of Utah, current landowners, and prospective purchasers to develop a settlement strategy that would result in full cleanup and redevelopment of this blighted area. As a result of this process, all parties signed the consent decree, and the prospective purchasers, through a PPA, will build a medical campus, movie theaters, and other commercial-retail establishments. The consent decree, entered on August 19, 1998, provides that Asarco will perform full cleanup on the site and reimburse all response costs. Two federal agencies considered by EPA to be Section 107(a)(3) arrangers during World War II will also be resolving their potential liability to Asarco in the decree. Pursuant to the consent decree, the City of Murray commits to implement and enforce institutional controls along with Asarco. The current landowners are required to provide access and comply with all institutional controls, some of which are dedicated property interests granted by those parties to Asarco and the City. The approximate total of all response costs at the site is \$16.5 million.

Libby Groundwater Superfund Site (Montana): The site is located in northwestern Montana in and adjacent to the City of Libby. The site was originally part of a lumber and plywood mill complex which produced timbers and poles that were treated with creosote and pentachlorophenol, along with carrier oils. Groundwater contamination was first detected in domestic wells within the City of Libby in 1979 and the site was placed on the National Priorities List in 1983. As of August 1998, the remedy is complete except for ongoing long-term groundwater biotreatment. Approximately 13 acres in size, the property contains a park, several buildings formerly utilized as a motel, a convenience store, and a chiropractor's office. The site owner, Stimson Timber Company, received a proposal to sell part of the site to a new developer to build a shopping center. The new companies, P.O.B. Montgomery and Albertsons, requested a Prospective Purchaser Agreement prior to accepting title.

The companies were willing to pay for the costs associated with obtaining a PPA as well as to conduct the remaining work needed at the property, including the abandonment of one monitoring well and the modification of four monitoring wells to protect against damage from surface activities at the property. The new development — approximately 60,000 square feet of retail development occupied, in part, by national level chain stores — is expected to generate approximately 100 permanent jobs for the community, a \$4.8 million increase in the local tax base, and \$17 million annually in sales. The PPA was signed in August 1998.

Toxic Substances Control Act

New Jersey Department of Corrections: On November 13, 1997, Region 2 issued a consent order to the New Jersey State Department of Corrections under which that agency agreed to pay a civil penalty of \$476,196 and spend over \$2.2 million for SEPs. The settlement resolved an administrative complaint under TSCA for violations of PCB regulations. The complaint had cited 16 violations of TSCA that occurred at two different facilities owned and

operated by the Department in Yardville and Avenel. EPA inspections of these facilities revealed numerous violations of inspection, record-keeping, disposal, marking, and registration requirements concerning PCB transformers. The SEPs will include the removal and disposal of PCB transformers, electrical upgrades, and environmental assessments at the Department's facilities throughout New Jersey.

Safety-Kleen Corporation: On July 31, 1998, EPA Region 5 signed a consent agreement and consent order resolving allegations that Safety-Kleen had violated Sections 5 and 13 of TSCA . The company will pay cash penalty of \$141,500 and undertake an innovative SEP to treat PCBs worth \$667,000. The SEP targets treatment of PCB oil in environmental justice communities and at not-for-profit entities that might otherwise go untreated. In a 1996 complaint, EPA had alleged that Safety-Kleen manufactured and imported "Luwa Bottoms" without proper premanufacture notice.

East Ohio Gas Company: On July 13, 1998, Region 5 filed a consent agreement and consent order resolving 161 alleged violations of PCB regulations under TSCA which had been self-disclosed to the Agency by the East Ohio Gas Company (EOG). Pursuant to EPA's Self-Disclosure Policy, EPA reduced the gravity portion of the proposed civil penalty of \$1,247,460 by 100% and required EOG to pay a penalty of \$193,260, which represented the economic benefit to EOG of the disclosed violations. As part of the settlement, EOG also certified that it is currently in compliance with TSCA.

On June 8, 1995, EOG voluntarily disclosed violations at its facilities located near Cleveland, OH. As part of the self-disclosure, EOG also notified EPA that similar violations of TSCA may have existed elsewhere in its multi-facility gas distribution system and that EOG intended to immediately conduct a company-wide audit of all of its facilities to determine its compliance with TSCA. The company disclosed additional violations of TSCA on four occasions in 1995 and 1996. On April 6, 1998, EOG completed a lengthy and extensive audit of its facilities, and submitted those findings to the Agency.

5.2 | Criminal Cases

U.S. v. H & J Auto Inc., et al. (Oklahoma): Carl E. Hines ran a salvage yard as a cover for an interstate methamphetamine manufacturing and distribution network. His efforts to dispose of trailer loads of 55-gallon drums of hazardous waste, which had accumulated at his salvage yard over the years, prompted Oklahoma Department of Environmental Quality interest, a subsequent investigative referral to EPA's criminal division, and a series of false explanations to law enforcement officers concerning the disappearance of the drums. Of the five defendants in the case, three pled guilty prior to trial. Jack Hensley pled guilty to conspiracy to manufacture and distribute methamphetamine; former Marshall County Sheriff Decco Bazter pled guilty to conspiring to manufacture, possession with intent to distribute methamphetamine, possession of methamphetamine, intimidating a federal witness, aiding and abetting the possession of a firearm by a convicted felon, and conspiracy to illegally transport hazardous waste; and Bill Orange, pled guilty to conspiring to illegally transport hazardous waste. On February 12, 1998, Carl Hines and Daniel R. Martin were convicted by a federal jury in

Oklahoma. Hines was convicted of conspiring to manufacture, possession with intent to distribute and distribution methamphetamine; attempt to manufacture methamphetamine; possession of a firearm after a felony conviction; intimidating a federal witness; causing the illegal transportation of hazardous waste without a manifest; and conspiring to illegally transport hazardous waste.

On June 23, 1998, all five defendants were sentenced. Hines was sentenced to a non-pardonable prison term of 420 months and to 120 months of supervised release. Martin was sentenced to two non-parolable prison terms of 240 months and a 120-month term of supervised release. Baxter was sentenced to concurrent terms of 102 months imprisonment and a 120-month term of supervised release. Hensley was sentenced to a 76-month prison term and a 60-month term of supervised release. Orange was sentenced to a 27-month prison term and a 36 month term of supervised release.

U.S. v. Louisiana Pacific Corporation, et al. (Colorado): Louisiana Pacific Corporation operates a wood products plant at Olathe, CO. An indictment alleged that plant mill manager Dana Dulohery and plant superintendent Robert Mann conspired to violate the Clean Air Act, filed false reports with the Colorado Department of Public Health and Environment and EPA, and committed mail and wire fraud. The defendants were indicted on 50 felony counts. On February 18, 1998, Robert Mann was sentenced to six months incarceration, five years of supervised probation, and fined \$10,000. On April 3, 1998, Dana Dulohery was sentenced to 10 months incarceration, three years supervised probation, and fined \$15,000. On May 28, 1998, Louisiana Pacific Corporation pled guilty to 14 felony counts for violating the CAA and four felony counts for consumer fraud. The company was fined \$36.5 million and ordered to pay \$500,000 in restitution. This was the largest fine ever collected under the Clean Air Act.

U.S. v. Safewaste Inc., et al. (California): In 1993, the Sacramento Fire Department inspected a warehouse leased by Frank Fiorillo, Jr. and Art Krueger which led to the discovery of illegally stored hazardous wastes. A subsequent search warrant by the Sacramento County Environmental Crimes Task Force revealed more wastes illegally stored in a concealed room, rocket motors, warheads, 17,000 artillery shells, and 7,500 pounds of explosives. The investigation disclosed that Fiorillo and Krueger operated Safewaste and West Coast Industries, Inc. They had contracted with Diversey Inc., a national manufacturer of cleaning chemicals based in Michigan, to handle its off-specification material as a hazardous waste. The material was taken to their Sacramento warehouse where much of it was hidden in the concealed room. Fiorillo and Krueger provided Diversey with false certificates of disposal for the waste and fraudulently billed them over \$250,000 for waste disposal services that were never performed. On July 2, 1997, Fiorillo and Krueger were convicted for the illegal storage and transportation of hazardous wastes to an unpermitted facility, as well as wire fraud. Fiorillo was also convicted of federal firearms and explosives regulations. On December 12, 1997, Frank Fiorillo, Jr. was sentenced to 51 months incarceration, a \$75,000 fine and ordered to pay \$14,000 in restitution to Sacramento Fire Department. On December 19, 1997, Art Krueger was sentenced to 21 months incarceration and a \$450 special assessment.

U.S. v. Saybolt, Inc., et al. (Massachusetts): On April 17, 1998, David H. Mead, President and CEO of Saybolt, and Frerik Plumers, of The Netherlands, formerly President and Chairman of the Board of Saybolt North America Inc. and Chairman of the Board of Saybolt Inc., were charged in a five-count indictment. The indictment charged violations of the Foreign Corrupt Practices Act, interstate travel in aid of a racketeering enterprise, conspiracy, and aiding and abetting. Mead and Plumers were also charged with bribing Panamanian officials. Mead and Plumers are alleged to have conspired with others to pay a \$50,000 bribe in December 1995 to officials of the Republic of Panama, in hopes of obtaining contracts from the government of Panama for an affiliated company, Saybolt de Panama, S.A. As a result of this payment, Saybolt de Panama was expected to receive expedited tax benefits and a commercially-attractive operating location along the Panama Canal. On August 18, 1998, Saybolt, Inc., pled guilty to violations of the Clean Air Act and the Foreign Corrupt Practices Act. Under the plea agreement, the company will pay a \$4.9 million fine and serve five years probation. As a condition of its probation, Saybolt is required to establish and maintain an effective compliance program regarding the operation of its qualitative inspection and testing services, subject to the review and approval of EPA. Saybolt also agreed to fully cooperate in the investigation of individuals responsible for its criminal conduct. A separate provision of the plea agreement requires Saybolt to purchase display advertising in petroleum industry trade publications, announcing the terms of its guilty plea to data falsification charges.

U.S. v. Hess Environmental Laboratories Inc., et al. (Pennsylvania): Hess Labs was engaged in the business of providing analysis of environmental samples to various customers. Michael Klusaritz was the Laboratory Director at Hess Labs until June 1995 when he left to start his own environmental laboratory, Phase II Labs. Klusaritz operated Phase II through November 1996. Investigation revealed that both Hess Labs and Phase II were providing fraudulent analysis to many customers. Hess Labs provided false and fraudulent environmental testing results to customers over a nine-year period. The company did not have the proper equipment to conduct the requisite analysis and failed to conduct the analysis in accordance with EPA methods. False lab results were provided to schools, hospitals, local governments and businesses and were relied upon by the EPA, Pennsylvania Department of Environmental Protection and the U.S. Department of the Army. On November 10, 1997, Hess Labs pled guilty to a total of nine felony counts including conspiracy, mail fraud, false statements, false claims and Clean Water Act violations, including knowingly aiding, abetting or causing violations of Tobyhanna Army Depot's CWA permit.

On April 9, 1998, Hess Labs was sentenced to five years probation and ordered to pay \$5,553,634 in restitution. Michael Klusaritz and Phase II each pled guilty to false statements, false claims and mail fraud violations and were sentenced October 28, 1997. Michael Klusaritz is currently serving a sentence of 12-months incarceration. Both Klusaritz and Phase II were held jointly and severally liable for restitution in the amount of \$40,000. Judith McCoy, former Technical Director at Hess Labs pled guilty to conspiracy, false statements, and mail fraud. McCoy was sentenced on September 21, 1998, to three years probation and ordered to pay a \$10,000 fine and restitution of \$27,000. William L. Hopkins, former President of Hess Labs, pled guilty to four felony counts including conspiracy, mail fraud, false statements and CWA violations. On May 30, 1997, Hess Labs closed and terminated its business as a result of the investigation. Phase II was also closed as a result of the investigation.

U.S. v. Barry Shurelds, et al. (Kentucky): On October 3, Barry Shurelds of Philadelphia; Sam Robinson of Philadelphia; Sean Shurelds of Camden, NJ; Hosea Eusebio of Jersey City, NJ; the IES Lead Paint Division and its parent corporation, IEMC Environmental Group, Inc., were sentenced in U.S. District Court for the Eastern District of Kentucky in Lexington for violating the Clean Air Act. Barry Shurelds, project manager, was sentenced to 51 months in prison. Robinson, the on-site supervisor, received a 10-month sentence. The two other individual defendants received probation. The companies were not fined, as they are out of business. The defendants were convicted of removing asbestos-containing material from the Hess Department Store in Louisville in early 1993 without following federal regulations that prevent exposure to workers and the general public. When inhaled, asbestos fibers can become trapped in the lungs. This can lead to lung cancer and asbestosis. As a result of the improper asbestos removal, the owner of the store, Crown American Corporation, was ordered by the Kentucky Department of Environmental Protection on March 10, 1993 to conduct an emergency cleanup. The cleanup cost to Crown American approximately \$1 million. The case was investigated by EPA's Criminal Investigation Division, the FBI, and the Kentucky Department of Environmental Protection.

U.S. v. Ruben Brown (Illinois): Ruben Brown, doing business as Ruben Brown Extermination and J. D. McKinley Extermination, operated a pest extermination business without state certification in the Chicago area for several years. Brown admitted spraying Chicago residences with methyl parathion between 1991 and 1996. He also admitted to selling bottles of methyl parathion to individuals for spraying. The spraying occurred in predominantly low income, African American communities. Many of the residences had young children residing in them. Exposure to methyl parathion can produce convulsions, coma, and death. On June 20, 1997, Brown was charged with misusing a restricted use pesticide. On July 24, 1997, Brown pled guilty, admitting that he sprayed methyl parathion in 1,000 homes in Chicago, and sold the chemical in concentrated form to his clients. On December 9, 1997, Brown was sentenced to two years imprisonment and one year supervised release. EPA Region 5 completed its cleanup of 90 Chicago area homes in May 1998. Some 900 homes were sampled for the presence of the toxic pesticide. Total cleanup costs exceeded \$10 million.

U.S. v. Frank V. Carlow (Pennsylvania): On February 3, 1998, Frank V. Carlow of Uniontown, PA, owner of several coal mining and demolition companies, was sentenced to serve 87 months in federal prison and pay \$4,591,027 in restitution. Carlow was convicted on November 3, 1997 of illegally storing hazardous wastes, tax evasion, mail fraud, pension fraud, and obstruction of justice. Carlow admitted that he illegally stored over 170 55-gallon drums of hazardous wastes at the former Beaumont Glass Company in Morgantown, WV, from 1992 to 1997. Many of the drums contained hydrofluoric acid which can cause severe chemical burns. In addition, Carlow evaded over \$10 million in federal taxes and \$2.5 million in state worker insurance payments by under-reporting the hours worked by approximately 400 miners whom he employed. The case was investigated by EPA's Criminal Investigation Division, the FBI, the IRS, the U.S. Department of Labor, and the Secret Service.

U.S. v. Warner-Lambert, Company Inc. (Puerto Rico): On September 19, 1998, Warner-Lambert Company, Inc., pled guilty to six counts of violating the Clean Water Act, and agreed to pay a \$3 million criminal fine. The guilty plea was for falsifying discharge monitoring reports (DMRs) on the levels of pollutants it was releasing from its Vega Bajo, PR, pharmaceutical plant into a drainage channel that feeds into the Cibuco River. The receiving waters and the river are used by poor area residents for both drinking water and recreational purposes. The company will also pay a civil penalty of \$670,000 for routinely releasing excess levels of pollutants between 1992 and 1995. The plant manager, Juan Ruiz Orengo, pled guilty the same date to false reporting under the CWA. On March 5, 1998, he was sentenced to 21 months imprisonment.

U.S. v. Royal Caribbean Cruise Lines, Ltd. (Puerto Rico): In October 1994, the cruise ship, *Sovereign of the Seas*, was observed by a Coast Guard plane emitting a visible oil sheen into ocean waters off the coast of Puerto Rico. When the Coast Guard boarded and inspected the vessel, it was presented with a false logbook that omitted some oil discharges and misrepresented others. Additionally, under orders of a senior officer, the bypass pipe that circumvented the oil-water separator (thereby resulting in the sheen observed by the Coast Guard) was removed between the first Coast Guard inspection in San Juan after the incident and the second inspection in Miami, and was cut up in pieces and disposed of in a dumpster. The appearance/disappearance of this pipe was documented in a Coast Guard videotape. During the ensuing investigation, it was established that the discharge of oily bilge water was not an isolated occurrence; rather it was endemic to the fleet of Royal Caribbean cruise ships. Likewise, the maintaining of false logbooks was endemic.

Royal Caribbean pled guilty in Puerto Rico on June 3, 1998, to seven counts of a ten count indictment and agreed to pay a fine of \$8 million. Violations included discharge of oil from the *Sovereign of the Seas* off the coast of Puerto Rico, and failure to report same, both in violation of the Clean Water Act, conspiracy, witness tampering, obstruction of justice (destruction of evidence), and false statements. On the same day, Royal Caribbean also pled guilty in Miami to one count for presenting a false oil record book for the *Nordic Empress*, and agreed to pay a \$1 million fine.

U.S. v. BFI Medical Waste Systems, Inc. (Washington, D.C.): On September 18, 1998, a \$1.5 million fine was imposed on a subsidiary of Browning-Ferris Industries, Inc., for 1995 and 1996 criminal violations of the Clean Water Act at a now-closed medical waste treatment facility in the District of Columbia. BFI-Maryland owned and operated a facility which treated medical wastes using an “autoclave” steam processing system. In a 1991 application to the District of Columbia, the company stated that the wastewater would be pre-treated prior to discharge to the sewer system. As a result of facility design changes, BFI-Maryland began accumulating rainwater, snow melt, and other liquids in a loading area used to load treated medical waste for shipment to a permitted landfill. This “trailer pit” also accumulated treated medical waste, untreated wastewater from the autoclave system, and, in the government’s view, untreated medical waste. Gregory Ryan Smith, the local plant manager, and others had employees pump wastewater from the trailer pit onto the facility’s parking lot and into a drain leading to the sanitary sewer. BFI-Maryland, along with Smith, pled guilty in

June to knowingly failing to notify District of Columbia authorities of a substantial change in the nature of the wastewater the facility was discharging into sewers leading to the Blue Plains waste water treatment plant. In addition to the \$1.5 million criminal fine, BFI-Maryland was sentenced to two years probation and community service, in the form of a \$100,000 payment to the Conservation Fund to advance land and water conservation activities at the community level. Also, the parent company, Browning-Ferris Industries, Inc., of Houston, TX, will execute an environmental audit and develop and maintain an environmental compliance program at each of its autoclave facilities in the United States.

U.S. v. City Sales Ltd., et al. (Maine): Between March 1993 and July 1994, City Sales, Ltd., a Canadian automobile parts dealership, illegally imported 246 tons of CFC-12 into the United States through the port of Houlton, ME. During this period, City Sales made thirty separate imports of CFC-12 to more than a dozen United States companies, accounting for eight percent of all CFC imports to the United States during 1993. These transactions netted City Sales over \$2.4 million in gross revenues and over \$650,000 in profits. City Sales never possessed the Clean Air Act (CAA) “consumption allowances” required for these imports and the company made false declarations on import invoices, in violation of the CAA and Customs laws, respectively. In addition, City Sales failed to pay the United States \$1.6 million in excise taxes owed on these transactions.

On May 29, 1998, City Sales owner Larry LeBlanc pled guilty and was sentenced to 15 months imprisonment and a \$28,000 fine. His wife, Anne LeBlanc, pled guilty and received a sentence of a \$1,500 fine. Former sales manager Scott Campion entered a guilty plea in April 1997 to tax evasion and was sentenced on October 7, 1997, to a \$2,500 fine. On July 16, 1998, Michael Cormier entered a guilty plea to tax charges. The corporations, City Sales, Ltd., Trans Canada Autohous Ltd., and 051544N.B. Inc, have been charged and sentenced in Canada, to a \$20,000 (CDN) fine.

U.S. v. American Scientific Technology, Inc: American Scientific Technology (AST), located in Little Rock, AK, conducted tank tightness tests on underground storage tanks and associated pipes. Federal regulations require that owners and operators of underground storage tanks test the tightness of these tanks to determine whether they are leaking. Mark Smith was employed as a tank tester by AST and several related companies between 1993 and 1997, including American Underground Storage Tank Testing, located in Austin, TX, and American Southern Technology, Inc. located in Little Rock, AK. Smith conspired to provide fraudulent test results to customers in numerous states including Illinois, Indiana, Kentucky, Maryland, Missouri, Ohio, Pennsylvania, Tennessee, and West Virginia. These test results were fraudulent because the data was falsified, the proper method of testing the tanks was not followed, and/or the names of the tester were falsified. The United States Attorney for the Western District of Pennsylvania, filed a Criminal Information against Smith on June 10, 1998, charging him with conspiracy to commit mail fraud, wire fraud, and false statement violations by providing false and fraudulent underground storage tank tightness test results from October 1993 to April 30, 1997. Smith pled guilty the same day.

U.S. v. Neptune Fireworks, Inc., et al. (Florida): On October 22, 1997, Neptune Fireworks, Inc., of Dania, FL; Neptune's president Itzhak Dickstein; its former vice-president for operations, Leslie Grimes; and Neptune's warehouse manager, Mark Williams, all pled guilty to federal charges that resulted from a fire caused by the illegal disposal of hazardous fireworks waste. The defendants admitted to causing the February 17, 1997 fire at the V. Ponte & Sons recycling facility in Pembroke Park, FL, by illegally concealing thousands of pounds of damaged and otherwise unsaleable fireworks in 12 cardboard bales after the fireworks had been soaked in water. One of the bales ignited and started a blaze that took six hours to bring under control. Neptune agreed to pay fines and restitution totalling \$500,000. Dickstein, Grimes and Williams all pled guilty to one count of illegal treatment of a hazardous waste under RCRA. The case was investigated by EPA's Criminal Investigation Division, the FBI, the U.S. Dept. of Transportation, and the Broward County Sheriff's Office, with the assistance of EPA's National Enforcement Investigations Center.

U.S. v. Holland American Cruise Line (Alaska): The Holland America Cruise Line, a subsidiary of the Dutch company HAL Beheer BV, agreed to pay a \$1 million fine and provide \$1 million to the National Park Foundation to benefit marine ecosystems at a hearing on June 19, 1998 in U.S. District Court in Anchorage. The company admitted to violating the Act to Prevent Pollution from Ships during the summer of 1994, when oily water was illegally discharged from the bilge of the cruise ship SS Rotterdam while it was sailing within Alaska's Inside Passage. In addition to the \$2 million payment, Holland America agreed to establish a company environmental compliance plan, to add pollution reduction equipment on each of its vessels, and to serve five years probation. The case was investigated by EPA's Criminal Investigation Division, the Marine Safety Office and the Investigative Service of the U.S. Coast Guard, and the FBI.

U.S. v. Lam Pine, Inc., et al. (Idaho): On May 18, George E. Betts, president of Lam Pine, Inc., of LaGrande, OR, was sentenced to pay \$163,177.34 in restitution to the EPA Superfund program. Betts had previously been convicted of being involved in the illegal transportation of more than 230 55-gallon drums of paint and solvent wastes to the North Point Milling (NPM) facility which Betts owned in Payette, ID. In August 1996, EPA conducted a cleanup of a total of 452 55-gallon drums of paint and solvent wastes which had been stored at the NPM facility. Betts was also sentenced to serve six months in prison. The case was investigated by EPA's Criminal Investigation Division, the Oregon State Police, the Idaho Division of Environmental Quality, and the Oregon Department of Environmental Quality.

U.S. v. T.T. Barge Cleaning, Inc. (Louisiana): T.T. Barge Cleaning has three marine facilities along an 80-mile stretch of the Mississippi River and provides barge cleaning and repair services to the marine industry. The barge cleaning process involves the stripping, steaming, and washing of customer barges with water and/or chemical cleaners. The cleaning process also includes the removal of rust, scale, mud, and sludge from inside cargo tanks within the customer barges. Allegations stated that from 1986 to February 1997, TT and its employees routinely discharged untreated wash waters directly from customer barges and vacuum tanks into the Mississippi River in contravention of LDEQ permits. TT cleaned a wide variety of commercial vessels

including petroleum barges that carried gas, diesel, benzene, toluene, and chemical compounds such as acid, calcium chloride, methanol, chlorine, glycol, and ethanol. The untreated wash water discharged into the river containing the above mentioned substances as well as cleaning solvents and chemicals used in the cleaning process. On August 20, 1997, TT pled guilty to violating the Clean Water Act by discharging pollutants over an eleven year period. On October 29, 1997, TT was ordered to pay a fine of \$300,000 and placed on five years probation. In addition, the company must conduct environmental audits and retrieve and remove the drums pushed into the Mississippi River.

U.S. v. T&T Fuels, Inc., et al. (West Virginia): On March 9, 1998, Paul Thomas of Morgantown, WV, president and co-owner of T&T Fuels, Inc., was sentenced for violating the Clean Water Act by discharging millions of gallons of acid mine drainage in violation of state and federal permits. Thomas was ordered to pay \$273,000 in back civil penalties and \$170,400 in land reclamation costs to the State of West Virginia, plus serve six months home detention and five years probation. Thomas also must pay two-thirds of the monthly cost of nearly \$36,000 for treating discharges from T&T mines for as long as they discharge.

U.S. v. Surpass Chemical Company, Inc. (New York): This case resulted in the first conviction nationwide for negligent endangerment under the Clean Air Act. Surpass Chemical Company, Inc. had a spill of hydrochloric acid on April 8, 1997. A 5,700 gallon storage tank ruptured suddenly and a portion of the contents surged over a secondary containment wall. The rupture brought the acid into contact with a drum of sodium hydroxide, and the resultant mixture generated chlorine gas. Green clouds of this gas were observed in and near the facility. Eight workers and about 32 others were taken to hospitals for observation and treatment. EPA, OSHA, the New York State Department of Environmental Conservation (NYSDEC), and the City of Albany Fire Department and Police Department all participated in the investigation. It was determined that the tank had been designed to work at atmospheric pressure only, i.e., it would not withstand pressure changes associated with filling or emptying the tank if its vents were blocked. Due to odor problems associated with the tank, Surpass had bolted down the large vent on the tank and replaced it with a small vent and piping that directed any gases into a drum of soda ash and later, sodium hydroxide. The sodium hydroxide in time clogged the line. As a result, the tank burst during filling operations. The negligent operation of the tank, including both the inadequate substitute vent and the failure to ensure that the vent remained free from blockage, caused the spill and resultant release into the ambient air of the chlorine gas.

On August 7, 1998, Surpass pled guilty to a negligent endangerment charge under the CAA and to illegally discharging a substance into a sewer system. Additionally, it entered into administrative settlements with OSHA and a civil consent order with NYSDEC. Under the plea agreement and civil settlements, Surpass will pay \$30,000 in fines to the U.S. and to the State of New York, \$30,000 in civil penalties to OSHA, and \$15,000 to NYSDEC and the City of Albany for reimbursement of cleanup costs.

CHAPTER 6

Highlights: Compliance Assistance Programs

This chapter reviews FY98 highlights of OECA's efforts in compliance assistance and compliance monitoring, as well as new policies issued during the year.

6.1 Compliance Assistance Activities

Tool Development

One of OECA's primary compliance assistance activities is the development of compliance assistance tools such as plain language guides, videos, websites, and more. Importantly, these tools are shared with Regions and states which deliver hands-on compliance assistance.

Sector Notebook Series: EPA added nine new sector notebooks to the industry Sector Notebook series, bringing the total to 27 at the end of FY98:

- ▶ Profile of the Metal Casting Industry
- ▶ Profile of the Ship Building and Repair Industry
- ▶ Profile of the Pharmaceutical Manufacturing Industry
- ▶ Profile of the Plastic Resin and Man-made Fiber Industry
- ▶ Profile of the Fossil Fuel Electric Power Generation Industry
- ▶ Profile of the Textile Industry
- ▶ Profile of the Ground Transportation Industry — Trucking, Railroad and Pipeline
- ▶ Profile of the Water Transportation Industry
- ▶ Profile of the Air Transportation Industry.

Each notebook provides a basic explanation of the major environmental issues relating to the subject industry and includes information on industry background; size and national distribution; economic trends; common manufacturing processes; wastes released; pollution prevention opportunities; summaries of applicable federal statutes and regulations; compliance and enforcement history; and resources for further research. In response to user demands, EPA also prepared and published the *Sector Notebook Data Refresh-1997*, which revised the Toxics Release Inventory and compliance and enforcement data presented in the first cluster of 18 notebooks published in 1995. Over 300,000 notebooks have been distributed in printed and electronic formats to audiences in the United States and abroad. (See the Sector Notebook Web page at <http://www.epa.gov/oeca/sector/index.html>.)

Environmental Management Systems Primer for Federal Facilities: In 1998, EPA's Federal Facilities Enforcement Office, in partnership with the Department of Energy's Office of Environmental Policy and Assistance, developed the *Environmental Management Systems Primer for Federal Facilities*. The *Primer* is designed to help federal managers who are considering adopting an environmental management system (EMS). The *Primer* is not intended to be a technical or detailed manual on EMS implementation. Rather, its goal is to help federal managers understand EMSs and how they can improve environmental management at their facilities.

Environmental Compliance Guide for Rural Electric Cooperatives: The guide helps rural electric cooperatives better understand their obligations under federal environmental regulations, and improve their level of compliance. The guide explains how to comply with the federal environmental regulations. It covers 13 environmental topics applicable to non-power generating activities at the cooperatives: PCBs; waste management; hazardous waste/material transport; storage tanks; hazardous products management; spills/releases; wastewater/storm water; drinking water; wetlands and endangered species; herbicides/pesticides; air; and asbestos. The guide also provides information on pollution prevention options that are available and where additional help can be obtained. The primary users of the guide are intended to be maintenance and other staff of rural electric cooperatives, with other potential users being local, state, and federal government environmental professionals, especially compliance inspectors.

Self-Audit and Inspection Guide for Organic Coating of Metal Parts: This useful audio-visual compliance assistance tool consists of a CD-ROM and written guidance that lead the user through a virtual organic coating facility. The guide provides a video or animated presentation of 17 processes in metal parts cleaning, coating, and curing. For each process area, information is provided on: federal environmental statutes and regulatory requirements; hot links to the full text of federal environmental statutes and regulatory requirements; self-audit and inspection questions; sources of pollution; common causes of violations; pollution prevention alternatives; and hot links to other Internet resources. This tool will help environmental professionals identify activities and requirements necessary to complete an audit of production processes, equipment, and management systems.

Lead-Based Paint Tool Kit: OECA prepared and distributed to the Regional Lead Coordinators a *Lead-Based Paint Tool Kit for Enforcement and Compliance of the Real Estate Notification and Disclosure Rule*. The package contains tools such as an Investigation Guidance Manual, Inspection Checklist, Targeting Strategy, Enforcement Response Policy, and sample subpoenas and complaints. The tool kit aids EPA Regional inspectors in determining

Integrating Compliance Assistance and Enforcement

In March 1998, EPA Region 1 undertook a landmark action against the Rhode Island Department of Transportation for improper handling and illegal storage of large amounts of hazardous waste, seeking a penalty of \$796,492. The violations were discovered during a multimedia inspection of RI-DOT's vehicle maintenance complex. EPA inspectors found 938 containers filled with various ignitable hazardous materials, including waste paints, solvents, and thinners, some of which were open or leaking. The building had no fire extinguisher nearby nor a fire alarm system.

In an effort to maximize the deterrent effect of the enforcement action and provide much-needed compliance assistance to public agencies, EPA mailed out 1,700 letters to state, federal, and municipal officials in each of the six New England states informing them of the new regulation and offering a compliance workshop. The response was so positive that people had to be turned away from the workshop.

compliance with the Disclosure Rule and in taking appropriate enforcement response against violators. Compliance with the Disclosure Rule is important in lowering the incidence of childhood lead poisoning.

DOI Compliance Initiative

During FY98, EPA initiated a joint effort with the Department of the Interior (DOI) to increase compliance at DOI facilities, which had increasingly become a matter of concern for both federal agencies. EPA and DOI agreed to work jointly to enhance compliance assistance across DOI Bureaus and facilities with the overall goal of raising the level of regulatory awareness and compliance at all DOI facilities. This was the first time that EPA pledged to provide compliance assistance across an entire federal agency. Senior management at each of the five major DOI Bureaus (National Park Service, Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation and Bureau of Indian Affairs) distributed a memorandum to Regional and field-level personnel affirming Bureau policy regarding compliance with environmental regulations and urging cooperation with EPA in compliance assistance activities.

One of the most innovative and far-reaching efforts in the EPA/DOI compliance initiative is an analysis of current environmental management systems within the National Park Service (NPS), including an analysis of support relationships between the field-level facilities and NPS and DOI Headquarters environmental offices. This review is based on the Code of Environmental Management Principles (CEMP) for all federal agencies developed by an interagency committee in response to Executive Order 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements*. The five primary CEMP principles address: 1) management commitment; 2) compliance assurance and pollution prevention; 3) enabling systems; 4) performance and accountability; and 5) measurement and improvement. With an estimated 1000 facilities covered by EPA regulations, DOI has a significant opportunity to benefit from this effort by improving compliance throughout the various DOI Bureaus. Moreover, the DOI/EPA effort will result in compliance assistance tools that can be used by other agencies, particularly civilian federal agencies.

Region 2 Federal Facility Environmental Management Reviews

In FY98, the EPA Region 2 Federal Facilities Program continued several pilot Environmental Management Reviews (EMRs) — with the US Postal Service (USPS) New York Metro Area, and the US Military Academy, West Point — in accordance with EPA's Interim Final Policy for Conducting EMRs at Federal Facilities. These pilot EMRs are intended to help the Postal Service and the Military Academy evaluate, and ultimately improve, their environmental management systems, and help EPA test the Interim EMR Policy.

The Postal Service EMR project differs from a traditional EMR in its scope. EMRs were originally designed to evaluate the environmental management system (EMS) at a specific facility or site. The USPS EMR, however, is taking this concept a step further by reviewing the EMS of an entire Postal Service Area, the New York Metro Area, which can be compared to an EPA Region. The USPS Metro Area consists of: 7 districts (New York City; Triboro; Long Island; Westchester; Central NJ; Northern NJ; and the Caribbean); 1700 facilities; 18 vehicle maintenance facilities; 30 plants (distribution operations); 14,000 vehicles; and 85,000 employees. Once the actual reviews are completed, EPA and USPS will extend the EMR project to other USPS Areas.

6.2 | Compliance Monitoring Activities

Enforcement Alerts

EPA has long recognized that publicity surrounding enforcement actions can deter noncompliance by others. In August 1998, the Office of Regulatory Enforcement published its first issue of *Enforcement Alert* to inform and educate the public and regulated community of important environmental enforcement issues, recent trends, and significant enforcement actions.

Issues of *Enforcement Alert* are intended to help the regulated community anticipate and prevent violations of federal environmental law that could otherwise lead to enforcement action. By raising awareness and explaining how compliance pitfalls can be avoided, EPA is helping the regulated community stay in compliance and minimize the risk of an enforcement action.

Enforcement Alert topics in 1998 focused on the illegal use of engine control “defeat devices,” the Clean Air Act’s “General Duty Clause,” the Worker Protection Standard, and the Real Estate Notification and Disclosure Rule.

Hazardous Waste Import/Export Activities

In calendar year 1998, the Import/Export Program tracked a record number of export notices (807) for hazardous wastes and, more significantly, a record total of 5,350 waste streams (both import and export). These hazardous wastes were subject to review by EPA and were allowed

to move across international borders only with the consent of the government of the receiving country. EPA also consented to the first import notice received under the new bilateral agreement between the United States and Costa Rica. (The notice concerned imports of waste solder paste, lead sludge and other items.)

The Import/Export Program continued its efforts to identify and refer for appropriate enforcement action any violations, including apparent failures to notify wastes for export prior to shipping. The Program referred eight matters for appropriate enforcement action. A publication, “International Trade in Hazardous Waste: An Overview,” was issued to promote compliance assistance and public outreach. The program also developed a system of reminder and warning letters to encourage the timely filing of annual reports by exporters; 250 reminder letters and 124 warning letters were sent.

U.S.-Mexico Border XXI Program

In FY98, OECA continued to strengthen its environmental partnership with Mexico by implementing and developing programs along the border and within border states. Both countries contributed to sustained progress in numerous areas, including enforcement cooperation, training, and compliance assistance. Following are examples of some progress in FY98:

- ▶ EPA worked with the border states, the Western States Project, the Southern Environmental Enforcement Network, and Mexican environmental officials to help deliver training for environmental officials in the United States and Mexico on pretreatment inspections for waste water systems, field investigations and sampling techniques, principles of environmental enforcement and compliance, hazardous waste inspections, and pesticide handling.
- ▶ EPA officials received training from Mexican officials on Mexico’s environmental laws and participated in a workshop in which U.S. and Mexican legal structures, laws, and regulations were comparatively analyzed.
- ▶ EPA Region 9 hosted a U.S.-Mexico workshop on the legal challenges in transboundary environmental enforcement. In attendance for the first time were non-governmental organizations from the U.S. and Mexico that focus on maquiladora issues.
- ▶ EPA created a pollution prevention video geared toward border industries and provided three hazardous waste compliance seminars to encourage pollution prevention practices and voluntary compliance.

Inspector Training

The Office of Compliance (OC) prepared inspector training materials and conducted numerous inspector training courses during FY98. Training was provided to over 1300 inspectors (540 federal, 667 state, 28 tribal, 83 local, 5 other). Specific training highlights include:

- ▶ **CAA Title VI Inspector’s Manual and Training:** In cooperation with EPA’s Stratospheric Protection Division, OC developed an Inspector’s Manual on stratospheric ozone protection. The manual includes a Title VI Compliance/Enforcement Strategy,

copies of all applicable FR notices, applicability determinations, sector-specific profiles, and an inspection checklist. Additionally, OC and SPD staff conducted Title VI training in FY98 in three Regions.

- ▶ **CAFO Inspector Training:** One of the first action items under the Agency's CAFO implementation plan was CAFO inspector training for federal and state inspectors. OC developed and conducted the first three of these courses, which involve classroom work and mock inspections at cooperating private feedlot facilities. To facilitate better understanding among EPA/state CAFO inspectors, the U.S. Department of Agriculture (which has primary federal technical assistance responsibilities), and farmers, the courses generally include USDA personnel and meetings with interested farmers and farm groups in the area of the training. OC developed a CAFO inspection manual for the course.
- ▶ **FIFRA Inspector Training:** OC organized and led two FIFRA state inspector training courses which brought together over 100 inspectors from states, territories, and tribes. The courses covered pesticide product and use enforcement.

Superfund Training

During FY98, OECA's Office of Site Remediation Enforcement (OSRE) taught more than ten courses, and trained more than 300 federal and state employees for the CERCLA enforcement and RCRA corrective action programs. In FY98, OSRE:

- ▶ Trained 90 new Superfund attorneys from all ten EPA Regions, EPA Headquarters, the Department of Justice, the Department of the Interior, and the Department of Agriculture, on their roles and responsibilities in the Superfund process.
- ▶ Trained 130 state and Regional Remedial Project Managers, and more than 120 technical and legal staff in three Regions and Headquarters, in the use of tools available to determine the shares of insolvent, and defunct PRPs at CERCLA sites. (The remaining seven Regions will receive the training in FY99.)

Case Officer Training

In FY98, the Toxics and Pesticides Enforcement Division conducted two sessions of "Case Development Training Course." The sessions were conducted in Washington, D.C. in October 1997 and Seattle, Washington in May 1998. Courses included both federal and state personnel involved in the enforcement of environmental laws regulating pesticides, toxic substances such as lead, asbestos, PCBs, and the release of toxic chemicals. The course covers the civil administrative case development process from the point of evidence collection to settlement or final decision in the proceeding.

Inspector Dialogue

In FY98, OECA conducted inspector dialogues in each Region, as a means of establishing better communications within EPA and identifying ways of enhancing the effectiveness of inspection programs. The dialogues each lasted up to a day and a half with approximately 500 compliance inspectors, supervisors, and other staff actively participating. The dialogues

responded to concerns about the increasing complexity of regulated facilities, the expanded base of information necessary for compliance inspectors to do an effective job, and the wider variety of tools now available to inspectors.

The dialogues led to a series of action items on improving training and communications. OECA has focused on providing advanced training courses on petroleum refining, pulp mills, animal feeding operations, and lead paint, and has also developed multimedia inspector guides for metal finishing, auto service and repair, and dry cleaners. Computer-based training guides are being developed for basic inspectors and RCRA inspections.

Other Inspection Activities

Good Laboratory Practices (GLP) Inspections and Audits: OC conducted 95 inspections and 273 data audits in FY98. Based upon these inspections, ORE has issued six actions against three labs and three sponsors, requesting \$30,000 in penalties. OC unveiled the GLP homepage in April 1998, providing the public direct access to our standard operating procedures for conducting inspections and to the complete library of GLP advisories that provide applicability determinations concerning the GLP regulations.

First Multi-Media Laboratory Inspection Conducted: OC staff organized and led EPA's first civil multi-media laboratory inspection. The team, composed of members from OECA, OAR, and Regions 1 and 2, looked at the laboratory performance in analyzing compliance data in the air, water, waste, and Superfund programs.

6.3 | New Policies

EPA's MSW CERCLA Settlement Policy

Signed in February 1998, the Municipal Solid Waste (MSW) Policy is intended to provide a fair, consistent, and efficient settlement methodology for resolving the liability of municipalities that disposed of municipal solid waste at sites on the National Priorities List. The policy reaffirms EPA's practice of not identifying generators and transporters of MSW as potentially responsible parties at NPL sites. However, in recognition of the strong public interest in reducing the burden of contribution litigation, EPA will offer settlements to any MSW generators and transporters that wish to resolve their potential Superfund liability. In addition, the policy sets a presumptive settlement range for municipal owners and operators of co-disposal sites on the NPL who desire to settle their liability. The policy potentially applies to the estimated one quarter of NPL sites that accepted both MSW and other wastes, such as industrial wastes, containing hazardous substances.

Memorandum on CERCLA Section 106

In addition to EPA and the Coast Guard, other federal agencies have significant responsibilities and substantial programs for responding, or requiring others to respond, to releases and threatened releases of hazardous substances. Under Section 106 of CERCLA, these Federal

Resource Managers have the authority to issue administrative orders or seek judicial relief with respect to a release or threatened release of a hazardous substance affecting either natural resources under their trusteeship, or a vessel or facility subject to their control. This Memorandum of Understanding among EPA, the U.S. Coast Guard, and the Departments of Agriculture, Commerce, Defense, Energy, Interior, and Justice, is intended to ensure that the signatories exercise their authority in a cooperative and integrated fashion, and in a manner that ensures interagency coordination, efficiency, and effectiveness.

Enforcement Y2K Policy

Although EPA has encouraged companies to test their computers for Y2K problems, the testing process could result in environmental violations. OECA issued an enforcement policy in late 1998 to alleviate this concern, and also to encourage the prompt testing of computer-related equipment to ensure that environmental compliance is not impaired by computer glitches related to the year 2000. EPA intends to waive civil penalties and recommend against criminal prosecution for any environmental violations caused during specific tests that are designed to identify and eliminate Y2K-related malfunctions. This policy is limited to testing-related violations disclosed to EPA by February 1, 2000, that also meet nine specified criteria.

Administrative Cashout Settlements, CERCLA Section 122(h)

EPA and the Department of Justice (DOJ) jointly issued the CERCLA Section 122(h) guidance, and five model settlement documents. The guidance announces a new type of expedited “cashout” settlement for “peripheral parties.” Peripheral parties are those parties who, although not technically *de minimis* or *de micromis* are not the focus of CERCLA enforcement activities. They include ability to pay parties, parties for whom unresolved CERCLA liability is an “extreme burden,” and other parties as defined on a case-by-case basis. For qualifying peripheral parties, a cashout settlement that resolves the settlor’s liability at the site is possible under the terms outlined in the guidance. The guidance and model agreements offer the possibility of increasing the efficacy and consistency of CERCLA administrative settlements nationally.

Guidance for Implementing Superfund Reform Initiative 9a: Risk Sharing

Estimates of the eventual cost of cleaning up the nation’s hazardous waste sites highlight the need to support the development of more cost-effective cleanup technologies. Potentially responsible parties are sometimes reluctant to implement new technologies due to concerns about having to “pay twice” if the innovative approach fails to achieve the required levels of cleanup. As part of the Superfund Reform Initiatives, EPA’s guidance identifies a program designed to share the risk of using selected innovative technologies. The purposes of this initiative are: 1) to encourage the demonstration and use of innovative technologies with the potential to lower costs and/or improve performance at a particular site and at other Superfund sites, and to document these early applications to assist future selection of response actions; 2) to support developers of promising technologies, especially small businesses, by enhancing contracting opportunities with PRPs; and 3) to encourage PRPs to assume a more active role in the development of new technologies for site remediation.

APPENDIX

Historical Enforcement Data

Exhibit A-1: National Totals, FY96-FY98 Enforcement Activity

| EPA Regional Inspections | | | |
|--------------------------|---------------|---------------|---------------|
| | FY96 | FY97 | FY98 |
| CAA Stationary | 2,064 | 2,844 | 2,722 |
| CAA Mobile Source | 107 | 104 | 64 |
| Asbestos | 635 | 653 | 806 |
| NPDES Minors | 499 | 784 | 1,116 |
| NPDES Majors | 1,046 | 918 | 1,019 |
| CWA 311 | 2,267 | 1,666 | 1,344 |
| CWA 404 | 342 | 529 | 968 |
| EPCRA 313 | 571 | 473 | 584 |
| EPRA non-313 | 689 | 438 | 804 |
| FIFRA | 116 | 207 | 264 |
| RCRA | 1,829 | 2,165 | 2,727 |
| UST | 579 | 1,421 | 1,253 |
| SDWA | 6,568 | 5,490 | 7,983 |
| TSCA | 898 | 1,014 | 1,537 |
| TOTAL | 18,210 | 18,706 | 23,237 |

SOURCE: program databases/IDEA, manual reports. There were also 96 GLP inspections and 277 data audits by HQ (OC/AED/LDIB). FY98 total includes 46 other inspections.

| EPA Administrative Compliance Orders Issued | | | |
|---|--------------|--------------|--------------|
| | FY96 | FY97 | FY98 |
| CAA | 154 | 209 | 277 |
| CERCLA | 197 | 279 | 233 |
| CWA | 504 | 815 | 849 |
| EPCRA | 2 | 7 | 4 |
| FIFRA | 10 | 7 | 18 |
| RCRA | 35 | 44 | 49 |
| SDWA | 284 | 453 | 287 |
| TSCA | 0 | 4 | 4 |
| TOTAL | 1,186 | 1,818 | 1,721 |

In addition, there were 66 HQ CAA Mobile Source NOVs w/ penalties. SOURCE: Docket

| EPA Administrative Penalty Order Complaints | | | |
|--|------------|--------------|--------------|
| | FY96 | FY97 | FY98 |
| CAA | 88 | 126 | 156 |
| CERCLA | 37 | 26 | 1 |
| CWA | 153 | 329 | 389 |
| EPCRA | 196 | 293 | 233 |
| FIFRA | 73 | 174 | 187 |
| RCRA | 88 | 139 | 155 |
| SDWA | 57 | 45 | 65 |
| TSCA | 178 | 181 | 214 |
| TOTAL | 870 | 1,313 | 1,400 |

Starting FY98-CERCLA 103 actions included under EPCRA. SOURCE: Docket

| EPA Administrative Penalty Settlements | | | |
|---|--------------|--------------|--------------|
| | FY96 | FY97 | FY98 |
| CAA | 103 | 139 | 127 |
| CERCLA | 39 | 33 | 3 |
| CWA | 169 | 205 | 324 |
| EPCRA | 184 | 366 | 259 |
| FIFRA | 107 | 161 | 173 |
| RCRA | 119 | 154 | 149 |
| SDWA | 76 | 44 | 43 |
| TSCA | 207 | 248 | 167 |
| TOTAL | 1,004 | 1,350 | 1,245 |

SOURCE: Docket

| EPA Field Citations | | | |
|----------------------------|------|------|------|
| | FY96 | FY97 | FY98 |
| UST | 115 | 240 | 194 |

SOURCE: Docket

| New EPA Civil Referrals to DOJ | | | |
|--------------------------------|------|------|------|
| | FY96 | FY97 | FY98 |
| CAA | 70 | 89 | 113 |
| CERCLA | 127 | 154 | 138 |
| CWA | 48 | 98 | 81 |
| EPCRA | 9 | 11 | 11 |
| FIFRA | 3 | 4 | 4 |
| RCRA | 19 | 49 | 49 |
| SDWA | 17 | 13 | 15 |
| TSCA | 2 | 8 | 0 |
| TOTAL | 295 | 426 | 411 |

SOURCE: Docket

| EPA Civil Judicial Settlements | | | |
|--------------------------------|------|------|------|
| | FY96 | FY97 | FY98 |
| CAA | 62 | 45 | 46 |
| CERCLA | 121 | 159 | 148 |
| CWA | 60 | 35 | 33 |
| EPCRA | 10 | 3 | 3 |
| FIFRA | 5 | 2 | 4 |
| RCRA | 22 | 18 | 14 |
| SDWA | 7 | 9 | 2 |
| TSCA | 5 | 3 | 3 |
| TOTAL | 292 | 274 | 253 |

SOURCE: Docket

Exhibit A-2: Dollar Value of FY98 EPA Enforcement Actions by Statute

| | Criminal Penalties Assessed | Civil Judicial Penalties Assessed | Administrative Penalties Assessed | \$ Value of Injunctive Relief | \$ Value of SEPs |
|----------------|-----------------------------|-----------------------------------|-----------------------------------|-------------------------------|----------------------|
| CAA | \$49,019,653 | \$27,758,838 | \$3,407,644 | \$305,659,541 | \$26,262,598 |
| CERCLA | \$509,400 | \$1,032,573 | \$446,450 | \$731,507,566 | \$525,100 |
| CWA | \$36,171,595 | \$18,582,253 | \$4,822,104 | \$859,639,752 | \$41,982,830 |
| EPCRA | \$0 | \$524,084 | \$4,640,551 | \$4,822,104 | \$26,262,598 |
| FIFRA | \$2,973,582 | \$24,400 | \$3,877,190 | \$48,100 | \$393,872 |
| RCRA | \$2,838,381 | \$15,465,383 | \$5,540,874 | \$33,457,366 | \$8,663,203 |
| SDWA | \$5,100 | \$118,700 | \$513,455 | \$38,162,507 | \$43,240 |
| TSCA | \$30,000 | \$25,500 | \$3,748,494 | \$3,462,117 | \$3,720,065 |
| Title 18/MPRSA | \$1,250,000 | \$0 | \$1,267,000 | \$0 | \$0 |
| TOTAL | \$92,797,711 | \$63,531,731 | \$28,263,762 | \$1,976,759,053 | \$107,853,506 |

Exhibit A-3: EPA Administrative Actions Initiated by Statute, FY75-FY98

| Statute | FY75 | FY76 | FY77 | FY78 | FY79 | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 |
|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| CAA | 0 | 210 | 297 | 129 | 404 | 86 | 112 | 21 | 41 | 141 | 122 | 143 |
| CWA/SDWA | 738 | 915 | 1,128 | 730 | 506 | 569 | 562 | 329 | 781 | 1,644 | 1,031 | 990 |
| RCRA | 0 | 0 | 0 | 0 | 0 | 0 | 159 | 237 | 436 | 554 | 327 | 235 |
| CERCLA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 160 | 139 |
| FIFRA | 1,614 | 2,488 | 1,219 | 762 | 253 | 176 | 154 | 176 | 296 | 272 | 236 | 338 |
| TSCA | 0 | 0 | 0 | 1 | 22 | 70 | 120 | 101 | 294 | 376 | 733 | 781 |
| EPCRA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 2,352 | 3,613 | 2,644 | 1,622 | 1,185 | 901 | 1,107 | 864 | 1,848 | 3,124 | 2,609 | 2,626 |
| Statute | FY87 | FY88 | FY89 | FY90 | FY91 | FY92 | FY93 | FY94 | FY95 | FY96 | FY97 | FY98 |
| CAA | 191 | 224 | 336 | 249 | 214 | 354 | 279 | 435 | 232 | 242 | 391 | 499 |
| CWA/SDWA | 1,214 | 1,345 | 2,146 | 1,780 | 2,177 | 1,977 | 2,216 | 1,841 | 1,774 | 998 | 1,642 | 1,590 |
| RCRA | 243 | 309 | 453 | 366 | 364 | 291 | 282 | 115 | 92 | 238 | 423 | 398 |
| CERCLA | 135 | 224 | 220 | 270 | 269 | 245 | 260 | 264 | 280 | 234 | 305 | 234 |
| FIFRA | 360 | 376 | 443 | 402 | 300 | 311 | 233 | 249 | 160 | 83 | 181 | 205 |
| TSCA | 1,051 | 607 | 538 | 531 | 422 | 355 | 319 | 333 | 187 | 178 | 185 | 218 |
| EPCRA | 0 | 0 | 0 | 206 | 179 | 134 | 219 | 307 | 244 | 198 | 300 | 237 |
| Totals | 3,194 | 3,085 | 4,136 | 3,804 | 3,925 | 3,667 | 3,808 | 3,544 | 2,969 | 2,171 | 3,427 | 3,381 |

Exhibit A-4: EPA Criminal Enforcement Actions, FY84-FY98

| Action | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 | FY91 | FY92 | FY93 | FY94 | FY95 | FY96 | FY97 | FY98 |
|--------------------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|-------|-------|
| Referral to DOJ | 31 | 40 | 41 | 41 | 59 | 60 | 65 | 83 | 107 | 140 | 220 | 256 | 262 | 228 | 266 |
| Defendants Charged | 36 | 40 | 98 | 66 | 97 | 95 | 100 | 104 | 150 | 161 | 250 | 245 | 221 | 322 | 350 |
| Months sentenced | 6 | 78 | 279 | 456 | 278 | 325 | 745 | 963 | 1,135 | 892 | 1,188 | 888 | 1,116 | 2,351 | 2,075 |

Exhibit A-5: EPA Civil Referrals to the Department of Justice, FY75-FY98

| Statute | FY75 | FY76 | FY77 | FY78 | FY79 | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| CAA | 5 | 15 | 50 | 123 | 149 | 100 | 66 | 36 | 69 | 82 | 116 | 115 |
| CWA | 20 | 67 | 93 | 137 | 81 | 56 | 37 | 45 | 56 | 95 | 93 | 119 |
| CERCLA | 0 | 0 | 0 | 2 | 5 | 10 | 2 | 20 | 28 | 41 | 35 | 41 |
| RCRA | 0 | 0 | 0 | 0 | 4 | 43 | 12 | 9 | 5 | 19 | 13 | 43 |
| TSCA/FIFRA/EPCRA | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 2 | 7 | 14 | 19 | 24 |
| Totals | 25 | 82 | 143 | 262 | 242 | 210 | 118 | 112 | 165 | 251 | 276 | 342 |
| Statute | FY87 | FY88 | FY89 | FY90 | FY91 | FY92 | FY93 | FY94 | FY95 | FY96 | FY97 | FY98 |
| CAA | 122 | 86 | 92 | 102 | 86 | 92 | 80 | 141 | 37 | 70 | 89 | 113 |
| CWA/SDWA | 92 | 123 | 94 | 87 | 94 | 77 | 84 | 97 | 54 | 65 | 111 | 96 |
| CERCLA | 54 | 114 | 153 | 157 | 164 | 137 | 129 | 144 | 102 | 127 | 154 | 138 |
| RCRA | 23 | 29 | 16 | 18 | 34 | 40 | 30 | 35 | 14 | 19 | 49 | 49 |
| TSCA/ FIFRA/EPCRA | 13 | 20 | 9 | 11 | 15 | 15 | 15 | 13 | 7 | 14 | 23 | 15 |
| Totals | 304 | 372 | 364 | 375 | 393 | 361 | 338 | 430 | 214 | 295 | 426 | 411 |

Exhibit A-6: State Environmental Agencies Administrative Actions and Judicial Referrals, FY88-FY98

| Administrative Actions | | | | | | | | | | | |
|------------------------|-------|--------|--------|-------|-------|--------|--------|-------|-------|--------|--------|
| Statute | FY88 | FY89 | FY90 | FY91 | FY92 | FY93 | FY94 | FY95 | FY96 | FY97 | FY98 |
| FIFRA | 5,078 | 6,698 | 4,145 | 3,245 | 3,095 | 4,172 | 3,528 | 2,486 | 2,333 | 1,101 | 1,163 |
| SDWA/ CWA | 2,887 | 3,100 | 3,298 | 3,180 | 2,748 | 3,960 | 4,063 | 4,231 | 4,598 | 7,051 | 6,960 |
| CAA | 655 | 1,139 | 1,312 | 1,687 | 1,411 | 2,005 | 2,050 | 1,833 | 1,534 | 1,919 | 2,410 |
| RCRA | 743 | 1,189 | 1,350 | 1,495 | 1,389 | 1,744 | 1,609 | 1,235 | 841 | 444 | 727 |
| Totals | 9,363 | 12,126 | 10,105 | 9,607 | 8,643 | 11,881 | 11,250 | 9,785 | 9,306 | 10,515 | 11,260 |

| Judicial Referrals | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| Statute | FY88 | FY89 | FY90 | FY91 | FY92 | FY93 | FY94 | FY95 | FY96 | FY97 | FY98 |
| SDWA/ CWA | 687 | 489 | 429 | 297 | 204 | 383 | 162 | 169 | 169 | 151 | 146 |
| CAA | 171 | 96 | 156 | 190 | 258 | 174 | 325 | 124 | 198 | 164 | 146 |
| RCRA | 46 | 129 | 64 | 57 | 112 | 133 | 91 | 104 | 66 | 64 | 60 |
| Totals | 904 | 714 | 649 | 544 | 574 | 690 | 578 | 397 | 433 | 379 | 352 |

Exhibit A-7: EPA Criminal Enforcement: Major Outputs, FY96-FY98

