United States Environmental Protection Agency

Office of Pollution, Prevention and Toxic Substances

April 1992

EPA

Directory of State and Local Pollution Prevention Programs

National Roundtable of State Pollution Prevention Programs

ACKNOWLEDGMENTS

The National Roundtable of State Pollution Prevention Programs would like to thank the United States Environmental Protection Agency in general, and the Office of Pollution Prevention, Gerald Kotas, John Atcheson, and Jackie Krieger in particular, for providing the funding and support that allowed this Directory to become a reality.

The Roundtable would also like to thank Terry Foecke, Al Innes and Bob Style at *WRITAR* for all their efforts on this project. Special thanks to Laurie Hutchinson for the important contributions she made in developing and testing the survey in the early stages of the project.

TABLE OF CONTENTS

Region 1

Connecticut

Connecticut Department of Environmental Protection 1-CT-1
Connecticut Technical Assistance Program (ConnTAP) 1-CT-3

Maine

Office of Pollution Prevention 1-ME-1

Massachusetts

Office for Technical Assistance for Toxics Use Reduction 1-MA-1
Toxics Use Reduction Act Implementation Team 1-MA-4
Toxics Use Reduction Institute 1-MA-7

New Hampshire

New Hampshire Pollution Prevention Program 1-NH-1
WasteCap 1-NH-4

Rhode Island

Hazardous Waste Reduction Program 1-RI-1

Vermont

Pollution Prevention Division 1-VT-1
Vermont Waste Cap 1-VT-3

Region 2

New Jersey

New Jersey Office of Pollution Prevention 2-NJ-1
New Jersey Technical Assistance Program for Industrial Pollution Prevention 2-NJ-3

New York

Bureau of Pollution Prevention 2-NY-1
Technical Advisory Services Division, New York State Environmental Facilities Corporation 2-NY-5
Erie County Office of Pollution Prevention 2-NY-7
Suffolk County Source Reduction Program 2-NY-10

Region 3

Delaware

Delaware Pollution Prevention Program 3-DE-1

Maryland

Environmental Service 3-MD-1

Pennsylvania

Center for Hazardous Materials Research 3-PA-1
Division of Waste Minimization and Planning 3-PA-4
Pennsylvania Technical Assistance Program (PENNTAP) 3-PA-6

Virginia

University Center for Environmental and Hazardous Materials Studies 3-VA-1
Virginia Waste Management Program 3-VA-3

West Virginia

West Virginia Pollution Prevention and Open Dump Program 3-WV-1

Region 4

Waste Reduction Resource Center for the Southeast 4-Regional-1

Alabama

Hazardous Material Management and Resource Recovery 4-AL-1
Project ROSE (Recycled Oil Saves Energy) 4-AL-3

Florida

Florida Center for Solid and Hazardous Waste Management 4-FL-1
Center for Training, Research and Education for Environmental Occupations (TREEO) 4-FL-3
Florida Waste Reduction Assistance Program 4-FL-5

Georgia

Pollution Prevention Program 4-GA-1

Kentucky

Kentucky Partners 4-KY-1
Waste Minimization Assessment Center 4-KY-3
Department of Environmental Protection 4-KY-5

Mississippi

Mississippi Comprehensive Waste Reduction/Waste Minimization Program 4-MS-1
Mississippi Technical Assistance Program (MISSTAP) and Mississippi Solid Waste Reduction Assistance Program (MISSWRAP) 4-MS-4

North Carolina

North Carolina Pollution Prevention Pays Program 4-NC-1
Pollution Prevention Pays Program, Western Carolina University 4-NC-4
EPA Center for Waste Minimization and Management 4-NC-6

South Carolina

Center for Waste Minimization 4-SC-1

Tennessee

The University of Tennessee's Center for Industrial Services 4-TN-1

Waste Reduction and Pollution Prevention 4-TN-3

Region 5

Illinois

Illinois Environmental Protection Agency 5-IL-1

The Hazardous Waste Research and Information Center 5-IL-3

Indiana

Indiana Pollution Prevention Program Office of Pollution Prevention and Technical Assistance 5-IN-1

The Indiana Pollution Prevention Technical Assistance Program 5-IN-4

Indiana Point-Source Pollution Prevention Program for Agricultural Industries 5-IN-6

Michigan

Office of Waste Reduction Services 5-MI-1

Waste Reduction and Management Program, Grand Valley State University 5-MI-5

Minnesota

Minnesota Office of Waste Management 5-MN-1

Minnesota Pollution Control Agency 5-MN-4

Minnesota Technical Assistance Program 5-MN-5

Ohio

Division of Litter Prevention & Recycling 5-OH-1

Pollution Prevention Section, Ohio EPA 5-OH-4

Ohio Pollution Prevention Technical Assistance 5-OH-8

Wisconsin

Wisconsin Department of Natural Resources 5-WI-1

Solid & Hazardous Waste Education Center 5-WI-3

Wisconsin Department of Development 5-WI-5

Region 6

Arkansas

Biomass Resource Recovery Program 6-AR-1

Louisiana

Department of Environmental Quality 6-LA-1

New Mexico

Municipal Water Pollution Prevention Program 6-NM-1

Solid Waste Bureau 6-NM-3

Oklahoma

Oklahoma Technical Assistance Program 6-OK-1

Texas

Office of Pollution Prevention and Conservation 6-TX-1

Region 7

Iowa

Comprehensive Solid Waste Management Planning 7-IA-1
Iowa Waste Reduction Center 7-IA-4
Landfill Alternative Grants 7-IA-7
Waste Reduction Assistance Program 7-IA-10

Kansas

Kansas State University RITTA Program 7-KS-1

Missouri

Waste Management Program, Environmental Improvement and Energy Resources Authority 7-MO-1

Nebraska

Hazardous Waste Section 7-NE-1

Region 8

Colorado

Pollution Prevention and Waste Reduction Program 8-CO-1

Montana

North Dakota

South Dakota

Utah

Wyoming

Solid and Hazardous Waste Division 8-WY-1

Region 9

Arizona

California

Alternative Technology Division, California EPA 9-CA-1
City of Berkeley Toxics Program 9-CA-5
Environmental Affairs Office 9-CA-7
Pollution Prevention Program, County of Los Angeles 9-CA-10
Hazardous and Toxic Materials Office (HTM), City of Los Angeles 9-CA-13
Pollution Prevention Program, San Diego County 9-CA-17
Pollution and Hazardous Waste Reduction Program, Bay Area Air Quality Management District 9-CA-20
Chief Administrative Officer's Hazardous Waste Management Program, City and County of San Francisco 9-CA-23

Hawaii
Nevada
Business Environmental Program 9-NV-1

Region 10

Alaska
Pollution Prevention Office 10-AK-1
Waste Reduction Assistance Program, Alaska Health Project 10-AK-4
Idaho
Oregon
Hazardous and Solid Waste Division 10-OR-1
Washington
Toxics Reduction, Waste Reduction, Recycling and Litter Control Program 10-WA-1

Region 1

NAME: **Connecticut Department of Environmental Protection**

ADDRESS: Waste Management Bureau
165 Capitol Avenue
Hartford, Connecticut 06106
Attn: Anne Gobin

PHONE: (203) 566-5217

FAX: (203) 566-4924

MISSION:
To increase emphasis on minimizing the generation of waste, to improve waste stream quality, and to prevent the incidence of pollution.

FUNCTION:
- Policy and Planning
- Education and Outreach
- Regulatory

PRESENT ACTIVITIES:
- Developing improved management practices for hazardous waste.
- Regulatory efforts to reduce packaging and toxic constituents in packaging.

TOOLS:
- A mass media campaign to encourage the elimination of waste
- Conferences and workshops
- Permit and enforcement conditions
- Training
- Information dissemination

FUTURE ACTIVITIES:
- Assessing opportunities for institutionalizing pollution prevention
- Developing an outreach program
- Increase training opportunities

DEFINITIONS:
P2-Definition from P.A. 91-276: "Pollution Prevention includes the change of or use of production processes, practices, raw materials or products that reduce or eliminate the generation of by-products without creating new risks of concern or that protect natural resources through their conservation.
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:

AUDIENCE/CLIENTS:
All Connecticut residents and businesses.

ENABLING LEGISLATION:
By and large, this is a voluntary effort except for specific products and their manufacturers faced with statutory mandates or permit conditions. The state's general philosophy and policy were established by P.A. 91-376.

ADMINISTRATIVE BASE:
State regulatory agency

BUDGET:
No dedicated funds.

SOURCES OF THE BUDGET:
The program relies on the resources of other programs. It has no dedicated funds other than $1 million for waste reduction education.

PROJECTED BUDGET:
Unknown pending notice of grant award.

EFFECTIVENESS:
The Department's annual strategic plan sets work plan and goals.

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Richard Barlow Waste Bureau Chief	Management	Engineering
2. Anne Gobin Planning Supervisor	Program development	Planning
3. Carmine DiBattista Director	Waste planning and standards	Program development
4. Elizabeth Napier Environmental Analyst	Program coordination	Regulatory
5. Tessa Gutowski Supervisor	Inter-Bureau coordination	Public Relations/Planning
6. Bob Meyers Environmental Analyst	Data Management	Computer Systems
7. John Cimochowski Supervisor	Fiscal and grants	Administrative

NAME: **Connecticut Technical Assistance Program (ConnTAP)**

ADDRESS: 900 Asylum Ave.
Suite 360
Hartford, CT 06105-1904

PHONE: (203) 241-0777

FAX: (203) 244-2017

MISSION:
To promote pollution prevention as the most preferred method of hazardous waste management.

FUNCTION:
ConnTAP is a program of the Connecticut Hazardous Waste Management Service. ConnTAP's function is to provide technical and financial assistance focused on pollution prevention to Connecticut business and industry. The Service also has responsibility for hazardous waste management planning and facility siting.

PRESENT ACTIVITIES:
- Resource Center

TOOLS:
- Information and Referral Hotline
- On-site pollution prevention assessments
- Free quarterly newsletter
- Videotape lending library
- Technical documents and reports
- Workshops and seminars.
- $5,000 Matching Challenge Grant Program
- Staff of 4 and 6 part-time positions (retired engineers) are vacant at this time

FUTURE ACTIVITIES:
- Site visit program in the developmental stages- will start conducting visits in February 1992
- Computerized tracking system for technical assistance requests
- Develop technical assistance for small business and light industry
- $10 million revolving loan fund for pollution prevention activities, including use reduction

DEFINITIONS:
P2-source reduction. Current legislation includes reduction of use of toxic or hazardous substances.
WR-use the USEPA definition-pertains to hazardous waste
WMIN-use the USEPA definition-pertains to hazardous waste
SR-use the definition from the U.S. 1990 Pollution Prevention Act
RECYCLING-Don't have a definition-concerned about confusion over recycling/reuse.

HIERARCHY:
The latest legislation mandates pollution prevention as priority for technical assistance, with recycling, treatment, and disposal acceptable when pollution prevention is not possible.

AUDIENCE/CLIENTS:
All the regulated community under RCRA, as well as Clean Water and Clean Air Acts. Audience is any person, business, or industry in the state, public or private. Targeting in the past has been on generators of metal hydroxide sludge, which is the largest wastestream in the state.

ENABLING LEGISLATION:
Connecticut General Statutes, Chapter 445a, Section 22a-134aa-nn
Public Act No, 91-376

ADMINISTRATIVE BASE:
Quasi-public state agency created by the state legislature.

BUDGET:
$358,900
$82,000 from EPA Region 1, $60,000 from Connecticut

SOURCES OF THE BUDGET:
$275,000 state funds from tax on hazardous waste
$83,900 federal RITTA grant, USEPA
$18,000 federal WRITE grant, USEPA

PROJECTED BUDGET:
$310,000 state funds
$15,000 WRITE grant
? other federal grants- possibly $42,000 PPIS grant from USEPA

EFFECTIVENESS:
At present, program staff track the number of requests responded to. The program will also track the number of site visits conducted and computerize both sources of information. Conducted a program evaluation in April 1990. Program staff surveyed 1500 users of services. Approximately 20%, or 309 responses were received. Program staff must communicate effectiveness to the board of directors and to the state legislature.

PUBLICATIONS:
A. Documents and Reports
Matching Challenge Grant Project Reports, 1988-1989
-"Engineering Report for Silk Dye Waste Reduction Project," American Cynamid Co., Davis and Gleck Div.
-"Summary Report, Cadmium Waste Management Program, Bass Plating Co.," Bass Plating Co.
-"Waste Minimization Technologies Review, 3 Case Studies," Connecticut Association of Metal Finishers
-"Electrolytic Recovery of Nickle from an Electroplating Process, Project P500," Precision Metal Finishing Co., Inc.
-"Waste Minimization Study, Seaboard Metal Finishing Co., Inc," YWC, Inc.
Matching Challenge Grant Project Reports, 1989-1990
-"Hazardous Waste Minimization Feasibility Study," Action Circuits, Inc.
-"An Evaluation of Process and Waste Treatment Materials to Reduce Waste Generation from a Burnishing Process," Bead Industries
-"Waste Minimization and Pollution prevention: Self-Audit Manual, Metal Finishing,: Integrated Technologies, Inc.

-"Feasibility Study of Pollution Prevention in the Connecticut Metal working Industry," New England Community Environmental Education Project
-"Feasibility Study of Ion Exchange and Electrolytic Metal Recovery for a Chemical Milling Process," Quality Rolling and Deburring Co., Inc.
–"Waste Minimization Audit," Sargent Manufacturing Co.
Other Reports
-"Economic Feasibility of a Hazardous Waste Land Disposal Facility in Connecticut"
-"Connecticut Hazardous Waste Generation and Management: A Status Report"
-An Assessment of the Characteristics and Amounts of Metal-Containing Hazardous Waste Generated in Connecticut"

B. Available Publications

-ConnTAP newsletter
-Connecticut Hazardous Waste Capacity Assurance Plan
-Advanced Treatment Technologies for Metal-Bearing Waste Minimization Conference, October 27,1989 Program and Abstracts
-Pollution Prevention in the Metal Finishing and Manufacturing Industries Conference, October 30, 1990
-List of waste minimization manuals available in the Services' library

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Rita Lomasney Manager	Program development and implementation	Chemical Engineering, Consulting
2. Andrew Vecchio Technical Specialist	Matching Grant program and technical assistance	Industry
3. Barbara Barbieri Secretary	Support	Clerical

NAME: **Office of Pollution Prevention**

ADDRESS: Department of Environmental Protection
State House Station #17
Augusta, ME 04333

PHONE: (207) 289-2811

FAX: (207) 289-7826

MISSION:
The Office of Pollution Prevention is established to review programs of the Department of Environmental Protection and make recommendations to the commissioner on means of integrating pollution prevention into departmental programs.

FUNCTION:
1. Establish pollution prevention priorities
2. Coordinate the DEP's activities on pollution prevention
3. Ensure consistency
4. Provide technical assistance, training and education to the public, government and the regulatory community
5. Establish a pollution prevention awards program
6. Identify opportunities in State procurement to encourage pollution prevention
7. Develop procedures to measure program effectiveness
8. Assume responsibility for the administration of toxic use reduction

PRESENT ACTIVITIES:
At this point the program is exclusively regulatory. Maine has required a 30% reduction in toxics release and hazardous waste generation and a suggested 30% reduction in toxics use by 1998.

TOOLS:
Not in place at this time.

FUTURE ACTIVITIES:
- Training
- Seminars and workshops
- On-site consultations
- Technical assistance
- Facility specific pollution prevention projects
- Development of college curricula

DEFINITIONS:
P2-the use of processes, practices, or products that reduce of eliminate the generation of pollutants, and wastes that reduce or eliminate the generation of pollutants and wastes or that protect natural resources through conservation or more efficient use.
WR-
WMIN-
SR-
RECYCLING-the collection, separation, recovery, and sale or reuse of material that would otherwise be disposed of or processed as waste, or mechanized separation and treatment of waste, other than through combustion, and the creation and recovery or reuseable materials other than as fuel for the generation of electricity.

HIERARCHY:
Pollution prevention is primary.

AUDIENCE/CLIENTS:
- Regulatory community
- Governmental agencies
- SQGs
- LQGs
- TRI reporters
- Municipalities
- General public

ENABLING LEGISLATION:
"An Act to Clean the Environment by the Reduction of Toxics Use, Waste, and Release," 5 MSRA §12004-I, Sub§ 22-A, as amended

ADMINISTRATIVE BASE:
State Agency

BUDGET:
$6,400 plus salary for one full time staff person

SOURCES OF THE BUDGET:
Fees

PROJECTED BUDGET:
Unknown

EFFECTIVENESS:
A measure of effectiveness has not yet been developed. Effectiveness must be communicated to the DEP Commissioner and Deputy Commissioner.

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Michael Kuhns Director	Develop P2 program, Coordinate Bureau activities	Engineering, Licensing & Enforcement

To date the Office of Pollution Prevention has only one staff member. It is, however, coordinating the activities of approximately 10 staff in media programs, shifting emphasis from "end-of-pipe" or "end-of-stack" to process modification.

NAME: **Office of Technical Assistance for Toxics Use Reduction**

ADDRESS: Executive Office of Environmental Affairs
100 Cambridge St.
Boston, MA 02202

PHONE: (617) 727-3260

FAX: (617) 727-2754

MISSION:
Mandated by the Massachusetts Toxics Use Reduction Act. Programs mission is to provide technical assistance to toxics users and small quantity toxics users to assist them in achieving toxics use reduction (TUR) and in complying with requirements of the Act. Conduct outreach for small businesses required to report and do TUR plans. Coordinate with private sector initiatives on TUR and waste prevention education and technical assistance.

FUNCTION:
Program provides technical assistance to industry, assist businesses required to file TUR plans; train state regulatory agency personnel; conduct workshops, seminars, and conferences on pollution prevention for industry; educate the public in pollution prevention.

PRESENT ACTIVITIES:
- Technical assistance
- Information clearinghouse
- Workshops
- Training regulatory staff

TOOLS:
- Training
- Seminars and conferences
- On-site visits and follow-up
- Case studies/fact sheets
- Review of new technologies
- TUR guide for industry

FOCUS:

FUTURE ACTIVITIES:
- Statewide conferences
- Industry specific workshops
- Continue training of DEP and regulatory community
- Expand staff in order to conduct more site visits

DEFINITIONS:
P2- encompasses all of the terms below.
WR-decreasing the total quantities of waste through any method possible, including more efficient treatment (filter presses, evaporators, etc.)
WMIN-
SR-reduction in toxics use, or process modification or chemical substitution.
RECYCLING-the reintroduction of process material either at the process site (integral) or on/off site (nonintegral) for reuse or other end use.

HIERARCHY:
Follow USEPA's pollution prevention hierarchy.

AUDIENCE/CLIENTS:
All sizes and types of industry. Emphasis is placed on large quantity toxics users because they pay the chemical user fee that funds the program.

ENABLING LEGISLATION:
Massachusetts Toxics Use Reduction Act (1989)

ADMINISTRATIVE BASE:
State agency

BUDGET:
$350,000 from the State.
$100,000 from the Federal government.

SOURCES OF THE BUDGET:
State funds provided by fees paid by industry for toxics use.
Federal funds provided by an USEPA grant.

PROJECTED BUDGET:
$1.3 million dollars in state funds.

EFFECTIVENESS:
Effectiveness is measured by number of contacts made, waste reduced, and number and types of outreach activities.
Program is accountable to TUR Advisory Board, and the USEPA.

PUBLICATIONS:

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Barbara Kelley Director	Policy and Administration	Gov't , Management Technical asst. programs
2. Richard Reibstein Outreach/Policy	Policy development, outreach plan, SQG program oversight	Env. studies, Law, Technical asst.
3. Mitchell Kennedy TUR Engineer	Technical assistance	Engineering, Technical assistance, Industry
4. Joe Paluzzi TUR Engineer	Technical assistance	Engineering, Consulting Industry
5. Bill McGowan TUR Analyst/Engineer	Technical assistance	Chemistry, Industry
6. Anne Reynolds TUR Analyst/Engineer	Technical assistance	Chemistry, Industry
7. Paul Richard Env. Engineer	Technical assistance, Outreach to POTWs	Wastewater specialist POTW
8. Tim Greiner Env. Engineer (PT)	Technical assistance, Staff training	Project director, Industry Engineering
9. Talbot Brewer Technical Writer (PT)	Develop written mat'l	Journalist
10. Marlene Wittman Economic Planner	Dev. case studies, Finan. analysis, Funding sources	Business
11. Rich Bizzero Env. Analyst	Technical assistance	Chemistry, Industry, Training
12. Grace Caner Program Coordinator	HW Program, Events Coordination	Environmental

NAME: **Toxic Use Reduction Act Implementation Team**

ADDRESS: Bureau of Waste Prevention
Massachusetts Department of Environmental Protection
1 Winter St., 7th Floor
Boston, MA 02018

PHONE: (617) 292-5953

FAX: (617) 556-1049

MISSION:
The Massachusetts Toxic Use Reduction Act establishes, as a goal, a 50% reduction in the "amount of toxic waste generated prior to treatments" by 1997, through toxics use reduction (TUR). DEP promotes this goal through mandatory TUR reporting and planning requirements and changing how we implement traditional media based permitting and enforcement programs. These changes are intended to make the programs multimedia in focus and to promote toxics use reduction as the preferred form of pollution control.

FUNCTION:
- Regulatory
- Policy and Planning
- Analysis of reporting and planning data

PRESENT ACTIVITIES:
- Developing and enforcing regulations, policies and procedures for reporting and planning.
- Developing and implementing multimedia pollution prevention based permitting, inspection, compliance reporting and enforcement procedures and policies.
- Analyzing reporting and planning data and shifting DEP priorities accordingly.

TOOLS:
- Regulations
- Reporting and planning data

FOCUS:

FUTURE ACTIVITIES:
- Developing regulations that classify similar production process/product combinations (production units) into similar user segments.
- Developing performance standards for selected "user segments."

DEFINITIONS:
P2-toxics use reduction, source reduction (including integral recycling only)- inplant changes in production processes or raw materials that reduce, avoid, or eliminate the use of toxic or hazardous substances or the generation of hazardous byproducts per unit of product.
WR-NA
WMIN-NA
SR-NA
RECYCLING-NA

HIERARCHY:
Toxics use reduction is the program's single priority.

AUDIENCE/CLIENTS:
Users or TRI and CERCLA chemicals above the TRI use and employment thresholds in SICs 10-14, 20-40, 44-51, 72,73,75,76.

ENABLING LEGISLATION:
Toxics Use Reduction Act MGL c21I

ADMINISTRATIVE BASE:
State Agency (regulatory)

BUDGET:
$100,000

SOURCES OF THE BUDGET:
- A chemical use fee dedicated to TURA implementation.
- Federal grants

PROJECTED BUDGET:
$627,000 State appropriation from TURA fees
$160,000 Federal grant

EFFECTIVENESS:
Numbers of-
- inspections/enforcement actions completed
- regulations written
- permits issued
- reduction in byproducts

PUBLICATIONS:
None

STAFF: NAME/POSITION	RESP.	BACKGROUND
1. Susan Peck Director, TUR Team	Regulatory, Policy, Procedure Dev.	Regulatory, Environmental Science
2. Lee Dillard Chief of Operations & Technical Support	Compliance & Enforcement Program	Regulatory, Environmental Management
3. Cynthia Chavez TUR Planner	TUR planning, multimedia permitting	Regulatory, Tech. Asst. Political Science
4. Susan Green TUR Env. Analyst	Data mgmt. system, Planner certification	Regulatory
5. Alissa Katz Counsel	Regulations, Enforcement	Legal
6. Sandra Hurlburt Compliance Coord.	NE Regional Ofc.	Regulatory
7. Carl Natho Compliance Coord.	SE Regional Ofc.	Regulatory
8. Doug Fine Compliance Coord.	Central Regional Ofc.	Regulatory
9. Roberta Ken Compliance Coord.	Western Regional Ofc.	Regulatory

NAME: **Toxics Use Reduction Institute**

ADDRESS: University of Massachusetts at Lowell
Lowell, MA 01854

PHONE: (508) 934-3275

FAX: (508) 453-2332

MISSION:
The mission of the Toxics Use Reduction Institute is to promote reduction in the use of toxic chemicals in Massachusetts industry and commerce. The Institute was established by the Massachusetts Toxics Use Reduction Act of 1989 and works in cooperation with the state Department of Environmental Protection (DEP) and the Office of Technical Assistance (OTA) to promote toxics use reduction. The Institute is a multi-disciplinary research, education and technical support center located at the University of Massachusetts at Lowell.

FUNCTION:
- Education
- Research and Development

PRESENT ACTIVITIES:
- Development and delivery of Toxics Use Reduction Planners Course
- Development of a research agenda
- Public education on pollution prevention and toxics use reduction

TOOLS:
- Grants
- Newsletters
- Curriculum development team
- Advisory Boards

FUTURE ACTIVITIES:
- Continuation of current services
- Curriculum development on toxics use reduction and pollution prevention for K-12, higher education

DEFINITIONS:
P2-prevention of the generation and use of all types of pollution. Includes, but is not limited to, toxics use reduction.
WR-end of pipe application of technology to waste.
WMIN-minimizing the generation of all types of industrial waste.
SR-toxics use reduction.
RECYCLING-on-site only. (closed loop)

HIERARCHY:
1. Toxics use reduction (source reduction)
2. Recycling

AUDIENCE/CLIENTS:
- State environmental staff and other public officials
- General public
- TRI reporters
- Non-regulated industry

ENABLING LEGISLATION:
Massachusetts Toxics Use Reduction Act 1986

ADMINISTRATIVE BASE:
University of Massachusetts- Lowell

BUDGET:
$300,000

SOURCES OF THE BUDGET:
- State fees on toxic chemical users
- Grants

PROJECTED BUDGET:
$1,000,000

EFFECTIVENESS:
Annual reports to state Administrative Council.

PUBLICATIONS:
Toxics Use Reduction Act Reports
Newsletters
Miscellaneous Publications
Curriculum for Toxics Use Reduction Planners

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Kenneth Geiser Director		Policy
2. Michael Ellenbecker Assoc. Director	Research agenda	Engineer
3. Beverly Johnson Assoc. Dir./ Adm.	Administration and Finance	
4. Jack Luskin Assoc. Director	Education and training agenda	Education & training
5. Mark Rossi Research Associate	Research agenda	Research/policy
6. Patrick Demers Special Projects Coordinator	Special projects	Engineer
7. Sandra Thibodeau Administrative Asst.	Administration	
8. Mark Griffin Education/Training Associate	Education and training	Engineer

NAME: **New Hampshire Pollution Prevention Program**

ADDRESS: New Hampshire Department of Environmental Services
Waste Management Division
6 Hazen Drive
Concord, New Hampshire 03301-6509

PHONE: (603) 271-2901/ 2902

FAX: (603) 271-2465

MISSION:
To meet Capacity Assurance Requirements and to assist the commercial and industrial business community in the formulation and implementation of waste reduction programs. This assistance is to be multi-media in scope. The program is relatively new will continure to expand its services through a recently received USEPA Pollution Prevention Incentives for the States grant. The program has not officially adopted a mission statement at this time.

FUNCTION:
The program's main functions are or will be;
- on-site technical assistance
- information clearinghouse
- education
- CAP implementation
- sponsoring state for NE Industrial Waste Exchange
- some policy and planning

PRESENT ACTIVITIES:
- On-site technical assistance
- Maintain a waste reduction/pollution prevention information clearinghouse
- Maintain resource network of state, federal and industry contacts

TOOLS:
- Information clearinghouse
- Fact sheets
- Seminars
- Pilot Projects
- Conferences/Seminars

FUTURE ACTIVITIES:
- Industry specific workshops, conferences, and fact sheets
- Newsletter
- Enhanced and expanded on-site technical assistance capabilities
- Awards program
- The incorporation of university resources into state program
- Increased outreach activities

DEFINITIONS:
P2-practices that reduce, avoid or eliminate the generation of pollution so as to reduce risks to the public health and the environment. This includes source reduction and excludes most forms of recycling. It is not limited to hazardous wastes or chemicals subject to TRI, but encompasses any hazardous substance, pollutant or contaminant.
WR-same as waste minimization
WMIN-activities that minimize the generation of wastes which subsequently require treatment and disposal. Waste Minimization includes source reduction and/or specific types of recycling measures that result in a reduction in the total toxicity of hazardous waste as long as the reduction is consistent with the goal of minimizing present and future threats to human health and the environment.
SR-any practice that reduces the amount of hazardous substance, pollutant or contaminant entering any waste stream or otherwise released to the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and reduces hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. (Good housekeeping, input substitutions, process redesign, inventory control, etc..).
RECYCLING-The collection, separation and recovery of useful materials which cannot be directly reused or would otherwise be discarded as waste.

HIERARCHY:
Recently enacted solid waste legislation sets out the preferred hierarchy as;
1. Source reduction
2. Recycling and reuse
3. Waste to energy
4. Incineration
5. Landfill

However, this legislation does not refer to the Pollution Prevention Program specifically. The Program draws its direction from federal certification process and the U.S. Pollution Prevention Act of 1990.

AUDIENCE/CLIENTS:
The business community in general.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
Non-regulatory program within a state regulatory agency.

BUDGET:
$217,667

SOURCES OF THE BUDGET:
- Superfund CORE Grant for CAP/Haz. Waste Reduction Staff ($77,000)
- Grant from Governor's Energy Office ($42,000)
- USEPA Pollution Prevention Incentives to the States grant ($296,000/3years)

PROJECTED BUDGET:

EFFECTIVENESS:
Program staff uses whatever means available for evaluation. Staff tracks number of contacts made, number of on-site visits, number of reports written, some quantitative analysis of RCRA figures.
Program staff are accountable to CAP process and USEPA Grants Program.

PUBLICATIONS:
Brochures for;
- Paints, thinners, and brush cleaners
- Household cleaners
- Used motor oil
- Motor vehicle batteries
- Hazardous materials in your home
- General waste reduction factsheets

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Vincent Perelli Waste Mgmt. Specialist	Capacity Assurance, Hazardous waste reduction	Natural resource mgmt., P2 training, some consulting
2. Paul Lockwood Waste Mgmt. Specialist	NH P2 programs	Public Health, Environmental Planner in private sector

NAME: **WasteCap**

ADDRESS: Business and Industry Association
122 North Main Street
Concord, NH 00301

PHONE: (603) 224-5388

FAX: (608) 224-2782

MISSION:
WasteCap facilitates the sharing of information on commercial and industrial waste reduction amongst NH business through a free site assessment.

FUNCTION:
The function of the program is to provide businesses with free technical assistance on waste reduction opportunities specific to their operations.

PRESENT ACTIVITIES:
• Coordination of on-site waste assessments

TOOLS:
• Experienced Professionals
• Workshops

FUTURE ACTIVITIES:
In planning stages

DEFINITIONS:None given
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:
1. Source reduction
2. Recycling

AUDIENCE/CLIENTS:
New Hampshire businesses

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
Business and Industry Association of New Hampshire

BUDGET:
$40,000

SOURCES OF THE BUDGET:
1. NH Governor's Recycling Program grant
2. US EPA grant
3. Corporate donations
4. In kind services from the Business and Industry Association

PROJECTED BUDGET:
$40,000

EFFECTIVENESS:
Measured by follow-up phone calls

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND
Emily Hess, assisted by Volunteer Steering Committee		

NAME: **Hazardous Waste Reduction Program**

ADDRESS: Rhode Island Department of Environmental Management
Office of Environmental Coordination
Hazardous Waste Reduction Section
83 Park St.
Providence, RI 02903-1037

PHONE: (401) 277-3434

FAX: (401) 277-2591

MISSION:
To reduce or eliminate the use of toxic/hazardous materials and the generation of environmental pollutants and hazardous waste as expeditiously as possible.

FUNCTION:
Non-regulatory technical and financial assistance:
- Policy and planning
- Education
- Identification and funding of hazardous waste reduction and recycling technologies
- Sponsorship of the Northeast Waste Exchange
- Grant funding for R&D activities
- Information and technology transfer

PRESENT ACTIVITIES:
- On-site assessments
- Consultation in funding for University-based student internships
- Support University research and industry demonstrations
- Information clearinghouse
- Conferences and workshops
- Environmental data analysis
- Assistance in Capacity Assurance Planning

TOOLS:
- Statewide and regional training
- Telephone hotline
- Newsletter
- $2M grants program (on hold)
- On-site assessments--computer tracking and follow-up
- Staff; 4 full-time, 3 part-time, 6 university chemical engineering students

FUTURE ACTIVITIES:
- Start-up the Rhode Island Pollution Prevention Council
- USEPA/NEWMOA sponsored pollution prevention conference; concurrent technical sessions and vendor exhibitions
- Joint projects with Rhode Island Department of Economic Development and Rhode Island trade associations.
- Expansion of on-site technical assistance program and library

DEFINITIONS:
P2-the avoidance or reduction of pollutants from all sources to all media. Includes source reduction and environmentally sound recycling.
WR-any in-plant practices that reduce, avoid or eliminate the generation of hazardous wastes so as to reduce risks to human health or the environment.
WMIN-the reduction, to the extent feasible, of hazardous waste that is generated or subsequently treated, stored, or disposed of (EPA).
SR-same as in Pollution Prevention Act of 1990
RECYCLING-techniques used to minimize the generation of waste by recovering and reusing otherwise spent material.

HIERARCHY:
1. Source Reduction
2. Recycling
3. Waste Minimization

AUDIENCE/CLIENTS:
All members of the regulated community: SQGs/LQGs TRI reporters, etc.

ENABLING LEGISLATION:
Hazardous Waste Reduction, Recycling, Treatment Research and Demonstration Act of 1986.
Hard-To-Dispose Material-Control and Recycling Law- 1990

ADMINISTRATIVE BASE:
State Agency

BUDGET:
Operating budget: $150,000
Funds available for grants: $1,400,000

SOURCES OF THE BUDGET:
USEPA SRRTA Grant: $300,000/3 years
State Hard-to-Dispose Material Tax: $200,000/year
State grant money (bond issue): $2,000,000

PROJECTED BUDGET:
Operating budget: $300,000
Grants: $1,200,000

EFFECTIVENESS:
Computer tracking of recommendations and follow-up. Reported wasted reduced through industry.
Programs reports to the state legislature, industry and associations, DEM management.

PUBLICATIONS:
- *Options* newsletter
- Solvent substitute fact sheet (near completion)
- Alternative Coating Technologies (near completion)
- Hazardous Waste Reduction Initiatives and the State of Rhode Island
- Hazardous Waste Reduction Technical Assistance Directory: A Pollution Prevention Resource for the Jewelry Industry

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Richard Enander Principle Environmental Scientist	Program manager	B.S., M.S. Environmental Science, Industry and Gov't regulatory
2. Eugene Pepper Senior Environmental Planner	On-site TA, Grant/oil program admin.	Industry, Gov't regulatory
3. Theodore Glasson Engineer (part-time)	On-site TA	Chemical Engineer, 35 yrs industrial experience
4. Gene Park Engineer	On-site TA, Process development work	B.S.,M.S.,Ph.D.(candidate) Chemical Engineering, Industry
5. Stanley Barnett Chair, URI Chemical Engineering Dept.	Director of RI Center for Pollution Prevention	Ph.D. Chemical Engineering, Industrial/Research
6. James Saletnik TA Program Coordinator	Coordination with small business and RI Dept. of Economic Development	Gov't experience

This list of staff does not include university grad/undergrad students, summer intern, part-time librarian, state clerical and data base management support.

NAME: **Pollution Prevention Division**

ADDRESS: Department of Environmental Conservation
103 South Main St.
Waterbury, Vermont 05671-0401

PHONE: (802) 244-8702

FAX: (802) 244-5141

MISSION:
Carry out the non-regulatory functions of the Department of Environmental Conservation.

FUNCTION:
To provide technical assistance and coordinate the state's efforts in pollution prevention.

PRESENT ACTIVITIES:
Program is scheduled to begin October 31, 1991

TOOLS:
N/A

FUTURE ACTIVITIES:
- Review toxics use reduction and hazardous waste reduction plans submitted by industry
- Support industry in its plan development
- On-site technical assistance
- Conferences, workshops, and seminars
- Newsletter
- Information clearinghouse
- Coordinate pollution prevention activities with other state agencies
- Review regulatory programs in order to minimize barriers to pollution prevention

DEFINITIONS:Program has no specific definitions at this time.
P2-N/A
WR-N/A
WMIN-N/A
SR-N/A
RECYCLING-N/A

HIERARCHY:
N/A

AUDIENCE/CLIENTS:
Regulated community and SQGs

ENABLING LEGISLATION:
Amendment to V.S.A. § 2873

ADMINISTRATIVE BASE:
State non-regulatory within regulatory agency

BUDGET:N/A

SOURCES OF THE BUDGET:
Fees on the generators of hazardous waste.

PROJECTED BUDGET:
$250,000

EFFECTIVENESS:
N/A

PUBLICATIONS:
N/A

STAFF:

NAME/POSITION	RESP.	BACKGROUND

The program will be have a full time staff of three.

NAME: **Vermont Waste Cap**

ADDRESS: P.O. Box 630
Montpelier, VT 05601

PHONE: (802) 223-3441

FAX: (802) 223-2345

MISSION:
To assist Vermont's private sector in developing and implementing effective and economical waste reduction and pollution prevention strategies.

FUNCTION:
Technical assistance and education.

PRESENT ACTIVITIES:
- Technical assistance
- Information clearinghouse
- Presentations at public forums

TOOLS:
- Volunteer trainings
- On-site visits
- Case studies
- WR database research
- Industry specific seminars

FUTURE ACTIVITIES:
Vermont Waste Cap plans a joint program with Maine and New Hampshire. Expansion to include development of municipal waste CAP programs, and interactive computer model and expansion of volunteers to include retirees and students.

DEFINITIONS:Staff has spent no time with the definition of these terms and have, as yet, found no need to do so.
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:
No

AUDIENCE/CLIENTS:
Vermont's private sector, both regulated and exempt.

ENABLING LEGISLATION:
No direct enabling legislation.

ADMINISTRATIVE BASE:
Non-profit business and industry association

BUDGET:
Approximately $33,000.

SOURCES OF THE BUDGET:
Year 1- State grant and corporate donations
Year 2- Federal EPA grant and corporate donations

PROJECTED BUDGET:
Approximately $33,000.

EFFECTIVENESS:
Staff will measure the program's effectiveness by tracking the number of site visits completed and telephone requests for information, performing follow-up consultation of strategies implemented and analyzing the results.

PUBLICATIONS:

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Connie Leach Administrator	Program management	Public sector waste management programs BA &MS in Natural Resources

Region 2

NAME **New Jersey Office of Pollution Prevention**

ADDRESS: New Jersey Department of Environmental Protection
CN-402
401 E. State St.
Trenton, NJ 08625

PHONE: (609) 777-0518

FAX: (609) 984-3962

MISSION:
To encourage the reduction or elimination of the use and generation of hazardous substances within industrial processes.

FUNCTION:
OPP is a regulatory program which requires facilities to develop pollution prevention plans, to report annual summaries, and to develop a facility wide permitting approach to require multi-media pollution prevention to achieve toxic reductions.

PRESENT ACTIVITIES:
- Developing legislation, rules and regulation.
- Initiating a pre-pilot facility-wide permit project.
- Conducting a Governor's Award.
- Developing industry profiles for pollution prevention trend analysis.

FUTURE ACTIVITIES:
- Developing guidance document for pollution prevention plans.
- Testing multi-media permitting project.
- Measuring effectiveness of planning approach.

TOOLS:
- Annual Governor's Award for Outstanding Achievement in Pollution Prevention.

DEFINITIONS:
P2- New Jersey defines pollution prevention as the source reduction of hazardous substances. Does not include out of process recycling, treatment, or control
WR- includes pollution prevention, out of process or off-site recycling.
WMIN- includes pollution prevention, out of process or off-site recycling, and treatment
SR- material substitution; product reformulation, process modification, in-process recycling and improved housekeeping.
RECYCLING-NA

HIERARCHY:
NJDEP/OPP promotes the waste management hierarchy:
1. source reduction
2. recycling
3. treatment
4. disposal

AUDIENCE/CLIENTS:
The programs primary audience is the regulated community, initially focusing on all TRI reporting facilities

ENABLING LEGISLATION:
The OPP is currently established through a NJ Department of Environmental Protection Administrative Order; New Jersey Pollution Prevention Act

ADMINISTRATIVE BASE:
NJ Department of Environmental Protection and Energy

BUDGET:
OPP is currently part of the Commissioner's Office - our enabling legislation and its funding source are still pending, all staff salaries are being paid for by an EPA Pollution Prevention Incentives Grant of $300,000 to be used over 3 years.

SOURCES OF THE BUDGET:
The OPP is operating with an EPA Pollution Prevention Incentives Grant and a matching grant from the state's Spill Fund. Legislatively mandated funding from an increase in the state Right to Know fee.

PROJECTED BUDGET:
Approximately $2.5 million.

PUBLICATIONS:
Currently working on a Q and A fact sheet about NJ's Pollution Prevention initiative.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Jeanne Herb Director		
2. Steve Anderson Research Scientist	Project mgr. for facility-wide permitting	Engineering; regulatory with both haz. and water
3. Mike Aucott Research Scientist		Regulatory with solid waste and CFCs
4. Tina Gutierrez Secretarial Assistant		
5. Debbie Milecofsky Executive Assistant		
6. Richard Longbien Supervising Env. Specialist		
7. Shelly Hearne Research Scientist		
8. Melinda Dower Senior Policy Analyst		

NAME **New Jersey Technical Assistance Program for Industrial Pollution Prevention**

ADDRESS: New Jersey Institute of Technology
Hazardous Substance Management Research Center
323 Martin Luther King Blvd.
Newark, NJ 07102

PHONE: (201) 596-5864

FAX: (201) 802-1946

MISSION:
To provide technical assistance and economic evaluations of pollution prevention options to New Jersey's industrial and business sector, with an emphasis on source reduction.

FUNCTION:
To provide technical assistance through on-site assessments, literature research, presentations to interested trade groups and referrals to engineering firms and consultants.

PRESENT ACTIVITIES:
- On-site assessment.
- Maintenance of an information center for distribution of publications.
- Outreach to trade groups.
- Establishment of county-based programs.

FUTURE ACTIVITIES:
- Secure continuation funding.
- Establish more county programs.
- Establish vocational education/environmental education programs.

TOOLS:
- On-site assessment.
- Information center.

DEFINITIONS:
P2-source reduction and recycling.
WR-NA
WMIN- NA
SR- an in-process change resulting in the reduction or elimination of waste previously generated.
RECYCLING- the recovery and reuse of materials that were no longer suitable for their original intended purpose.

HIERARCHY:
To reduce confusion, NJTAP defines pollution prevention as source reduction and recycling.

AUDIENCE/CLIENTS:
NJTAP's audience is the regulated community with emphasis on small business not having the resources needed to effectively evaluated pollution prevention options.

ENABLING LEGISLATION:
None at this time.

ADMINISTRATIVE BASE:
New Jersey Institute of Technology

BUDGET:
$198,000

SOURCES OF THE BUDGET:
RITTA, and source reduction and technical assistance grants

PROJECTED BUDGET:
$198,000

PUBLICATIONS:
Distribute existing publications from other technical assistance programs.

STAFF

NAME/POSITION	RESP.	BACKGROUND
1. Kevin Gashlin Director		Industrial liaison, Env. compliance for the NJDEP
2. Alan Ulbrecht Research Scientist		Metal finishing
3. Hanna Saqa Research Scientist		Industrial engineering

NAME: **Bureau of Pollution Prevention**
Division of Hazardous Substances Regulation and the Division of Solid Waste
New York State Department of Environmental Conservation

ADDRESS: 50 Wolf Road
Albany, NY 12233

PHONE: (518) 457-7276 (518) 457-6603

FAX: (518) 457-0629

MISSION:
The program's mission is to facilitate the maximum utilization of preferred waste management practices (i.e., source reduction) by implementing appropriate programs for large and small quantity generators of hazardous and solid wastes and dischargers and emitters of toxic substances. This multi-media effort incorporates enhanced enforcement, integrated facility management across all environmental media, and fosters extensive and comprehensive research programs.

FUNCTION:
Our programs consist of enforceable laws and regulations, technical assistance, research and development, planning, compliance and enforcement, education and waste exchange. For solid waste program only-- grant and other financial assistance, market development through the Department of Economic Development.

PRESENT ACTIVITIES:
Hazardous Waste- Waste reduction plans from large quantity generators (the plans are subject to DEC approval), hotline/information clearinghouse, workshops for small generators, newsletters, success stories, annual conference.
Solid Waste- Survey information on returnable containers and municipal recycling, technical assistance and planning grants to local governments. Multi-media pollution prevention and cross permitting through an integrated facility management approach is the key activity to accomplish extensive pollution prevention.

TOOLS:
- Training
- Hotline
- Seminars
- Newsletters
- Case studies
- On-site visits and inspections
- Annual conference
- Technical and financial assistance to local programs (Solid Waste only)

The program also holds multi-media pollution prevention workshops (up to 30 per year).

FUTURE ACTIVITIES:
The regulatory program is being expanded to multi-media by requiring larger emitters and dischargers of toxic substances to undertake planning and implement toxic release reduction programs as part of permitting requirements. Also enforcement settlements are requiring pollution prevention activities. In addition, integrated permitting is being required. The overall pollution prevention effort will be incorporated into Best Management practices and fugitive reduction programs.

DEFINITIONS:
P2-reduction in volume of solid waste, reduction in volume and/or toxicity of hazardous waste and/or toxic substances, including source reduction and recycling.
WR-reduction in volume of solid waste, reduction in volume and/or toxicity of hazardous waste, including source reduction and recycling, directed at solid waste media.
WMIN-same as waste reduction except that treatment to reduce or detoxify generated waste is included under waste minimization.
SR-in-plant practices to reduce, avoid or eliminate the generation of waste, including input substitution, technology modification, good housekeeping practices and product reformulation.
RECYCLING-direct use or reuse (not closed loop) of waste material in a process or reclamation by recovering secondary materials for separate end use or by removing impurities so that waste may be reused.

HIERARCHY:
Our program has the following preferred hierarchy for managing hazardous and solid waste as contained in Sections 27-0105 and 27-0106 of the Environmental Conservation Law respectively.

- Hazardous Waste (Section 27-0105)
  1) Source Reduction
  2) Waste Reduction
  3) Waste Minimization
- Solid Waste (Section 27-0106)
  1) Source Reduction
  2) Recycling

AUDIENCE/CLIENTS:
Local governments and private industries including regulated community, SQGs, LQGs, and TRI reporters. The regulatory program is directed at approximately 600 facilities that are responsible for generating over 95% of hazardous wastes and toxic substance emissions and discharges to air and water. The technical assistance program is directed at over 25,000 smaller facilities. At 26 vehicle maintenance workshops held in late 1989 through mid 1990, over 1500 individuals attended.

ENABLING LEGISLATION:
- Environmental Conservation Law (ECL) Section 27-0908; Hazardous Waste Reduction Plans.
- ECL Section 27-0105; Preferred statewide hazardous waste management practices hierarchy.
- ECL Section 27-0106; State solid waste management policy.
- ECL Sections 19-0301 and 17-0303; Provide authority to impose pollution prevention requirements on toxic substance dischargers and emitters.
- ECL Article 3; Provide general authorities.
- ECL Article 8; Environmental quality review as related to permitting and other activities.
- ECL Article 71; Provides strong enforcement provisions.
- Solid Waste Management Act of 1988.

ADMINISTRATIVE BASE:
New York State Government, Department of Environmental Conservation

BUDGET:
$4 million

SOURCES OF THE BUDGET:
New York State General Fund and federal grants. The general fund provides over 90% of the funding.

PROJECTED BUDGET:
$4 million

EFFECTIVENESS:
The success is measured by evaluating progress of waste reduction efforts as explained in individual facility annual reports and in waste reduction plans. Also, the response to workshops offered is used as an indicator of success. The following explains how the current program developed based on evaluation of statutory and regulatory tools needed to further waste reduction

The program began in the early 1980s by providing on-site technical assistance to manage hazardous and solid wastes. In 1987 and 1988 preferred waste management practices (i.e., hierarchies) were established for hazardous and solid wastes respectively. Further, in 1988, the Solid Waste Management Act provided authority and funding to create and implement solid waste reduction and recycling programs. Also, in 1988 based on the hazardous waste hierarchy law (ECL 27-0105), the Department required RCRA permitted facilities to develop and implement comprehensive hazardous waste reduction programs. In 1989, this effort was expanded to initiate a pilot multi-media pollution prevention program. In 1990, a statute requiring hazardous waste reduction planning passed which require about 600 large quantity generators responsible for generating over 94% of the hazardous waste generated to develop programs for implementing comprehensive waste reduction measures. These programs are reviewed by the Department and can be rejected, if the programs are deficient. Any facility that does not develop an acceptable program cannot make waste reduction certifications on manifests and as part of its operating record (TSDs). In 1991, comprehensive multi-media pollution prevention regulations are being developed to require approvable pollution prevention programs as part of permitting programs based on thresholds of toxic substance releases as reported pursuant to Section 313 of SARA.

PUBLICATIONS:
Documents include;

- Waste Reduction Guidance Manual
- Small Quantity Generator Technical Assistance Manual
- specific technical assistance manuals for vehicle maintenance facilities, dry cleaners, and printers
- a guide for reducing and recycling solid wastes

For a more complete list of available documents and to obtain documents, please call (518) 485-8400.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. N.G. Kaul Director	Hazardous Substance Regulation (HSR)	Engineering
2. Norm Nosenchuck Director	Solid Waste (SW)	Engineering
3. John Iannotti Bureau Director	Division of HSR Pollution Prevention Program	Engineering
4. William Colden Bureau Director	Division of SW Recycling and Reduction Program	Engineering

Staff in Hazardous Substance Program totals 24.
Staff in Solid Waste Program totals 13.
Additional staff for multi-media and toxic substances total 4.

Total staff (41) is exclusively devoted to pollution prevention activities. Other support staff exist to perform general inspections across all media and for enforcement activities.

NAME: **Technical Advisory Services Division, New York State Environmental Facilities Corporation**

ADDRESS: 50 Wolf Road
Albany, New York 12205

PHONE: (518) 457-4132

FAX: (518) 485-8773

MISSION:
To improve New York's environment and encourage the reduction, reuse and recycling of wastes by providing technical assistance to industry, municipalities and State Agencies.

FUNCTION:
Provide technical assistance to businesses, in both the public and private sector, to encourage waste minimization through source reduction, reuse, recycling, and waste exchanges in an environmentally safe, economically feasible manner. Provide a financing mechanism through the industrial finance program.

PRESENT ACTIVITIES:
- Technical assistance
- Industrial financing

TOOLS:
- Seminars and workshops
- On-site visits
- Industrial financing
- Training

FOCUS:
Staff has experience in chemical, paper making, metal finishing sector as well as significant regulatory experience.

FUTURE ACTIVITIES:
Staff plan to provide technical assistance to small business in New York State as required in the Clean Air Act Amendment of 1990.

DEFINITIONS:
P2-
WR-reducing the amount of waste requiring disposal after utilization of reuse, recycling and waste exchange.
WMIN-Same as waste reduction.
SR-reducing the quantity or toxicity of waste at the source.
RECYCLING-returning waste materials to the original process to produce similar products, as opposed to reuse which is to use the waste materials for some beneficial purpose, not limited to a return to the original process.

HIERARCHY:
1. Source reduction
2. Reuse
3. Recycling
4. Waste exchange
5. Disposal

AUDIENCE/CLIENTS:
SQGs and LQGs in both the public and private sector.

ENABLING LEGISLATION:
New York State Public Authority Law, Section 1285.

ADMINISTRATIVE BASE:
New York State Public Benefit Corporation - nonprofit.

BUDGET:
$350,000

SOURCES OF THE BUDGET:
Fees generated from contractual services and industrial financing.

PROJECTED BUDGET:
$350,000

EFFECTIVENESS:
By how well we meet our earned income requirements, the number of clients, the diversity of clients, the amount of waste reduction resulting from activities.

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Harold Snow, PE Acting Director	Management of TAS Program	Industrial
2. Peter Marini Project Manager	Mgmt. of selected projects	Engineering, Regulatory
3. Harry Ching Chemical Engineer	Mgmt. of selected projects	Data mgmt, chemistry
4. Mary Blass Secretary	Staff support, records mgmt.	

NAME: **Erie County Office of Pollution Prevention (ECOPP)**

ADDRESS: 95 Franklin St.
Buffalo, NY 14202

PHONE: (716) 858-7674
858-6339
858-6370

FAX: (716) 858-8072

MISSION:
Assist small to medium sized businesses with understanding and implementing pollution prevention strategies.

FUNCTION:
ECOPP is a non-regulatory assistance oriented effort.

PRESENT ACTIVITIES:
- Technical assistance
- Education
- Outreach
- Policy development
- Information center

TOOLS:
- Quality Industry Specific Newsletters
- On-site consultations (later developed into case studies)
- Industry specific workshops
- A general pollution prevention slide presentation

Program is working with public development programs to incorporate pollution prevention information into their funding approval criteria.
Also working with local POTWs to incorporate pollution prevention into routine inspections.

FUTURE ACTIVITIES:
Along with continuing the above mentioned activities, planning has begun for industry specific work sessions to train industry and facilitate information sharing within industry.

DEFINITIONS:
P2- The use of materials, processes and practices to eliminate the generation of pollution discharges.
WR- Net reduction of the amount of waste disposed of, includes marketing wastes as raw materials for other industries.
WMIN- Similar to waste reduction. Theoretically, minimization is ultimately achieved when a facility has implemented every economically feasible technique to reduce waste disposal.
SR- Similar to pollution prevention. Material changes, process changes and institution of management practices implemented at the source of generation to reduce the waste stream produced.
RECYCLING- Reuse of waste products as raw materials. May involve on-site treatment (i.e. distillation, neutralization, etc.)

HIERARCHY:
1. Pollution prevention
2. Source reduction
3. Waste minimization
4. Waste reduction
5. Recycling

AUDIENCE/CLIENTS:
Small to medium sized businesses.
Target industries include;
- Dry cleaners
- Metal manufacturers
- Printers/photographic industry
- Vehicle maintenance
- Educational/Vocational
- County operated facilities

ENABLING LEGISLATION:
None.
Program staff is working to set policies which require pollution prevention. Businesses are currently being solicited through outreach efforts. Only businesses that request assistance are provided ECOPP services.

ADMINISTRATIVE BASE:
Erie County Department of Environment and Planning

BUDGET:
$200,000

SOURCES OF THE BUDGET:
Majority of funding is provided by an EPA Pollution Prevention Incentives Grant and a WRITE Program Grant.

PROJECTED BUDGET:
Same as FY 1991.

EFFECTIVENESS:
Effectiveness is charted by the number of businesses assisted, newsletters distributed, workshops conducted, and amounts of waste reduced at the facilities serviced by program staff.

PUBLICATIONS:

- Newsletters
- Hazardous Waste Management Guidelines
- Case Study Tracking Forms

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Thomas R. Hersey Coordinator of Pollution Prevention Programs	Program oversight, administration	Civil Engineer, 5 years technical assistance experience working with Erie County
2. William Welisevich Environmental Compliance Specialist	Technical assistance, outreach	General industry experience gained through consultant and regulatory work.
3. Richard Rutkowski Environmental Compliance Specialist	Technical assistance outreach	Technical assistance experience gained through work on county assistance and regulatory programs.
4. Barry Boyer, esq. Consultant	Policy meeting and program evaluation	Professor at the University of Buffalo Law Department and the Baldy Center for Public Policy.

NAME: **Source Reduction Program**

ADDRESS: Watershed Oversight and Protection Department
Suffolk County
Sunrise Highway and Pond Road
Oakdale, NY 11769

PHONE: (516) 563-0308

FAX: (516) 563-8723

MISSION:
Program goal is to ensure that the residents of Suffolk County continue to receive a safe, clean and adequate supply of water. We are committed to maintaining the integrity of our water resources for future generations.

FUNCTION:
Provide technical assistance to the local business community of Suffolk County. This program is non-regulatory and confidential . Additionally, we actively implement waste minimization and source reduction programs at both the inter-office and local levels.

PRESENT ACTIVITIES:
- Technical assistance
- Education

TOOLS:
- Seminars
- Telephone assistance
- On-site assistance

FOCUS:
- Water

FUTURE ACTIVITIES:
Pin-pointing a fully developed plan is difficult because the program is so new. Staff plans to aggressively expand technical assistance activities. Plans are to focus on modeling and geographic information systems.

DEFINITIONS:
P2-a policy which seeks to ensure that methods and processes are optimized by applying human interaction, engineering controls, and planning controls.
WR-development and application of techniques to qualitatively and quantitatively reduce the undesirable or dangerous materials in our resources. The some definition could be applied to the reduction of unwanted by-products of our processes.
WMIN-same as waste reduction.
SR-identifying and eliminating possible sources of contaminants to the aquifer or groundwater.
RECYCLING-

HIERARCHY:
None established.

AUDIENCE/CLIENTS:
- Internal departments of Suffolk County Water Authority
- Present or potential Water Authority customers
- Any individual or organization whose activities affect groundwater quality

ENABLING LEGISLATION:
SCWA's originating legislation calls for stewardship of water resources.
SCWA operates under the Public Authorities Law of New York State. The actual program is established administratively under this broad authority.

ADMINISTRATIVE BASE:
The Suffolk County Water Authority is a New York State public benefit corporation providing water to 1.2 million Long Island customers. Operating within a federally designated sole source aquifer area, the Authority's potable water supply is drawn entirely from groundwater.

BUDGET:
Funding is within overall department budget. There has been no delineation for this program.

SOURCES OF THE BUDGET:
The program is funded as an administrative activity within the Watershed Oversight and Protection Department. All SCWA revenues are obtained from the sale of water to Authority customers. Grants are being sought.

PROJECTED BUDGET:
NA

EFFECTIVENESS:
Overall evaluation parameters have not been established. Staff will be looking at a combination of the following factors;
- number of contacts or referrals made
- number of source points reduced
- number of sites remediated

PUBLICATIONS:
Program staff have produced brief fact sheets that address such issues as specific local laws and various common commercial activities. A brochure offering a comprehensive view of the program and its function is planned.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Pierre Delice Source Reduction Engineer	Conduct SR Audits, Adm. Technical Asst. program, Liason with the business community	BS, Chem. Engineering

Region 3

NAME: **Delaware Pollution Prevention Program**

ADDRESS: Department of Natural Resources and Environmental Control
P.O. Box 1401
89 Kings Highway
Dover, DE 19903

PHONE: (302) 739-3822

FAX: (302) 739-5060

MISSION:
To promote the reduction, reuse and recycling of waste in industry, agriculture, government and households through technical assistance, education, economic incentives and community awareness.

FUNCTION:
- Technical assistance
- Education
- Community awareness
- Economic incentives

PRESENT ACTIVITIES:
- Information clearinghouse
- Library project
- Usable Byproducts Advisory Group (UBAG)
- K-8 curriculum
- Green Industries Programs including economic incentives
- Seminars and outreach activities

TOOLS:
- Seminars
- Case studies/bibliographies
- Joint program with DE Development Office for Green Industries.
- State/industry/community implementation committee.
- Multimedia staff committee for UBAG evaluations and recommendations.
- Created pollution prevention reference collections in all libraries.

FUTURE ACTIVITIES:
- On-site technical assistance
- Seminars/outreach
- Pollution prevention training for industry
- Technical assistance to agriculture
- State agency audits
- Continuation of all current programs

DEFINITIONS:
P2-
WR-the reduction in quantity of toxicity of waste.
WMIN-same as above.
SR-
RECYCLING-the process by which materials which would otherwise be disposed of are collected, reprocessed or remanufactured and returned to the economic mainstream, excluding the production of electricity.

HIERARCHY:
1) Waste Reduction-preventing the production of waste.
2) Reuse-reusing a waste product without processing.
3) Recycling-reusing a waste product with processing.

AUDIENCE/CLIENTS:
• Business and industry
• Agriculture
• Households
• State government

ENABLING LEGISLATION:
The Waste Minimization/Pollution Prevention Act of 1990 (HB 585)

ADMINISTRATIVE BASE:
State Agency

BUDGET:
$103,628

SOURCES OF THE BUDGET:
• State General Funds
• Federal grants
• Fees

PROJECTED BUDGET:
$365,749

EFFECTIVENESS:
Annual Summary Reports will be written and submitted to the State Legislature, Governor and EPA. Weekly updates are currently written for the Governor listing contacts,outreach activities, progress in developmental and ongoing activities and UBAG activities.

PUBLICATIONS:
• Three Rs for the 90s- Program Information
• Household Audit Kit
• developing a General Manufacturing Audit Kit

STAFF: NAME/POSITION	RESP.	BACKGROUND
1. Philip J. Cherry Director		Regulatory/Geologist
2. Andrea K. Farrell Program Manager		Economics/Policy and Planning
3. Janet T. Manchester Environmental Scientist		Regulatory/Solid Waste

NAME: **Environmental Service**

ADDRESS:
2020 Industrial Drive
Annapolis, MD 21401

PHONE: (301) 974-7281

FAX: (301) 974-7267

CONTACT: Mr. William Sloan

MISSION:

FUNCTION:

PRESENT ACTIVITIES:

TOOLS:

FOCUS:

FUTURE ACTIVITIES:

DEFINITIONS:
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:

AUDIENCE/CLIENTS:

ENABLING LEGISLATION:

ADMINISTRATIVE BASE:

BUDGET:

SOURCES OF THE BUDGET:

PROJECTED BUDGET:

EFFECTIVENESS:

PUBLICATIONS:

STAFF:

NAME/POSITION	RESP.	BACKGROUND

NAME: **Center for Hazardous Materials Research**
(There is no specific name assigned to the pollution prevention activities of the Center. All services are offered under CHMR's Technical Assistance Program.)

ADDRESS: 320 William Pitt Way
Pittsburgh, PA 15238

PHONE: (412) 826-5320
(800) 334-2467 Hazardous Materials Information Hotline

FAX: (412) 826-5552

MISSION:
CHMR's mission is to motivate, educate and support industry and government in the exploration and development of the pollution prevention concept and pollution prevention techniques as practical solutions to the many technical, environmental, public health, economic, institutional, and public policy problems associated with the use and disposal of hazardous waste and materials in society. The program exists as a non-regulatory link between industry and governments in the pursuit of economically efficient and environmentally sound methods of altering management and engineering practices and processes to incorporate pollution prevention thinking.

In fulfilling this mission, CHMR makes its services available to business and government, but focuses on helping small to medium sized organizations which do not have the benefit of dedicated environmental staffs.

FUNCTION:
CHMR's pollution prevention program is a component of its overall comprehensive, non-regulatory education and assistance program. Through this program CHMR provides technical, regulatory compliance information, financial and management assistance and educational service to business, governments and individuals. The technical assistance program incorporates pollution prevention into all aspects of its operation.

CHMR, a non-regulatory organization, is a not-for-profit subsidiary of the University of Pittsburgh Trust.

PRESENT ACTIVITIES:
- Technical assistance
- Regulatory information and technical assistance hotline
- On-site pollution prevention consultations
- Develop pollution prevention manuals and sections of manuals for government and industry (currently working on projects for;)
  - A leading electrical utility organization
  - The Electrification Council (TEC) of the Edison Electric Institute
  - A national trade association
  - Pennsylvania Department of Transportation
- Develop and disseminate pollution prevention fact sheets

TOOLS:
- Toll-free hazardous material hotline
- Industry-specific and general pollution prevention one-day workshops and seminars
- On-site pollution prevention and environmental consultations supported by the USEPA and the Pennsylvania Department of Environmental Resources
- Pollution prevention fact sheets
- Pilot, university-based community pollution prevention demonstration program funded by the EPA
- The Pollution Prevention by and for Small Business grant program which distributes grants to developers of pollution prevention technologies
- Quarterly newsletter (The Minimizer)

FUTURE ACTIVITIES:
- Aid in the development of pollution prevention curricula at the University of Pittsburgh
- Broaden CHMR's technical assistance/pollution prevention activities throughout the region

DEFINITIONS:
P2- The reduction or elimination of discharges and/or emissions to the environment through source reduction and environmentally sound recycling. This includes all pollution, hazardous and non-hazardous, regulated and unregulated, across all media and from all sources.
WR- The reduction or elimination of discharges or emissions to the environment. This includes all wastes, hazardous and non-hazardous, regulated and unregulated, across all media and from all sources.
WMIN- The minimization or elimination of discharges or emissions to the environment. This includes all wastes, hazardous and non-hazardous, regulated and unregulated, across all media and from all sources.
SR- any activity that reduces or eliminates the generation of a waste at the source, usually within a process.
RECYCLING- The use, reuse or reclamation of a waste, either on-site or off-site, after it is generated by a particular process.

HIERARCHY:
1) Source reduction
2) Recycling
3) Energy recovery/beneficial use- using wastes as energy sources or substitutes in processes.
4) Treatment
5) Land disposal

AUDIENCE/CLIENTS:
Program's audience is the regulated community, SQGs, LQGs, TRI reporters, government (including PennDOT, Allegheny County and municipalities) and the general public.

Although CHMR's pollution prevention activities extend to all businesses, governments and individuals, specific activities such as consultations and seminars/workshops target SQGs for assistance since they often lack the resources (human, economic, and financial) to asses their waste generation problems and pollution prevention activities independently.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
CHMR is a not-for-profit subsidiary of the University of Pittsburgh Trust. While affiliated with the University of Pittsburgh, we are wholly responsible for our own funding and staffing. Through subcontracting relationships, CHMR and University of Pittsburgh faculty and staff work on joint projects.

BUDGET:
$650,000
Specific pollution prevention assistance is being provided under a two-year, $300,000 Pollution Prevention Incentives for States grant from USEPA. Approximately 50% of this grant will be spent during FY 1991.

SOURCES OF THE BUDGET:
- Pennsylvania General Revenue Funds
- PPIS grant

PROJECTED BUDGET:
$700,000- includes the majority of the $500,000 of funding from the DER to operate the Technical Assistance Program which is utilized in support of various pollution activities.

EFFECTIVENESS:
Measures of effectiveness include:
- Number of calls to Hotline
- Number of on-site consultations conducted
- Number of seminars and workshops performed and number of attendees
- Summary of case study results
- Quantity of contacts with business community made via *The Minimizer* speeches and various reports

Audiences to communicate program effectiveness to include: businesses, especially SQGs, via *The Minimizer*, speeches and various reports; Commonwealth and Federal regulatory agencies via routine reports and their participation in CHMR seminars and workshops; Pennsylvania Legislative and communication with the governments.

PUBLICATIONS:
List available on request.
Call the CHMR Hazardous Materials Information Hotline (800) 334-2467.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Roger Price Manager, Special Projects	Manages and/or conducts most activities under PPIS.	Engineering, public and private
2. John Billak Research Assistant	Regulatory and pollution prevention, facility management and production processes	Environmental Engineer, public
3. Robert Clarke Project Engineer	Consults on control of hazardous waste, air toxic emissions, and regulatory compliance.	Chemical Engineer public

NAME: **Division of Waste Minimization and Planning**
Bureau of Waste Management
Pennsylvania Department of Environmental Resources

ADDRESS: P.O. Box 2063
Harrisburg, Pa 17105-2063

PHONE: (717) 787-7382

FAX: (717) 787-1904

MISSION:
The program has no formal mission statement. In general, the goal is to reduce the amount of waste requiring treatment or disposal.

FUNCTION:
The program is located in a state regulatory agency. Program staff also attempt to provide technical assistance, education, grants and information exchange.

PRESENT ACTIVITIES:
- Outreach
- Governor's Waste Minimization Award
- Northeast Industrial Waste Exchange
- Fund the Center of Hazardous Materials Research
- Manage system of hazardous waste transportation and management fees
- Provide grants for hazardous waste recycling equipment

TOOLS:
- Northeast Industrial Waste Exchange
- Center of Hazardous Materials Research
- Grants for recycling equipment
- Basic technical information
- Limited site visits

FUTURE ACTIVITIES:
- Technical assistance program
- Establish waste minimization coordinators in regional offices
- Promulgating regulations which require generators to develop waste minimization plans
- Work on regulations to exempt legitimate on-site use or reclamation activities from hazardous waste permit requirements

DEFINITIONS:
P2-
WR-
WMIN- the reduction of hazardous or residual waste generated, or subsequently treated, stored, or disposed. Waste minimization consists of any source reduction, use, or reclamation activity undertaken by a generator that results in either the reduction of the quantity of waste, the reduction of toxicity of waste, or both, so long as such reduction is consistent with the goal of minimizing present and future threats to human health and the environment. Treatment intended solely to prepare the waste for disposal, such as dewatering, is now waste minimization.
SR- the reduction or elimination of hazardous or residual waste generation at its source, usually within a process. Source reduction measures include process modifications,

feedstock substitutions, improvements in feedstock purity, housekeeping and management practices, increases in the efficiency of machinery, use or reclamation within a process, or any other actions that reduce the amount of waste leaving a process
RECYCLING-Use: direct and effective substitution of waste for an ingredient of raw material used in an industrial process and the effective substitution for a commercial chemical product.

Reclamation\: the treatment of a material to recover a usable product such as regenerating the material or recovering distinct components as separate end products

HIERARCHY:
1) Source reduction
2) Use and reclamation

AUDIENCE/CLIENTS:
All generators of industrial and hazardous waste. Program staff are working on municipal waste reduction.

ENABLING LEGISLATION:
There is no comprehensive pollution prevention legislation.
- Act 97, The Solid Waste Management Act, provides general authority.
- Act 108, The Hazardous Site Cleanup Act, authorizes the grant program.
- Act 101, The Municipal Waste Planning, Recycling and Waste Reduction Act, deals with the reduction and recycling of municipal waste.

ADMINISTRATIVE BASE:
The program is based in a regulatory state agency.

BUDGET:
No budget separate from the Bureau of Waste Management.

SOURCES OF THE BUDGET:
General revenue funds
Federal grants for hazardous waste
Fees on hazardous waste management

PROJECTED BUDGET:
No budget separate from the Bureau of Waste Management.

EFFECTIVENESS:
(no answer)

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Greg Harder Waste Minimization Specialist	H. waste recycling, Waste Reduction/ Minimization	Regulatory
2. Tom Ung Waste Minimization Engineer	Source reduction audits, Recycling equipment grants	Engineering, Water Quality, Regulatory

NAME: **Pennsylvania Technical Assistance Program**

ADDRESS: The Pennsylvania State University
248 Calder Way
University Park, PA 16801

PHONE: (814) 865-0427

FAX: (814) 865-5909

MISSION:
The program seeks to transfer published technical information from the hard sciences to businesses and industries within the Commonwealth of Pennsylvania to achieve economic benefits.

FUNCTION:
The major function of the program is to provide technical assistance by means of technology transfer. The latter includes some help with regulatory difficulties, some aid with planning and, where necessary, help with research and development activities

PRESENT ACTIVITIES:
- Technical assistance

TOOLS:
- Five program offices spread across the state.
- Resource library
- On-site assessments

FUTURE ACTIVITIES:
- Expand technical assistance- PENNTAP plans to hire on another staff member to work on and help solve environmental problems.

DEFINITIONS:
P2- When new businesses and industries are in the formative stages, program staff are frequently asked about possible environmental impacts. The answers to this type of problem is pollution prevention.
WR- Usually takes place when an existing process is modified so as to change the amount of waste produced.
WMIN- Implies that an assessment is made of a whole manufacturing line to determine what changes in design etc., should be made to reduce waste.
SR- Source reduction suggest the case where a number of pollutants are involved and the major sources are sought.
RECYCLING- A broad term that covers the reuse of materials such as paper, aluminum cans, etc.

HIERARCHY:
No preferred hierarchy.

AUDIENCE/CLIENTS:
Small businesses and industries in Pennsylvania.

ENABLING LEGISLATION:
State appropriation to the Department of Commerce

ADMINISTRATIVE BASE:
Penn State University initiative in response to industry concern.

BUDGET:
ETAP is a functional component of PENNTAP.
Budget of $800,000

SOURCES OF THE BUDGET:
Pennsylvania State University
Pennsylvania Department of Commerce
Economic Development Administration
Naval Air Development Center
Private Sectors (Bell Atlantic and Pennsylvania Manufacturers Association)

PROJECTED BUDGET:
Uncertain- depends on funding.

EFFECTIVENESS:
Numbers of questions received and evaluation forms filled out by user.

PUBLICATIONS:
not given

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Jack Gido Director		
2. Thomas F. Barone Senior Technical Specialist		
3. Edwin W. Biederman Senior Technical Specialist		
4. Frank Konchar Senior Technical Specialist		
5. Douglas B. Tharp Senior Technical Specialist		
6. Mark Toda Senior Technical Specialist		
7. Anthony J. Venett Librarian		

NAME: **University Center for Environmental and Hazardous Materials Studies**

ADDRESS: Virginia Polytechnic Institute and State University
Blacksburg, VA 24061-0113

PHONE: (703) 231-7508

FAX: (703) 231-3367

MISSION:
To carry out interdisciplinary research on environmental problems and to help government, industry, and the public use this research effectively

FUNCTION:
- Research
- Education
- Technical Assistance

PRESENT ACTIVITIES:
Various research projects.

TOOLS:

FUTURE ACTIVITIES:
Continues research, much of which relates directly or indirectly to pollution prevention.

DEFINITIONS: Program staff have not formally specified definitions for these terms. Some staff tend to use the OTA definitions where applicable.
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:
No

AUDIENCE/CLIENTS:
Varies according to project.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
University

BUDGET:

SOURCES OF THE BUDGET:
Most projects are funded by sponsors (state &federal agencies, private industry, foundations). Program receives some support from the University (faculty, staff salaries, etc.)

PROJECTED BUDGET:

EFFECTIVENESS:
Peer review and professional feedback regarding reports, papers, books, etc.
Communicate to University administration and to potential research sponsors.

PUBLICATIONS:
Numerous publications by faculty members and others affiliated with the Center. Overall listing not available . Would need to contact individual authors.

Guidebooks on Hazardous Waste Management in Virginia (rev. 1988)
Guidebooks on Municipal Solid Waste Management in Virginia (1990)
Hazardous Materials Dialogue (quarterly publication)

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. John Cairns, Jr. Director	Research/education	Biology/Interdisciplinary
2. John T. Novak Assoc. Director	Research/education	Environmental Engineering
3. W. David Conn Assoc. Director	Research/education	Environmental Planning
4. George H. Lacy Assoc. Director	Research/education	Biotechnology
5. John C. Parker Assoc. Director	Research/education	Soil Science
6. Richard C Rich Affiliated Faculty	Research/education	Political Science
7. Barbara Falls Executive Secretary	Support	
8. Darla D. Donald Editorial Assistant	Publications	
9. Barbara R. Niederlehner Lab Specialist	Support	

NAME: **Virginia Waste Management Program**

ADDRESS: Monroe Building, 14th Floor
101 North 14th St.
Richmond, VA 23219

PHONE: (804) 225-2513

FAX: (804) 371-0193

MISSION:
Assist business and government in Virginia in reducing the amounts of hazardous waste generated and requiring treatment and disposal by promoting the implementation of innovative solutions to waste management problems.

FUNCTION:
- Technical assistance
- Interagency coordination
- Educational information development
- Limited research activities

PRESENT ACTIVITIES:
- Information clearinghouse
- Technical assistance
- Training for waste minimization

TOOLS:
- One day workshops on waste minimization
- Waste minimization case studies
- Waste minimization fact sheets

FUTURE ACTIVITIES:
- Grant funded multi-media pollution prevention project currently underway that seeks to research and provide training on waste minimization opportunities for several Virginia industries.
- Train regulatory staff from three environmental media agencies to look for pollution prevention opportunities/applications in their positions.

DEFINITIONS:
P2-Preventing and reducing the loss of hazardous materials into the environment (multimedia) by source reduction and closed-loop recycling.
WR-The reduction of hazardous waste that is generated or subsequently treated, stored or disposed of including a reduction in the total volume or quantity of hazardous waste or a reduction in the toxicity of hazardous waste, as long as the reduction is consistent with the goal of minimizing present and future threats to human health and the environment.
WMIN-Same as Waste Reduction.
SR-The reduction of waste at its source, before it is generated, through changes in the industrial processes thereby eliminating the need for treatment, storage or disposal of that particular hazardous waste.
RECYCLING-Reuse of wastes for the original purpose or some other purpose, ie. materials recovery. Includes closed-loop, on-site and off-site recycling.

HIERARCHY:

1) Pollution prevention
2) Waste minimization
3) Recycling

AUDIENCE/CLIENTS:
Initially, the program was targeted at hazardous waste generators. With the onset of ITP, we will probably do some work specific to TRI reporters.

ENABLING LEGISLATION:
1988 Virginia Assembly provided funding for the establishment of the Virginia Waste Minimization Program. There is no specific legislation mandating pollution prevention or waste minimization activities of industry.

ADMINISTRATIVE BASE:
Virginia Department of Waste Management; agency involved in recycling, solid waste, hazardous waste, Superfund activities and SARA Title III.

BUDGET:
Approximately $200,000

SOURCES OF THE BUDGET:
- Federal grants (CAP and PPI)
- State matching funds
- State general funds

PROJECTED BUDGET:
Approximately $200,000

EFFECTIVENESS:
Program supplies numbers of technical assistance responses and number of waste minimization workshops to both the Virginia Legislature and EPA Region 3.

PUBLICATIONS:
In 1990, a Waste Minimization Opportunities document for the printing industry was developed. The programs offers a series of fact sheets.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Sharon Kenneally-Baxter Environmental Programs Specialist	Waste Min., SARA Title III, ITP, PPIs grant	Regulatory (policy)
2. Cathy L. Harris Environmental Program Manager	SARA Title III, Waste Min.	Regulatory (policy)
3. Bill Samecky Environmental Engineer	Capacity Assurance Planning	Engineering, Regulatory, Permit Writing, Permit Management
4. David Timberline Information Clearinghouse	Database modification and augemntation, information development, workshop/seminar organization	Computer Science, regulatory, non-profit public relations
5. Harry E. Gregori Director, Office of Policy and Planning	Education, lead in responding to Governor and General Assembly	Regulatory (policy)

NAME: **West Virginia Pollution Prevention and Open Dump Program**

ADDRESS: West Virginia Division of Natural Resources
Waste Management Section
1356 Hansford Street
Charleston, WV 25301

PHONE: (304) 348-4000

FAX: (304) 348-0256

MISSION:
The role of the Pollution Prevention/Open Dump Program (PPOD) is to promote the reduction of hazardous and non-hazardous solid wastes in the public and private generating communities through the implementation of an integrated waste management system consisting of educational and technical support programs designed to insure the ultimate protection of health and environmental standards in the State of West Virginia.

FUNCTION:
Program staff pursue their mission by monitoring the generation of hazardous waste, educating generators and state employees in pollution prevention techniques, and working directly with industry to improve its working, handling, processing and disposal methods to reduce use, waste and accidents involving hazardous chemicals.

PRESENT ACTIVITIES:
•Education
•Tracking
•Technical Assistance

TOOLS:
•Training
•Technical assistance (audits)
•Generator Assistance Program (GAP)

FOCUS:

FUTURE ACTIVITIES:
•Conduct or assist in conducting 20 industrial facility environmental audits, 400 commercial facility environmental audits before July 1, 1993.
•Compile an assessment of waste disposal for all waste (solid and hazardous) generated in the state.
•Seek federal and private grants.
•Set up annual household hazardous waste cleanup days.

DEFINITIONS:
P2-the reduction or elimination of discharges (waste) or emissions of hazardous or non-hazardous substances to the environment.
WR-the activity that eliminates a hazardous waste produced via a process by reentering the waste as a material in other processes or treating the waste to lessen its effect on the environment.
WMIN-the reduction of hazardous waste that is generated, treated, stored, or disposed of within the generators limits of feasibility. It includes source reduction, recycling and any other processes that reduces the volume or renders the waste less toxic.
SR-any activity that reduces or eliminates the generation of hazardous waste at its process source.
RECYCLING-any material that can be used, reused, or reclaimed after it has been declared a hazardous or non-hazardous waste.

HIERARCHY:
1. Pollution prevention
2. Source reduction
3. Waste reduction
4. Recycling

AUDIENCE/CLIENTS:
•State government personnel
•LQGs

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
State Agency

BUDGET:
$87,709

SOURCES OF THE BUDGET:
Fees

PROJECTED BUDGET:
Unavailable

EFFECTIVENESS:
Number of generator contacts, environmental audits, and requests for literature.

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Dale E. Moncer Env. Analyst	Tracking manifest data, Capacity assurance, Audits	Geologist
2. Richard A Ferrell Env. Analyst	Technical assistance, Audits Education	Educator

Region 4

NAME: **Waste Reduction Resource Center for the Southeast**

ADDRESS: P.O. Box 27687
3825 Barrett Drive
Raleigh, NC 27611-7687

PHONE: (919) 571-4100
(800) 476-8686

FAX: (919) 571-4135

MISSION:
To serve as a waste reduction information clearinghouse and to provide waste reduction technical assistance to Region IV, state technical assistance programs and others as requested.

FUNCTION:
Assemble and disseminate information on waste reduction issues.

PRESENT ACTIVITIES:
- Information clearinghouse
- On-site technical assistance
- Seminar support
- Develop specialized information packages by request

TOOLS:
- Hotline
- On-site visits
- Case studies
- Seminar participation
- Training

FOCUS:
Special experience in:
- Paper
- Food
- Metal fabrication
- Textiles
- Coatings
- Metal finishing

FUTURE ACTIVITIES:
To be determined.

DEFINITIONS: Same as EPA's pollution prevention strategy definitions
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:
1. Source reduction
2. Pollution prevention
3. Waste reduction
4. Waste minimization
5. Recycling

AUDIENCE/CLIENTS:
State technical assistance programs, other state environmental programs, Region IV staff, local governments, industries and the general public within Region IV. Also tries to respond to requests from outside the Region.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
EPA Region IV provides operating funds and SEE employee support.
Tennessee Valley Authority provides funds for one engineer.

BUDGET:
$76,000 Operating funds from EPA
$40,000 TVA personnel expenses
$75,000 SEP employees and their support from EPA
$182,000

SOURCES OF THE BUDGET:
See above.

PROJECTED BUDGET:
$59,000 Operating funds
$115,000 Personnel

EFFECTIVENESS:
No answer

PUBLICATIONS:
Case studies and fact sheets available

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Bob Carter Supervising Eng.	Coordinate activities of Center	BSCE, BS/MS Areospace Post Grad. Env. Engineer, Military, Industry
2. Phil Morse Staff Eng, EPA-SEE	Research tech. asst. requests, participates in audits	BS Elect. Eng., Industry exp. in paper, textiles, food
3. Victor Young Staff Eng. Reg. IV	Research tech. asst. requests, participates in audits	BS Elect. Eng., PE (WI) Industry exp. in coatings, metal finishing, machining, elect. motor controls

NAME: **Hazardous Material Management and Resource Recovery** (HAMMARR) a program of **The Environmental Institute for Waste Management** (EIWMS)

ADDRESS: Chemical Engineering Department
The University of Alabama
Box 870203
Tuscaloosa, AL 35487-0203

PHONE: (205)348-8403

FAX: (205)348-8573

MISSION:
Provide assistance to industry and the citizens of Alabama regarding industrially related environmental problems

FUNCTION:
- Technical
- Education
- Research
- Waste Exchange/Recycling Programs

PRESENT ACTIVITIES:
- Technical Assistance
- Soft Research
- Regulatory Information
- Waste Exchange
- University Waste Reduction and Recycling Task Force

TOOLS:
- Workshops/Seminars
- Publications
- Newsletters
- Site Visits/Case Studies
- Public Contact

FUTURE ACTIVITIES:
- Continue present activities.
- Expand on-site environmental pollution prevention assessments/case studies.
- Initiate intern-site matchups.
- Develop research studies to support the program.

DEFINITIONS:
P2-Multi-media waste reduction efforts focused on source reduction of wastes.
WR-Source reduction and recycling, used for both solid or hazardous wastes.
WMIN-The sum of source reduction and recycling elements (usually RCRA related).
SR-Good manufacturing practices, process modifications, material substitutions, inventory control, segregation, technology changes, etc.
RECYCLING-Beneficial reuse, substitution for virgin material, resource recovery, alternate use.

HIERARCHY:
1) Pollution prevention, source reduction
2) Recycling
Waste reduction and waste minimization can be seen as the sum of these elements.

AUDIENCE/CLIENTS:
SQGs, LQGs, TRI reporters, general public, University

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
University of Alabama

BUDGET:
$85,000

SOURCES OF THE BUDGET:
University of Alabama

PROJECTED BUDGET:
$325,000

PUBLICATIONS:
- Regulatory Information Service
- Newsletter
- Institute Papers (write HAMMARR for listing)

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Dr. Robert A. Griffin Director-EIWMS	Admin., Program Dev.	Environmental Engineering
2. Dr. John Moeller Prog. Dir. HAMMARR	Coord. of HAMARR, Regulatory Inform.	Environmental Law
3. William J. Herz Staff Research Assoc.	Alabama Waste Exchange Technical Assistance	Industry, Public Relations
4. Nora Keene Prog. Support Asst.	Staff Support	Office Administration

NAME: **Project ROSE** (Recycled Oil Saves Energy)

ADDRESS: The University of Alabama
P.O. Box 870203
Tuscaloosa, AL 35487-0203

PHONE: (205) 348-4878

FAX: (205) 348-8573

MISSION:
Project ROSE is an Alabama energy saving program designed to educate Do-It-Yourselfers (DIYs) regarding the energy saved by recycling used motor oil and promotes and encourages proper management of this large, but widely dispersed waste stream. Recycling used oil also offers individuals the opportunity to protect and preserve our environment and dwindling supply of natural resources.

FUNCTION:
Project ROSE functions at two levels:
1) At the individual level (DIYs), ROSE provides education, public awareness programs, local recycling program development, and other promotions designed to raise community awareness of recycling alternatives and community environmental responsibility.
2) ROSE also works with used oil generators, large and small, to provide regulatory information, technical assistance, education, waste exchange options and information concerning new techniques that improve waste management practices.

Project ROSE is also active at the regulatory and legislative levels to the extent that it provides information regarding the used oil management system in relation to pending or proposed regulations or legislation.

PRESENT ACTIVITIES:
ROSE provides technical assistance, education, legislative interaction, an information clearinghouse and a waste exchange.

TOOLS:
- ROSE uses low-cost, public media (radio, television, newspapers), newsletters, two toll-free instate telephone hotlines, seminars, workshops and conferences to reach the individual users. In addition, ROSE enlists community leaders, service organizations, and support groups to voluntarily promote the program.
- ROSE uses many of the tools listed above to contact business which make up the used oil management system in Alabama (SQGs & LQGs) in an effort to increase their awareness of regulatory initiatives that may impact various levels of the system.
- Project ROSE Used Oil Waste Information Exchange.
- ROSE works with other waste exchanges to recycle materials other than used oil.

FUTURE ACTIVITIES:
ROSE plans to expand its services to DIYs through Alabama Cooperative Extension Agencies, and expand oil recycling services to other structures that offer convenient recycling options.

DEFINITIONS: Not Applicable

HIERARCHY: Not Applicable

AUDIENCE/CLIENTS:
Individual waste oil generators (DIYs), business and industry, local and state government..

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
ROSE is funded by the Alabama Department of Economic and Community Affairs-Science, Technology and Energy Division, and sponsored by the College of Engineering at the University of Alabama in conjunction with the Alabama Department of Environmental Management.

BUDGET:
$70,000

SOURCES OF THE BUDGET:
State Grant

PROJECTED BUDGET:
$70,000

PUBLICATIONS:
To obtain a list of publications contact address above.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Janet H. Graham Project ROSE Coord.	Program Management	Education
2. Dr. Gary C. April Principal Investigator	Program founder (1977)	Chemical Engineering

NAME: **Florida Center for Solid and Hazardous Waste Management**

ADDRESS: University of Florida
3900 SW 63rd Blvd.
Gainesville, FL 32608

PHONE: (904) 392-6264

FAX: (904) 392-6910

MISSION:
Facilitate research and education in the area of solid and hazardous waste management.

FUNCTION:
- Research
- Education
- Technical assistance

PRESENT ACTIVITIES:
- Technology development
- Technology transfer
- Information dissemination

TOOLS:
- Seminars
- Newsletters
- Grants
- Reports

FUTURE ACTIVITIES:
Program staff anticipate a continuation of current activities.

DEFINITIONS:
P2-NA
WR-Reduction of the amount of solid waste generated.
WMIN-NA
SR-NA
RECYCLING-Recycle and reuse includes all activities involved with source separating, collecting, sorting, processing and handling solid waste which precede its ultimate disposal by incineration or burial in a landfill.

HIERARCHY:
None

AUDIENCE/CLIENTS:
Local government, business and industry solid waste management efforts.

ENABLING LEGISLATION:
Florida Solid Waste Management and Resource Recovery Act of 1988 (CS/CS SB1192)

ADMINISTRATIVE BASE:
State University System of Florida
Host Institution- University of Florida

BUDGET:
$500,000

SOURCES OF THE BUDGET:
Solid Waste Management Trust Fund

PROJECTED BUDGET:
$500,000

EFFECTIVENESS:

PUBLICATIONS:
List of publications available at above address

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. James O. Bryant, Jr. Director	Manage program, conduct research, provide training and technical assistance.	Chemical and Environmental Engineering
2. Gisela Bosch Research Associate	Initiate, manage and conduct research	Process Engineering
3. Paul Still Assistant in Hazardous Waste Management	Initiate, manage and conduct research and technical assistance	Recycling, composting, biological research
4. Gina Haukins Graduate Assistant	Research	Resource economics, conservation and specific public interest work on water issues, solid waste, and toxic hazards.

NAME: **Center for Training, Research and Education for Environmental Occupations (TREEO)**

ADDRESS: University of Florida
3900 SW 63rd Blvd.
Gainesville, FL 32608

PHONE: (904) 392-9570

FAX: (904) 392-6910

MISSION:
To provide continuing education opportunities in the area of environmental concerns including water and wastewater, asbestos, OSHA, solid and hazardous waste. Pollution prevention activity funded by a RITTA grant.

FUNCTION:
- Education
- Technical assistance

PRESENT ACTIVITIES:
- Technical assistance
- Education

TOOLS:
- Seminars
- Training
- Manuals/factsheets
- Videos

FUTURE ACTIVITIES:
Not known because of uncertain budgetary conditions.

DEFINITIONS: N/A
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:
None

AUDIENCE/CLIENTS:
Small Quantity Generators, regulated community, state and local government staff.

ENABLING LEGISLATION:
TREEO was created by act of the Florida legislature in 1874 with a specific mandate to conduct training and research directed toward achievement of Florida's environmental goals.

ADMINISTRATIVE BASE:
TREEO is housed as an administrative unit in the Division of Continuing Education at the University of Florida.

BUDGET:
$100,000 RITTA Grant
$900,000 from course fees and other funds

SOURCES OF THE BUDGET:
- Grants
- Registration fee

PROJECTED BUDGET:
Unknown. The RITTA contract expires 12/15/90

EFFECTIVENESS:

PUBLICATIONS:
Check lists
Factsheets and manuals for printing, auto repair, and fiberglass boat and spa building. All publications are in draft form only.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Sandra W. Scaggs Associate Dir.	TREEO management, development, instruction	Higher education teaching, administration of adult technical education programs
2. James O. Bryant, Jr. Director	Manage programs, conduct research, provide training and technical assistance	Chemical and Environmental Engineering
3. Shari O'Brien Coordinator	Develop and coordinate courses and videos	Education
4. Paul Still Asst. in Hazardous Waste Management	Develop courses and written materials and provide technical assistance	Recycling, composting and biological research

NAME: **Florida Waste Reduction Assistance Program**

ADDRESS: Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

PHONE: (904) 488-0300

FAX: (904) 922-4939

MISSION:
The staff's vision is to prevent pollution of all types by providing technical assistance and education to businesses and government staff.

FUNCTION:
- Non-regulatory technical assistance
- Pollution prevention education
- Identification of economic and other incentives
- Technology transfer and research needs identification

PRESENT ACTIVITIES:
- Information clearinghouse
- Education and training
- Technical assistance
- Technology transfer
- Research priorities
- Identification of incentives
- Awards for excellence

TOOLS:
- Training
- Workshops & seminars
- Speakers
- Used Oil Recycling Grants
- On-site visits and follow-up
- Success stories and case studies

FUTURE ACTIVITIES:
- Pollution prevention incentive grants
- Expanded education and training events
- TRI reporter expansion
- Local government program development

DEFINITIONS:
P2-source reduction & on-site recycling of air toxics, hazardous waste, solid waste, used oil, fresh water reduction, water reuse, energy conservation, toxics use reduction.
WR-source reduction & recycling (on- and off-site) including resource conservation.
WMIN-HSWA definition- includes volume and toxicity reduction.
SR-includes toxics use reduction, reformulation of products, modification of manufacturing or other processes, and the improvement of in-plant maintenance and operations. Source reduction does not include any recycling.
RECYCLING-the use of a material more than once, in the same process (as in closed loop recycling), or without the transfer of the material to another facility.

HIERARCHY:
1. Pollution prevention
2. Recycling
3. Treatment and neutralization of contaminants that are difficult to recycle.
4. Disposal

AUDIENCE/CLIENTS:
The regulated community, SQGs, LQGs, TRI reporters, government facilities, air toxics emitters, and individuals.

ENABLING LEGISLATION:
1988 Waste Reduction
1991 Pollution Prevention Act

ADMINISTRATIVE BASE:
State Agency

BUDGET:
$137,000 for the Pollution Prevention Partners
$167,000 for the WRAP full-time staff

SOURCES OF THE BUDGET:
Water Quality Assurance Trust Fund
State General Revenue Funds

PROJECTED BUDGET:
Same as FY91.

EFFECTIVENESS:
Program staff use a combination of the number of contacts made, documents distributed, reports written, site visits done, and waste reduced.

PUBLICATIONS:
Call or write.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Janeth A. Campbell Env. Supervisor II	Management, education, technical assistance	Energy, Economics, Public Administration
2. Betsy Galocy Env. Specialist II	Used oil recycling, computer databases	Planning, Engineering analysis
3. Eileen Gandy Senior Clerk	Waste Reduction Information Center, Librarian	Data entry, Library

The program also used 18 retired engineers.

NAME: **Pollution Prevention Program**
Waste Reduction and Environmental Compliance Program (WREC)

ADDRESS: Environmental Engineering Branch
Georgia Tech Research Institute
Rm 143, O'Keefe Building
Atlanta, GA 30332

PHONE: (404) 894-8044

FAX: (404) 894-8281

MISSION:
To reduce risks to human health and the environment resulting from exposure to toxic chemicals used, released, or present in wastes generated by industry.

FUNCTION:
- Regulatory
- Technical assistance
- Policy and planning
- Education
- Research and development

PRESENT ACTIVITIES:
- Technical assistance
- Training
- Research and targeting
- Policy development
- Retiree and student intern program
- Publications

TOOLS:
- Training
- Seminars
- Case studies
- Site visits
- Newsletter

FUTURE ACTIVITIES:
- Research grants
- Expand retiree/student intern program

DEFINITIONS:
P2- Reduce the generation of pollutants at the source as much as possible and recycle those that are generated. Includes reduction in both volume and toxicity of waste product.
WR- Any activity that reduces or eliminates the generation of waste at its source. This includes changes in production technology, materials, processes, operations or procedures. This also includes in-process, in-line, or closed loop recycling.
WMIN- Source reduction and recycling.
SR- Reduce the amount of waste generated at the source through changes in industrial processes.
RECYCLING- The reuse of materials for the original or other purpose after they are recovered from the industrial process. Includes energy production.

HIERARCHY:
1. Source reduction
2. Recycling

AUDIENCE/CLIENTS:
Regulated community and the general public.

ENABLING LEGISLATION:
A line item in the University budget.

ADMINISTRATIVE BASE:
Georgia Institute of Technology
Georgia Tech Research Institute

BUDGET:

Approximately;	$276,000	Hazardous Waste Technical Assistance
	$195,000	Pollution Prevention Incentives Contract with GA Hazardous Waste Management Authority
	$150,000	Pollution Prevention Contract w/GA Office of Energy Resources
	$621,000	

SOURCES OF THE BUDGET:
General funds pay for Hazardous Waste Technical Assistance
EPA grants pay for Pollution Prevention programs

PROJECTED BUDGET:
Approximately $276,000 for Hazardous Waste Technical Assistance. Pollution Prevention programs funding is under negotiation.

EFFECTIVENESS:
Six-month follow-up on technical assistance.

PUBLICATIONS:
Georgia Pollution Prevention Guide

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. John Nemeth Lab Director	Directs all lab programs.	Engineering, industrial experience, regulatory, public relations.
2. Jim Walsh Branch Head Env. Engineering	Directs Branch programs.	Engineering, industrial and regulatory.
3. Ed Valentine Senior Research Scientist	Staff	Engineering, industrial and regulatory.
4. Carol Foley Pollution Prevention Program Coordinator	Staff pollution prevention coordination.	Engineering, industrial, regulatory and public policy
5. Kevin Kamperman Director of the Hazardous Materials Training Program	Training	Regulatory
6. Mike Gladle Research Scientist	HWTAP staff	Industrial hygiene, regulatory
7. Rochie Tschirhart Research Scientist	HWTAP staff	Underground storage tank, industrial, regulatory.
8. Cecilia Metzger Staff Assistant	Pollution Prevention Program	Industrial
9. Allen Davis Grad Student	Pollution Prevention Program	Industrial
10. John Bennet Grad Student	Pollution Prevention Program	Industrial
11. Nancy Davis Head, GTRI/ESTC Publications	Publications	Public relations, technology transfer.
12. Claudia Haff Head, GTRI/ESTC Training Programs	Training	Training development and coordination.

NAME: **Kentucky Partners**, State Waste Reduction Center

ADDRESS: 312 Ernst Hall
University of Louisville
Louisville, KY 40292

PHONE: (502) 588-7260

FAX: (502) 588-0964

MISSION:
Kentucky Partners is a free, confidential and non-regulatory service designed to assist all Kentucky industry and business to reduce, reclaim, re-use and recover hazardous waste generated in their plants, by their processes and products.

FUNCTION:
- Technical assistance
- Education
- Research for industry

PRESENT ACTIVITIES:
- Technical assistance
- Waste reduction site visits
- Information Center

TOOLS:
- Annual seminar
- Quarterly newsletter
- Workshops
- On-site visits

FUTURE ACTIVITIES:
Continue present course of action.

DEFINITIONS:
P2-Reduction in the amount of all types of pollution introduced into the environment by any method.
WR-Reduction of waste (w/o recycling, treatment, etc.).
WMIN-Reduction of waste (including recycling).
SR-Reduction or elimination of waste at it's source.
RECYCLING-Re-use of a waste (on- or off-site)

HIERARCHY:
Hierarchy changes according to industry. WMIN is lowest priority.

AUDIENCE/CLIENTS:
SQGs, LQGs, TRI reporters and the regulated community.

ENABLING LEGISLATION:
Kentucky House Bill 722

ADMINISTRATIVE BASE:
Speed Scientific School
University of Louisville

BUDGET:
$100,000

SOURCES OF THE BUDGET:
Federal grants and general funds from the State.

PROJECTED BUDGET:
$100,000

PUBLICATIONS:
Write to the KY Partners for further information.

STAFF:

Name/Position	Responsibilities	Background
1. J. St.Claire Executive Director	Everything	Chemist, 25 yrs. indust. exp.
2. A. Kaltenhauser Technical Coord.	Almost Everything	Metallurgical Eng.,7 yrs. indust. exp.
3. A. Crumbacher Program Assistant	Ofc. oper. and computers	Degreed, Computer Technology
4. B. Derry Co-op Student	Research	Chemical Eng. Student
5. A. Anderson	Site Visits	Retired Engineer
6. M. Bailey	Site Visits	Retired Engineer
7. C. Turok	Site Visits	Retired Engineer
8. W. Norton	Site Visits	Retired Engineer
9. E. Murphy	Site Visits	Retired Engineer
10. B. Schuler	Site Visits	Retired Engineer

NAME: **Waste Minimization Assessment Center**

ADDRESS: Dept. of Chemical Engineering
University of Louisville
Louisville, KY 40292

PHONE: (502) 588-6357

FAX: (502) 588-6355

MISSION:
WMAC's mission is to do waste minimization assessments, at no cost, in SIC 20-39, within an 150 mile radius (Ohio, Kentucky, and Indiana) for plants with no more than $75 million/year annual sales and no more than 500 employees. Assessments must involve faculty and students.

FUNCTION:
WMAC functions include technical assistance and education.

PRESENT ACTIVITIES:
- Technical assistance
- Student training

TOOLS:
- On-site visits and follow-up visits
- Reports about on-site visits including waste management costs and costs and payback period for waste minimization opportunities

FUTURE ACTIVITIES:
- Research and development projects
- Academic course development, through university and other funding sources

DEFINITIONS:
P2- Elimination or reduction of quantity and/or strength (composition) of pollutants and contaminants in hazardous and nonhazardous solid, liquid and aqueous wastes and air emissions. Also, conversion to a less hazardous waste. Includes on-site and off-site recycling.
WR- Includes definitions of pollution prevention plus conservation of raw materials by using less, loss reduction. Also, recovery of materials not usually considered a waste.
WMIN- same as waste reduction
SR- Reduction of waste leaving site, substitution of materials, reducing material usage and losses by other than recycling.
RECYCLING- Solid waste stream leaves main processing unit and goes to recovery/reduction unit hard piped from waste generating unit to recovery unit and back.

HIERARCHY:
none

AUDIENCE/CLIENTS:
WMAC clients are manufacturers in SIC 20-39, with no more than $75 million/year annual sales and no more than 500 employees, preferably SQGs

ENABLING LEGISLATION:
none

ADMINISTRATIVE BASE:
University

BUDGET:
$80,000

SOURCES OF THE BUDGET:
Funded by EPA-RREL, Cincinnati, managed by University City Science Center, University of Louisville matching funds.

PROJECTED BUDGET: ?

PUBLICATIONS:

STAFF NAME/POSITION	RESP.	BACKGROUND
1. Marvin Fleischman Director	Set up site visits, collect waste min. info and lit., assist/direct students in assessment reports	Chemical Engineer, industrial & gov't exper.
2. Dermot Collins Asst. Director	Assist/direct students in assessment reports	Chemical Engineer, industrial exper.
3. Clay Hansen Student Asst.	Write waste min. assessment reports, collect info.	Chemical Engineering
4. Patrick Schmidt Student Asst.	Write waste min. assessment reports	MS in Chemical Engineering

NAME: **Department for Environmental Protection**

ADDRESS:
18 Reilly Road
Frankfort, KY 40601

PHONE: (502) 564-2150

FAX: (502) 564-4245

CONTACT: Mr. Russell Barnett

MISSION:

FUNCTION:

PRESENT ACTIVITIES:

TOOLS:

FOCUS:

FUTURE ACTIVITIES:

DEFINITIONS:
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:

AUDIENCE/CLIENTS:

ENABLING LEGISLATION:

ADMINISTRATIVE BASE:

BUDGET:

SOURCES OF THE BUDGET:

PROJECTED BUDGET:

EFFECTIVENESS:

PUBLICATIONS:

STAFF:

NAME/POSITION	RESP.	BACKGROUND

NAME: **Mississippi Comprehensive Waste Reduction/ Waste Minimization Program**
Mississippi Department of Environmental Quality

ADDRESS: P.O. Box 10385
Jackson, MS 39289-0385

PHONE: (601) 961-5241

FAX: (601) 354-6612

MISSION:
To implement the legislative mandate outlined in Mississippi Senate Bill 2568:

> "The Legislature hereby declares it to be the policy of the State of Mississippi that the generation of waste should be reduced or eliminated at the source, whenever feasible; waste that is generated should be recycled whenever feasible; waste that cannot be recycled should be treated in an environmentally safe manner; and disposal employed only as a last resort and should be conducted in an environmentally safe manner."

FUNCTION:
Technical assistance, policy and planning, education, waste exchange, research and development, technology transfer.

PRESENT ACTIVITIES:
- Technical assistance
- Policy and planning
- Education
- Technology transfer
- Information clearinghouse
- Waste exchange
- Conferences, seminars and workshops
- Waste audits

TOOLS:
The program works in cooperation with MISSTAP and MISSWRAP in pursuit of its mandate.

FOCUS:

FUTURE ACTIVITIES:
- Challenge grants
- Demonstration projects
- Expanded waste audit activities
- Recycling market development
- Regulatory involvement
- Student intern program

DEFINITIONS:
P2-NA
WR-NA
WMIN-the reduction, to the extent feasible, of waste that is generated or subsequently treated, stored or disposed of. It includes any source reduction or recycling activity undertaken by a generator or facility operator that results in either (i) the reduction of total volume or quantity of waste, or (ii) the reduction of toxicity or other characteristics of hazardous waste, or both, as long as the reduction is consistent with the goal of minimizing present and future threats to human health and the environment
SR-
RECYCLING-the reuse or reclamation, through a process or activity separate from the production of the primary product or the provision of the primary service, of a waste.

HIERARCHY:
1. Source reduction
2. Recycling
3. Treatment
4. Disposal

AUDIENCE/CLIENTS:
- SQGs
- LQGs
- TRI reporters
- CESQGs
- All generators of non-hazardous solid waste

ENABLING LEGISLATION:
Senate Bill 2568
Section 49-31-1 et seq., Mississippi Code of 1972

ADMINISTRATIVE BASE:
Mississippi Department of Environmental Quality, Office of Pollution Control

BUDGET:
$650,000

SOURCES OF THE BUDGET:
- Federal grants
- Waste Minimization Tax imposed on all LQGs and SQGs in the state based on USEPA biennial report and TRI form R.

PROJECTED BUDGET:
$760,000

EFFECTIVENESS:
Effectiveness is tracked by number of;
- contacts made
- audits performed
- presentations made
- documents distributed
- waste reduced or minimized

Program is accountable to;
- Mississippi Legislature
- USEPA
- Governor's Office
- Commission on Environmental Quality
- Citizens and industry of the State of Mississippi

PUBLICATIONS:
Monthly newsletters on hazardous and solid waste.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Thomas E. Whitten Director	Overall prog. dir., Admin., Budget, Planning	BSME, MSES, Industrial & transportation exper.
2. Chris Bowen Haz. Waste Coord.	Hazardous waste	Geologist
3. Larry Estes Solid Waste Coord.	Non-hazardous solid waste	Civil Engineer
4. Ernestine Martin Secretary	Office mgmt., secretarial	

NAME: **Mississippi Technical Assistance Program (MISSTAP) and Mississippi Solid Waste Reduction Assistance Program (MISSWRAP)**

ADDRESS: P.O. Drawer CN
Mississippi State, MS 39762

PHONE: (601)325-8454

FAX: (601)325-2482

MISSION:
- Promote the reduction of hazardous and solid waste generation.
- Promote industrial and municipal recycling.
- Provide information to entities interested in waste minimization.

FUNCTION:
- Supply technical assistance and education.
- Promote research.
- Assist in policy development.
- Develop waste exchange programs.

PRESENT ACTIVITIES:
- Technical assistance
- Information clearinghouse
- Regulatory information transfer
- Waste exchange database
- Conferences and seminars
- Site assessments

TOOLS:
- Remote access computerized database
- Newsletters
- Conferences and seminars
- Site visits

FUTURE ACTIVITIES:
- Continue with current activities
- Increase site assessments

DEFINITIONS:
P2-Activities which promote process changes or use of alternative materials which eliminate the potential of pollution generation.
WR-Reduce waste volume after generation.
WMIN-Reduce waste volume before generation.
SR-Reduce waste generated at the source through optimization/material selection.
RECYCLING-Reclamation and reuse of waste material (on- or off-site).

HIERARCHY:
None

AUDIENCE/CLIENTS:
SQGs, LQGs, TRI reporters, Municipalities, Counties

ENABLING LEGISLATION:
State Legislative Act. Mandate to Department of Environmental Quality which contracts for service.

ADMINISTRATIVE BASE:
Mississippi State University

BUDGET:
$496,000

SOURCES OF THE BUDGET:
Grants

PROJECTED BUDGET:
$800,000

PUBLICATIONS:
Newsletters

STAFF: NAME/POSITION	RESP.	BACKGROUND
1. Don Hill Dir. Tech.Asst.	Coord. Technical Asst. Prg.	Chemical Engineer
2. Caroline Hill Dir. Tech. Transf.	Coord. Technical Transfer	Home Economist
3. Pat Lindig Tech. Transf. Spec.	Coord. Newsletters & Conf.	Home Economist
4. June Carpenter Tech. Transf. Spec.	Coord. Newsletters & Conf.	Home Economist
5. Dennis Truax Tech. Asst. Spec.	Provide Info. on hazardous & solid waste mgmt.	Civil Engineer
6. Angela Summers Tech. Asst. Spec.	Provide Info. on hazardous & solid waste mgmt.	Chemical Engineer
7. Hal Keolling Tech. Asst. Spec.	Research and site assessment	Chemical Engineer
8. George Lightsey Tech. Asst. Spec.	Research and site assessment	Chemical Engineer
9. Clifford George Tech. Asst. Spec.	Research and site assessment	Chemical Engineer
10. Richard Mathers Tech. Asst. Spec.	Research and site assessment	Chemical Engineer
11. Mary Jean Gates Tech. Asst. Spec.	Site assessment	Industrial Engineer
12. Bill Keller Tech. Asst. Spec.	Research	Chemical Engineer

NAME: **North Carolina Pollution Prevention Pays Program**

ADDRESS: Mail- P.O. Box 27687
Raleigh, NC 27611
Street- 3825 Barrett Drive
Raleigh, NC 27609

PHONE: (919) 571-4100

FAX: (919) 571-4135

MISSION:
To provide free, non-regulatory technical assistance to North Carolina industries, municipalities, state agencies, and citizens on methodologies used to prevent or reduce, reuse or recycle waste. The program is and always has been multimedia in focus, addressing air and water quality, toxic materials and hazardous and solid wastes.

FUNCTION:
The program's primary function is to provide free, non-regulatory technical assistance. Other functions include;
- Education- plant specific, industry specific, waste specific and general
- Policy and planning- grants for industrial waste reduction applications
- University intern projects- research and development

PRESENT ACTIVITIES:
- Telephone technical assistance
- On-site technical assistance
- Retired engineer program in conjunction with TVA
- Information clearinghouse
- Both industry and waste specific information packages
- Outreach (including training)
- Industrial challenge grants

TOOLS:
- Case study summaries, challenge grant summaries, publications, fact sheets, pollution prevention tips.
- Industry specific and wastestream conferences and workshops.
- Challenge grants.
- Employee training for industry.
- Pretreatment coordinator training.
- Library with more than 5,000 references.
- Computerized literature searches.
- "Focus Minimization," a quarterly waste reduction newsletter for hazardous waste generators

FUTURE ACTIVITIES:
- Training for state regulatory personnel (Sept. '91).
- Establish technical assistance follow-up program.
- Follow-up and cooperative effort with the Solid Waste Determination staff in an attempt to reduce the amount of material landfilled.
- Track trends in waste generation and reduction.
- Identify to 10 reducers of hazardous waste.
- Electroplating seminar

DEFINITIONS:
P2- A proactive approach to reducing pollutants at the source through process modification, chemical substitution or inventory control. This includes reuse, recovery, and recycling on-site, as well as reuse, recovery, and recycling off-site.
WR-Same as above.
WMIN-Same as above but applicable to hazardous waste only.
SR-The elimination or reduction of pollutants or wastes at the point of generation.
RECYCLING-Recovery or reuse of material after generation either on- or off-site.

HIERARCHY:
1. Source reduction
2. On-site recovery or reuse
3. Off-site recovery or reuse
4. Energy recovery

AUDIENCE/CLIENTS:
Regulated community, small quantity generators, large quantity generators, TRI reporters, industry, municipalities and citizens.

ENABLING LEGISLATION:
Established originally in 1984 through the Board of Science and Technology, the Pollution Prevention Program became a part of the state's line item budget in 1989-90.

ADMINISTRATIVE BASE:
State agency.

BUDGET:
Approximately $600,000.

SOURCES OF THE BUDGET:
State general revenue fund. An additional 1 employee is funded as part of an EPA grant for work specific to that project.

PROJECTED BUDGET:
Approximately $600,000.

EFFECTIVENESS:
At present, the program's effectiveness is being charted by the percentage increases in requests for technical assistance from year to year. Beginning in June, follow-up letters will be sent and telephone contacts made for all receiving technical assistance in the past. Contacts will continue to be made approximately every six months

PUBLICATIONS:
List available at above address.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Stephanie Richardson Manager, Environmental Supervisor II	Manage program, provide technical assistance and outreach, project mgmt. for challenge grants, training.	Civil Engineering, private practice and state government, wastewater treatment background.
2. Sharon Johnson Environmental Chemist II	Provide technical assistance and outreach, training, project mgmt. for challenge grants.	15 yrs with state government, ran air quality lab, assisted in writing NC air toxics regulations
3. David Williams Environmental Engineer II	Provide technical assistance and outreach, training, project mgmt. for challenge grants.	Engineer, water quality background.
4. Terry Albretch Environmental Engineer I	Provide technical assistance, project mgmt. for challenge grants, analyze hazardous waste reporting data.	Engineer, water and wastewater background.
5. Vacant Environmental Engineer I	(Frozen)	
6. Vacant Environmental Chemist II	Conduct work on EPA multimedia grant. Intended to bring all environmental data in the state together on Data 4 Base for tracking of trends and comparative analysis. (Recommendation has been made.)	

NAME: **Pollution Prevention Pays Program**

ADDRESS: Center for Improving Mountain Living
Western Carolina University
Cullowhee, NC 28723

PHONE: (704) 227-2792

FAX: (704) 227-7422

MISSION:

FUNCTION:
The Pollution Prevention Pays Program provides information, training and policy guidance directed at promoting waste reduction.

PRESENT ACTIVITIES:
- Disseminate a manual developed for use by faculty in the areas of engineering and manufacturing technology and business.
- Serve as a regional technical information center for pollution prevention instructional material for two- and four-year college instructors.
- Provide technical assistance through the WCU Small Business Technical Development Center to assist new and existing businesses in North Carolina set up systems that will increase efficiency and reduce waste.
- Work on a variety of state and regional initiatives that set policy and rules related to waste reduction and solid and hazardous waste management.
- Operate a 30 county Recycling and Market development program.
- Operate a recognition and awards program for business and industry.
- Operate a waste reduction training program for localities in the western 28 counties in North Carolina.
- Develop curricula and programs for use both within the university system for traditional college students in areas associated with manufacturing and business and develop training programs for individuals already in business or industry.

TOOLS:
- Seminars
- Training programs
- Workshops
- Waste Minimization Task Forces
- Work with a 17 Regional Leadership Council
- A 30 county Recycling and Market Development Initiative.

FUTURE ACTIVITIES:
- Develop a Recycling Market Directory.
- Develop a Recycling Market Primer.
- Develop curricula in the area of Chemical Safety.
- Expand existing faculty training and curriculum development efforts.

DEFINITIONS:
"Specific, limiting definitions are not a problem in our program since we are not involved directly with regulatory efforts."

HIERARCHY:
There is no preferred hierarchy.

AUDIENCE/CLIENTS:
Two and four year college faculty, business, industry, local government and community leaders.

ENABLING LEGISLATION:

ADMINISTRATIVE BASE:
Western Carolina University

BUDGET:

SOURCES OF THE BUDGET:
All programs operated by a combination of grant, state and federal funding. Sources include the Appalachian Regional Commission, EPA, TVA, the state of North Carolina, private foundations and local sources.

PROJECTED BUDGET:

PUBLICATIONS:
Write to the address above for list of publications available. This list includes the Pollution Prevention Pays Instruction Manual. This 150 page manual was prepared for use by 2 and 4 year college faculty and inservice industry. The manual has been field tested and revised after use at both the 2 and 4 year college level. Materials cover all areas of waste reduction, including energy, solid and hazardous waste, water conservation and product reformulation.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
Susan Smith	Director	

NAME: **EPA Center for Waste Minimization and Management**

ADDRESS: Department of Chemical Engineering
Box 7905
North Carolina State University
Raleigh, NC 27695-7905

PHONE: (919)737-2325

FAX: (919)737-3465

MISSION:
Research pollution prevention opportunities and manufacturing process improvements.

FUNCTION:
Pursue research and facilitate technology transfer.

PRESENT ACTIVITIES:
Research information dissemination.

TOOLS:
Not applicable

FUTURE ACTIVITIES:
Expand the range and variety of research.

DEFINITIONS:The Center for Waste Minimization and Management does not define terms separately and often use these terms interchangeably. It is their belief that the strict adherence to terms and definitions is often inaccurate and counterproductive.

HIERARCHY:
None

AUDIENCE/CLIENTS:
Corporations and technical assistance programs.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
North Carolina State University

BUDGET:
$1,250,000

SOURCES OF THE BUDGET:

PROJECTED BUDGET:
$1,250,000

PUBLICATIONS:
None listed.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Michael Overcash Center Director	Administration	
2. George Rutledge	Tech. Transf & Research	
3. Cliff Kaufman	Tech. Transf & Research	
4. Deb Jurczak	Information dissemination	
5. Olivia Keel Admin. Asst.	Staff support	

NAME: **Center for Waste Minimization**

ADDRESS: 2600 Bull St.
Columbia, SC 29201

PHONE: (803)734-4715

FAX: (803)734-5199

MISSION:
Assist industry in the voluntary implementation of source reduction and recycling opportunities through information sharing and direct technical assistance.

FUNCTION:
Provide technical assistance primarily to small and medium sized companies.

PRESENT ACTIVITIES:
- Information clearinghouse
- On site waste minimization assessments

TOOLS:
- On-site assessments by 4 engineers.
- Response to clearinghouse telephone inquiries.
- Seminars

FUTURE ACTIVITIES:
- Newsletters
- Development of employee training resources

DEFINITIONS:
P2-Source reduction, on-site recycling, reclamation and reuse.
WR-Reduce the quantity and/or toxicity of waste. (syn. source reduction)
WMIN-Source reduction, recycling, reclamation and reuse, (on- or off-site). To include energy recovery activities.
SR-See Waste Reduction.
RECYCLING-Activities which beneficially use production by-products, to include reclamation and reuse (on- or offsite).

HIERARCHY:
1. Source reduction
2. Recycling

AUDIENCE/CLIENTS:
Services are targeted toward small and medium sized companies generating hazardous waste, but services are available to any hazardous waste generator.

ENABLING LEGISLATION:
State legislation targeting the minimization of hazardous waste.

ADMINISTRATIVE BASE:
South Carolina Department of Health and Environmental Control

BUDGET:
$150,000

SOURCES OF THE BUDGET:
Fees from users of hazardous waste landfills.

PROJECTED BUDGET:
$150,000

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Jeff deBossonet Manager	Program management	Regulatory/Engineering
2. Bob Burgess Engineer	Technical assistance	Industry
3. Neal Hunter Engineer	Technical assistance	Industry
4. Kathy Powell Engineer	Technical assistance	Industry

NAME: **The University of Tennessee's Center for Industrial Services**

ADDRESS: Suite 401
226 Capitol Boulevard Building
Nashville, Tennessee 37219-1804

PHONE: (615)242-2456

FAX: (615)741-6644

MISSION:
The University of Tennessee's Center for Industrial Services assists business and industry reduce the amount and toxicity of waste generated by providing on-site technical assistance and training to the regulated community and state environmental regulatory personnel.

FUNCTION:
The Center for Industrial Services is a nonregulatory body. The on-site technical assistance is free and confidential. Training and technology transfer is provided through workshops, videotapes, and teleconferences.

PRESENT ACTIVITIES:
- Technical assistance
- Information clearinghouse
- Training

TOOLS:
- Technical assistance is provided on• site.
- Information packages are assembled and distributed
- A one week training course for waste reduction assessors, workshops, videotapes and teleconference training are available

FUTURE ACTIVITIES:
- A follow-up to the technical assistance contacts in order to develop case studies.
- Newsletter
- Computer managed interactive training.

DEFINITIONS:
P2-Multimedia source reduction.
WR-Multimedia source reduction and recycling.
WMIN-RCRA Waste reduction.
SR-process changes and operating procedures.
RECYCLING-on and off site, closed loop (all)

HIERARCHY:
Hazardous waste is the major priority, followed by toxic waste.
1. Source reduction
2. Reuse
3. Recycling

AUDIENCE/CLIENTS:
CIS serves the industry, business and state environmental community.

ENABLING LEGISLATION:
Public Chapter 578 (1988) Establishes a waste reduction policy and program.
House Bill 2217 (1990) Requires large and small quantity generators to develop waste reduction plans.

ADMINISTRATIVE BASE:
University of Tennessee

BUDGET:
$450,000

SOURCES OF THE BUDGET:
Contract with the Tennessee Department of Health and Environment. Funds taken from general revenues and EPA grant.

PROJECTED BUDGET:
$450,000

PUBLICATIONS:
Waste Reduction Assessment and Technology Transfer Training Manual.

STAFF:

Name/Position	Responsibilities	Background
1. George Smelcer Director	T/A	Engineer, Regulatory
2. Louis Hoyt Engineer	Reg. T/A	Engineer, Industry
3. Bill Singleton Engineer	On-site T/A	Engineer, Industry
4. Tom Dolan Engineer	On-site T/A	Engineer, Industry
5. Chuck Steinmetz Engineer	On-site T/A	Engineer, Industry
6. Cam Metcalf Training Manager	Training Programs	Engineer, University
7. Bill Wiley Trainer	Training organization	Library, Video
8. Keith Ridley Info. Specialist	Clearinghouse	Journalism, Univ.
9. Debbie Phillips Writer	Newsletter, train.	Journalism, Univ.
10. Pam Peters Secretary	Manage office	Two yr. college

NAME: **Waste Reduction and Pollution Prevention**

ADDRESS: Tennessee Department of Conservation
150 Ninth Avenue, North
Nashville, TN 57247-3001

PHONE: (615) 741-3657

FAX: (615) 741-4608

MISSION:
It is the policy of the State of Tennessee that, wherever feasible, the generation of hazardous waste is to be reduced as expeditiously as possible. Waste that is never-the-less generated should, in order of priority, be reduced at its source, recovered and reused, recycled, treated or disposed so as to minimize the present and future threat to human health and the environment.

FUNCTION:
1) By contract- technical assistance and training.

2) In house beginning in 1992- regulatory.

PRESENT ACTIVITIES:
- Technical assistance
- Training
- Information clearinghouse
  (all activities performed by contract with The University of Tennessee Center for Industrial Services.)

TOOLS:
- On-site technical assistance and follow-up
- Newsletter
- Seminars
- Teleconferences
- Case studies and technical papers in clearinghouse
- Governor's Award

FUTURE ACTIVITIES:
Beginning in January of 1992, the program will enforce the provisions of the Tennessee Hazardous Waste Reduction Act of 1990 which requires generators to develop a plan for hazardous waste reduction and annually report accomplishments toward goals to the Department.

DEFINITIONS:
P2- the protection of human health and the environment through the reduction of pollutants at the source and through environmentally sound recycling.
WR- the prevention of pollution through the multi-media (air, land, and water) reduction of pollutants at the source and through environmentally sound recycling.
WMIN- the reduction, to the extent feasible, of hazardous waste that is generated or subsequently treated, stored, or disposed. It includes any source reduction or recycling activity undertaken by a generator that results in either (a) the reduction of total volume of quantity of hazardous waste, or (2) the reduction of toxicity of hazardous waste, or both, so long as the reduction is consistent with the goal of minimizing present and future threats to human health and the environment.
SR- the reduction or elimination of waste generation at the source, usually within a process. Source reduction measures include process modifications, feedstock substitutions or improvements in feedstock purity, various housekeeping and management practices, increases in the efficiency of machinery and even recycling within a process. Source reduction implies any action that reduces the amount of waste exiting from a process.
RECYCLING- the use or reuse of a waste as an effective substitute for a commercial product, or as an ingredient or feedstock in an industrial process. It also refers to the reclamation of useful constituent fractions within a waste material or removal of contaminants from a waste to allow it to be reused. Recycling implies use, reuse or reclamation of a waste, either on-site, or off-site, after it is generated by a particular process.

HIERARCHY:
1) Source reduction- waste is not produced.
2) Recycling- waste is converted to a usable product.
3) Treatment- waste is made less harmful.
4) Disposal- the option of last resort.

AUDIENCE/CLIENTS:
Large and small quantity generators

ENABLING LEGISLATION:
Tennessee Code Annotated Sections 68-46-201(b), 68-46-205(d), 68-46-206(f), and 68-46-013 et seq.

ADMINISTRATIVE BASE:
The University of Tennessee Center for Industrial Services under contract with the Tennessee Department of Environment and Conservation.

BUDGET:
$681,896

SOURCES OF THE BUDGET:
- State appropriations- $400,000 FY 91, $300,000 FY 92*
- RITTA Grant- $320,000 for 10/15/88 through 10/14/91
- PPIS Grant- $300,000 for 10/1/90 through 4/30/93

* $100,000/yr. grant program for hazardous waste reduction ends FY 91

PROJECTED BUDGET:
$472,990 plus regulatory expenses for 1/2 year (funds not ear-marked and activities will be added to RCRA activities and paid by State).
EFFECTIVENESS:

1) Quantity of waste reduced.
2) Number of Waste Reduction Assessment Reports written.
3) Number of documents distributed.
4) Type, number and attendance for training sessions.

Program also makes an effectiveness report to the EPA and the Tennessee General Assembly.

PUBLICATIONS:
Too numerous to list. For listing contact: Mr. Keith Ridley, Information Specialist
Waste Reduction Assistance Program
Center for Industrial Services
The University of Tennessee
226 Capitol Boulevard Bldg., Suite 401
Nashville, TN 37219-4816
(615) 242-4816

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1.George Smelcer Director	Management and Supervision	Engineer, regulatory
2. Keith Ridley Information Specialist,	Library operation, publication distribution	Environmental, regulatory
3. Pam Peters Secretary	Secretarial duties	Secretarial
4. Tom Dolan Waste Reduction Engineer	Assessments, report writing	Engineer, industry consulting
5. Cam Metcalf Training Manager	Develop training materials, training activities, lecture	Engineer, regulatory, teaching consulting
6. Debbie Phillips Technical Writer	Write and edit technical documents	Publications specialist, editor
7. Bill Wiley Technical Trainer	Develop training material, lecture	Planning, developing waste reduction training
8. Bill Singleton Waste Reduction Engineer	Assessment, report writing	Retired engineer, industry
9. Chuck Steinmetz Waste Reduction Engineer	Assessment, report writing	Retired engineer, industry

The program also uses 20 retired engineers from industry as part-time Waste Reduction Engineers.

Region 5

NAME: **Illinois Environmental Protection Agency**

ADDRESS: 2200 Churchhill Road
P.O. Box 12976
Springfield, IL 62796-9276

PHONE: (217) 785-0833

FAX: (217) 524-4959

MISSION:
Illinois Environmental Protection Agency (IEPA) provides a number of innovative waste reduction services to Illinois industries and citizens, in addition to its responsibilities for implementing the environmental regulations and laws of the state of Illinois. IEPA has three programs: the Voluntary Toxic Pollution Prevention Innovation Plan Program, The IEPA Pollution Prevention Internship Program, Illinois Industrial Materials Exchange Services (IMES).

FUNCTION:
- The Voluntary Toxic Pollution Prevention Innovation Plan Program, under the provisions of the Toxic Pollution Prevention Act, is charged with encouraging pollution prevention in Illinois industries.

- The IEPA Pollution Prevention Internship Program provides engineering students to work as interns at Illinois industries on targeted pollution prevention projects. Major generators are selected to participate in the internship program, based on reported releases submitted under the federal community right-to-know legislation.

- The IMES is an information clearinghouse, directory and marketing facilitator for hazardous an nonhazardous materials that might otherwise be wasted. At no times is IMES involved in negotiations or actual exchange of materials. Client confidentiality is respected at all times.

PRESENT ACTIVITIES:
Pollution Prevention Innovation Plans Program
- Support industry's pollution prevention on approval from the innovation plan as outlined in the Toxic Pollution Prevention Act.

IEPA Pollution Prevention Internship Program
- Match engineer interns with Illinois industry on pollution prevention projects.
- Train and provide technical support to the interns
- Help to determine pollution prevention goals for the targeted industry

IMES
- Information clearinghouse
- Maintain Directory
- Facilitate a market for hazardous and nonhazardous materials
- Distribute published materials to it's subscribers

TOOLS:
Innovative Pollution Prevention Plans Program
- Expedite review of permit applications
- Support variance petitions

IEPA Pollution Prevention Internship Program
- Training of interns by IEPA
- Giving technical support to interns by IEPA
- Determine pollution prevention goals for an intern's project

IMES
- Information clearinghouse
- Directory
- Free waste exchange information and referral

FUTURE ACTIVITIES: No response.

DEFINITIONS: No response.

AUDIENCE/CLIENTS
Pollution Prevention Innovation Plans Program - Illinois industry

IEPA Pollution Prevention Internship Program - industry by way of engineering interns working on targeted pollution prevention projects at Illinois industries.

IMES - over 10,000 subscribers nation-wide

ENABLING LEGISLATION:
Innovative Pollution Prevention Plans Program - the Toxic Pollution Prevention Act

IEPA Pollution Prevention Internship Program - None

IMES - None

ADMINISTRATIVE BASE:
All three of the programs work under the IEPA Office of Pollution Prevention. IMES also works with the Illinois State Chamber of Commerce.

BUDGET: $400,000

SOURCES OF THE BUDGET:
Air Pollution Release fees, Solid Waste Disposal fees, USEPA Pollution Prevention Grants.

PROJECTED BUDGET: No response.

PUBLICATIONS: Write to IEPA.

STAFF:
1. Mike Hayes

NAME: **The Hazardous Waste Research and Information Center**

ADDRESS: One East Hazelwood Drive
Champaign, IL 61820

PHONE: (217) 333-8940

FAX: (217) 333-8944

MISSION:
The Hazardous Waste Research and Information Center combines research and education, information collection, analysis and dissemination. HWRIC also offers direct technical assistance to industry, agriculture and communities in a multidisciplinary effort to reduce the generation of hazardous wastes in Illinois.

FUNCTION:
HWRIC provides technical assistance, education and research to reduce the hazardous waste.

PRESENT ACTIVITIES:
- Provide direct technical assistance to industries, businesses, schools, government bodies and individual citizens.
- Funding basic and applied research in developing and improving pollution prevention techniques and technologies.
- Produce, collect and make available to its audience a broad range of information materials.
- Give and participate in talks, workshops and seminars relating to pollution prevention.

TOOLS:
- Direct technical assistance.
- On-site consultations.
- Outreach
- Waste Reduction Advisory System (WRAS) - a computerized database of pollution prevention case studies and literature.
- Economic incentives
  - The Recycling and Reduction Techniques (RRT) matching funds project
  - Annual Governor's Pollution Prevention Awards
  - Funding for research in pollution prevention
- Data management program which is responsible for developing and maintaining various data files on hazardous waste facilities and Illinois landfills, volumes and types of wastes generated and transported, waste treatment and disposal facilities and waste reduction practices of Illinois industries.
- Information clearinghouse

FUTURE ACTIVITIES:
- Waste paint reduction options study.
- Six workshops on pollution prevention in teaching and research laboratories.
- Pollution prevention focus on printers and the chemical industry.
- Waste Reduction Innovative Technology Evaluation projects with printers, electroplaters and foundries.
- Curriculum development in engineering, chemistry and business.
- Survey of waste management needs of colleges and universities of Illinois.

DEFINITIONS:
P2- Those activities taken by an industry (or other entity) to reduce the amount or toxicity of the waste they generate without transferring it to another media.
Waste Reduction- Same as above.
Waste Minimization- Not Used.
Source Reduction- Includes management strategies, waste reduction audits, better housekeeping, waste stream segregation, process raw materials modification or substitution, product reformulation or redesign, equipment or technology modification, process modification or substitution, and wastewater reduction.
Recycling- Emphasis placed on off-site recycling.

HIERARCHY:
1. Waste Elimination
2. Pollution Prevention or Waste Reduction
   -true source reduction is of the highest priority here, followed by on-site recycling.
3. Off-site recycling
4. On-site treatment
5. Off-site treatment
6. Land disposal

AUDIENCE/CLIENTS:
HWRIC serves as broad spectrum of Illinois citizens and organizations. These include industries and businesses, educational institutions, consultants, public and community action groups, local and state government officials, public and private researchers, and the public. The center interacts with similar groups at a national level.

ENABLING LEGISLATION:
HWRIC was formed within the Illinois Department of Energy and Natural Resources in 1984 by the Illinois General Assembly through the Hazardous Waste Technology Exchange Act (PA 83-1436). The Toxic Pollution Prevention Act of 1989 as amended in 1990 (PA 86-914) added several pollution prevention responsibilities to their mandate.

ADMINISTRATIVE BASE:
HWRIC is a division of the Illinois state agency, the Department of Energy and Natural Resources. HWRIC is officially affiliated with the University of Illinois at Urbana-Champaign.

BUDGET:
Approximately $2 million per year

SOURCES OF THE BUDGET:
• The Illinois General Assembly as a separate line in the budget of the Department of Energy and Natural Resources. Most of this comes from general revenues. About $400,000 per year is appropriated from a fee on hazardous waste disposal.
• Federal Contracts - RITTA, WRITE, PPIES/WRAS integration PPIG.

PROJECTED BUDGET:
Same as present budget.

PUBLICATIONS:
HWRIC produces a number of research, technical and administrative reports each year (60 reports to date), which are available through the HWRIC clearinghouse. In addition, HWRIC produces and collects fact sheets, posters, brochures and booklets, which are also available. For lists of reports and other clearinghouse items available, phone (217) 333-8940.

STAFF:

NAME	POSITION
1. David Thomas	Director
2. Gary Miller	Assit. Director/Research Program Manager
3. Katie Day	Admin. Assist./Personnel Officer
4. Chris Murphy	Fiscal Officer
5. Christina Komadina	Public Information Officer
6. June Wihite	Lab Purchasing Officer
7. Betty Stites	Office Assistant
8. Karen Miller	Office Assistant
9. Kathy Nojd	Office Assistant/Receptionist
10. Margie Ford	Office Assistant
11. Mark Anliker	WRAS Engineering Assistant (Grad Student)
12. Marvin Piwoni	Lab Services Manager
13. Kevin Cappo	QA/QC Safety Officer
14. Jack Cochran	Sr. Organic/Analytical Chemist
15. Teresa Chow	Sr. Organic Chemist
16. Aaron Weiss	Sr. Inorganic Chemist
17. David Green	Organic Lab Technician
18. Sarah Smothers	Inorganic Lab Technician
19. Frank Brookfield	Computer Systems Specialist
20. Scott Dalbey	Shipping/Receiving Official
21. Veronica Lazovskaya	Glassware Washer/Lab Tech
22. Christine Grill	Organic Lab Technician
23. Maria Olson	Inorganic Lab Technician
24. Dan Kraybill	Manager of Industrial and Technical Assistance
25. Alisa Wickliff	Engineering Assistant
26. Jim Morrison	ITA Technical Assistant
27. Michelle Miller	ITA Engineering Assistant (Grad Student)
28. Claudia Washburn	Research Project Officer
29. Jackie Peden	Research Project Officer
30. Sam Mehta	Pilot Plant Engineer
31. Bill Tancig	WRITE Project Engineer
32. Isabel Busch	Research Program Assistant
33. Sara Tompson	Info Services Program Manager/Librarian
34. Renee Ketchem	Information Assistant
35. Chris Friese	Library Assistant (Grad Student)
36. Michelle Wiley	Library Assistant (Undergrad Student)
37. Jennifer Hines	Data Management Specialist
38. John Garver	Data Management Specialist

NAME: **Indiana Pollution Prevention Program Office of Pollution Prevention and Technical Assistance**

ADDRESS: Indiana Department of Environmental Management
105 South Meridian Street
P.O. Box 6015
Indianapolis, IN 46206-6015

PHONE: (317) 232-8172

FAX: (317) 232-8564

MISSION:
The Indiana Pollution Prevention Program's goal is to foster pollution prevention statewide by the following:

- Incorporating P2 strategies into the regulatory process
- Advancing P2 initiatives in the regulated community through technology transfer and technical assistance
- Promote P2 concepts to all Hoosiers through education.

FUNCTION:
Internal regulatory P2 strategies, technical assistance, technology transfer, education, research and development grant administration and policy and planning.

PRESENT ACTIVITIES:
- Technical assistance
- Information clearinghouse
- Regulatory
- Pollution prevention opportunity assessments
- Technology transfer
- Conferences and workshops

TOOLS:
- Training
- Hotline
- Seminars
- Workshops
- On-site visits
- Case studies
- Publications

FUTURE ACTIVITIES:
- Pollution prevention newsletter
- Expanded technical assistance and case studies
- Pollution prevention demonstration and R & D grants
- In-house training of inspectors
- Public education programs
- Waste auditor training
- Planner's training

DEFINITIONS:
P2- Reducing industrial use of toxic materials or reducing the environmental and health hazardous associated with an environmental waste without diluting or concentrating the waste before the release, handling, storage, transport, treatment, or disposal of the waste.
WR- No response.
WMIN-No response.
SR- Reduce the volume of solid waste generated.
RECYCLING- Related to P2, recycling is not a practice that is applied to an environmental waste after the waste is generated or comes into existence or after the waste exits a production or commercial operation. It includes closed loop recycling.

HIERARCHY:
1. Pollution prevention
2. Source reduction
3. Reuse
4. Recycling

AUDIENCE/CLIENTS:
Regulated community, SQGs, LQGs, TRI reporters, municipalities, institutions, state agencies, educators, school-age children, regulatory agency personnel general public.

ENABLING LEGISLATION:
Pollution prevention - HEA 1106
Source reduction - HEA 1240, HEA 1391

ADMINISTRATIVE BASE:
State agency

BUDGET:
$1.5 million

SOURCES OF THE BUDGET:
General fund and federal grants

PROJECTED BUDGET:
Increases proposed, not yet approved.

PUBLICATIONS:

STAFF:

NAME	RESPONSIBILITY	BACKGROUND
1. Joanne Joyce Acting Director, OPPTA	Direct program	Administration
2. Harry Davis Senior Engineer	P2 TA, case studies, regulatory strategies, education	Industrial and regulatory engineering
3. Charles Sullivan Environmental Manager	P2 TA, case studies, regulatory strategies, education	Municipal and regulatory pollution prevention and environmental management
4. Ed Cohen Program Director	Solid waste reduction and recycling technical assistance	Private sector and regulatory source reduction, energy conservation and recycling

Program director intends to hire 14 additional pollution prevention personnel by 1/1/93.

NAME: **The Indiana Pollution Prevention Technical Assistance Program**

ADDRESS: Purdue University
School of Civil Engineering
Environmental Management and Education Program
1284 Civil Engineering Building
West Lafayette, IN 47907-1284

PHONE: (317) 494-5038
(800) 669-6604 (within IN only)

FAX: (317) 494-6422

MISSION:
To promote multi-media source reduction and recycling to small and medium size businesses in Indiana.

FUNCTION:
We provide technical assistance, education, and operate the Indiana Waste Exchange program.

PRESENT ACTIVITIES:
- Technical assistance
- Education
- Information on pollution prevention and recycling.

TOOLS:
- On-site technical assistance
- Conferences and workshops
- Toll-free telephone line
- Toll- free access to the PIES system
- Indiana Waste Exchange
- 1.5 full time staff, and one half-time graduate student.

FUTURE ACTIVITIES:
A continuation of present activities.

DEFINITIONS:
P2- Reducing waste through changes in production technology, materials, processes, operations or procedures, or the use of in-process, in-line, or closed loop recycling. It does not include a practice which is applied to a waste after it is generated.
WR- A general term that encompasses all other relative terms, except incineration, treatment, and disposal.
WMIN- A term that applies to RCRA hazardous waste that includes source reduction and recycling (both on and off-site), as per the Waste Minimization Opportunity Assessment Manual (USEPA).
SR- Any activity that reduces the generation of waste at the source, usually within a process. (not restricted to RCRA hazardous wastes)
RECYCLING- A general term including the use, re-use, or reclamation of a material; both on or off-site.

HIERARCHY:
1. Pollution Prevention
2. Recycling
3. Treatment (including incineration)
4. Disposal

AUDIENCE/CLIENTS:
Our targeted audience is small to medium sized businesses, including SQG's, and we are using the TRI report to target generators that produce the seventeen chemicals targeted by the EPA's Industrial Toxics Project.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
Purdue University

BUDGET:
$100,000

SOURCES OF THE BUDGET:
The Indiana Department of Environmental Management was awarded a three-year, $300,000 Source Reduction and Recycling Technical Assistance Grant pursuant to a joint proposal with Purdue University. The administration of that grant was subsequently contracted to the Environmental Management and Education Program at Purdue University.

PROJECTED BUDGET:
$100,000

PUBLICATIONS:
None

STAFF:

NAME	RESPONSIBILITY	BACKGROUND
1. Rick Bossingham Coordinator	Organizing conferences, conducting workshops, performing waste min. assessments and providing guidance for graduate students involved in assessments	Environmental Health, regulatory, education and environmental planning
2. Vacant Graduate Assistant	Conducting waste min. opportunity assessments	

NAME: **Indiana Point-Source Pollution Prevention Program for Agricultural Industries**

ADDRESS: Environmental Management and Education Program
Civil Engineering Building
Purdue University
West Lafayette, IN 47907-1284

PHONE: (317) 494-5036

FAX: (317) 494-6422

MISSION:
To protect surface and groundwater, land, and air by reducing or eliminating the potential for pollution from point-source locations where agrichemicals, farm implement fluids, and animal wastes are produced, used, stored, and disposed.

FUNCTION:
Education and technical assistance

PRESENT ACTIVITIES: (The program was initiated Dec. 17, 1991.)
- Technical assistance
- Education
- Information on pollution prevention

TOOLS:
- Hotline
- Newsletters
- News articles to assist with dissemination of information on pollution prevention.

FUTURE ACTIVITIES:
- Training will be offered to Purdue University Cooperative Extension Agents
- Teleconferences will be held to distribute information.

DEFINITIONS:
P2- Activities which reduce the chance that environmental contamination will occur.
WR- A general term that includes pollution prevention, waste minimization, source reduction and recycling.
WMIN- A term that applies to reducing waste production, and includes source reduction and recycling.
SR- Reduction or elimination of a waste within a process.
RECYCLING- The use, reuse or reclamation of a waste either on- or off-site after it is generated

HIERARCHY:
1. P2
2. SR
3. Recycling
4. WR
5. Treatment
6. Disposal

AUDIENCE/CLIENTS:
Livestock and crop producers, fertilizer and chemical dealers, implement dealers, feedlot operators, Extension Agents, lawn care firms, home pest control operators

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
Purdue University

BUDGET:
$100,000

SOURCES OF THE BUDGET:
A three-year, $300,000 agreement between the US EPA and the Purdue University Environmental Management and Education Program, School of Civil Engineering. The Purdue University School of Agriculture has allocated $33,333 of additional in-kind support for this project.

PROJECTED BUDGET:
$100,000

PUBLICATIONS:
None to date

STAFF:

NAME	RESP.	BACKGROUND
Jeff Burbrink Coordinator	To complete the tasks outlined in the proposal for the IN Point-Source Pollution Prevention Program for Agricultural Industries	Business administration, Agricultural economics and worked as and agricultural extension agent

NAME: **Office of Waste Reduction Services**

ADDRESS: P.O. Box 30004
Lansing, MI 48909

PHONE: (517) 335-1178

FAX: (517) 373-6547

MISSION:
The mission of the Office of Waste Reduction Services is to help Michigan businesses and institutions reduce the volume and toxicity of their waste. They pursue this mission because the long term health of the environment and the economy depends upon preventing waste.

FUNCTION:
OWRS function is to increase awareness within the business and institutional communities of the benefits that result from waste prevention. They provide educational and technical assistance service; develop expertise in the private sector, university community and public sector to support business and institutional waste prevention efforts; and engage in continuous learning and research to understand their customers, the environment in which they operate and how they most effectively can help them prevent waste.

AUDIENCE/CLIENTS:
The clients of OWRS are Michigan businesses and institutions that generate hazardous waste, solid waste, air emissions and discharges to water. On-site services are limited to firms engaged in electroplating, paint and allied product manufacturing, and painting and coating. Special efforts also are directed toward the automobile industry.

PRESENT ACTIVITIES:
- On-site technical assistance to firms in targeted industrial sectors, including a student intern program that has placed 30 students in businesses throughout the state.
- Oversee administration of a survey of Michigan manufacturers concerning waste reduction.
- Waste reduction seminars and workshops, as well as an annual "Roundtable."
- Provide telephone consultation services and educational materials to firms in non-targeted sectors.
- Conduct research into waste reduction potentials of various industry sectors.
- Waste reduction grants management.

TOOLS:
- Waste reduction information clearinghouse in the form of telephone and written consultations
- Publications, including fact sheets and case studies.
- Seminars and workshops
- Resource Center.

FUTURE ACTIVITIES:
- Administer a waste reduction grants program.
- Demonstration/implementation projects
- Quarterly newsletter
- Administet a retired engineers program
- Awards program
- Training program for Natural Resources and Commerce staff
- Explore regulatory barriers to waste reduction

DEFINITIONS:
P2- NA.
WR- waste prevention, reuse and recycling
SR- The philosophy practice of not creating or generating waste materials; increasing of, substituting materials or changing processes so that few waste materials are produced.
WMIN- waste reduction
RECYCLING-NA.

HIERARCHY:
1. Waste Prevention - An action that avoids, eliminates or greatly reduces a generation, amount and (when present) toxicity of waste at the source and thus, reduces the need for subsequent management of any kind.
2. Reuse
3. In-plant recycling
4. Out-of-plant recycling

ENABLING LEGISLATION:
The enabling legislation for OWRS is the Public Acts 245 and 247 of 1987. These statutes created an Office of Waste Reduction in the Department of Natural Resources and a Waste Reduction Assistance Service in the Department of Commerce. The two departments, through a Memorandum of Understanding, have implemented the mandated waste reduction responsibilities through the jointly-managed Office of Waste Reduction Services.

ADMINISTRATIVE BASE:
The Michigan Departments of Commerce and Natural Resources share the administrative base for OWRS.

BUDGET:
The OWRS was appropriated $1.4 million for the fiscal year 1991and approximately $1.7 million for 1992.

SOURCES OF THE BUDGET:
OWRS is funded by "tipping" fees (restricted funds), Federal Funding.

CASE STUDIES:
Hudson's
McPherson Hospital
AC Rochester
United Technologies Automotive
Steelcase

PUBLICATIONS:
Why Reduce Waste?
Waste Reduction - Getting Started
Reduce Waste: Increase Your Corporate and Product Image
Waste Reduction Overview
Waste Reduction Checklist
Reducing Office Paper Waste
Reducing Corrugated Cardboard Waste
Waste Exchange: Everybody WINS!
Procuring Recycled Products
Conservation Tips for Business
Selecting a Supplier, Hauler, and Materials Broker
Glossary of Waste Reduction Terms
Michigan Recycled Materials Market Directory
Managing Used Containers
Reducing Machine Coolant Waste
Considerations in Selecting a Still for On-Site Recycling
Guide to Establishing a Successful Waste Reduction Program
Michigan Recycles Materials Market Directory
The "Business" of Recycling
Waste Reduction Clearinghouse Brochure

UPCOMING PUBLICATIONS:
Waste Reduction Opportunities for Metal Parts Cleaning Operations
Increasing teh Efficiency of SOlvent Degreasing Operations
Considerations in Selecting a Still for On-Site Recycling
Aqueous and Solvent Emulsion Cleaners
Considerations in Off-Site Solvent Recycling
Preventing Discharges to Groundwater
Reducing Machine Coolant Waste
Reducing Waste in Paint Application
Northern Michigan Businesses Respond to Challenges in Solid Waste Management
Waste Reduction: A Cost-Saving Strategy with Environmental Benefits (a brochure)
Developing a Waste Reduction Program (a manual)

UPCOMING CASE STUDIES:
Butterworth Hospital
Alpha Metal Finishing
People's Food Co-op
Gretchen's House Day Care

STAFF:

NAME	RESPONSIBILITIES	BACKGROUND
1. Nan Merrill Manager	Provides program direction, staff supervision, and administration Primary liaison with management of DNR, DOC, Executive Office and the legislature. Key liaison with the business community and other groups	Econ. Development
2. Julie Feldpausch Resource Coord.	Manage Resource Center, manage budget, other admin. functions	Mgmt, Admin.
3. Dave Fiedler Tech. Asst. Eng.	Provide waste prev. asst., liaison w/ trade associations.	Civil Eng. and Resource Development
4. Bill Kesling Tech. Asst. Eng.	Provide waste prev. assistance, and recycling assistance.	Civil Eng. and resource development
5. Robert Jackson Tech. Asst. Eng.	Provide waste prev. assistance, liaison w/ trade associations.	Chem. Eng.
6. Steve Kratzer Tech. Asst.	Provide waste prev. assistance, liaison w/ trade associations.	Resource Development
7. Marcia Horan	Manage auto poll. prev. project	Econ. Development
8. Ruth Borgelt Customer Serv. Rep.	Oversee client intake/tracking system and evaluate client satisfaction w/OWRS, identify needs and learn waste prevention accomplishments of clients.	Computer
9. Kathy Bennett Publications Coord.	Coordinate development, revision, and production of OWRS; design displays, slides and other promotional and educational materials.	Graphic art/design
10. Lucy Doroshko Clearinghouse Staff	Provide staff support for waste reduction clearinghouse.	Natural Resources
11. Barb Spitzley Education/Outreach	Coordinate workshops/seminars; manage student intern prog.	Management; policy development and legislative analysis.

NAME: **Waste Reduction and Management Program**

ADDRESS: Grand Valley State University
Water Resources Institute
One Campus Drive
Allendale, MI 49401

PHONE: (616) 895-3749 (616) 695-3048

FAX: (616) 895-3864

MISSION:
The mission of the Water Resources Institute is "to preserve, protect, and improve our water resources." The mission of the Waste Reduction and Management Program (WRAMP) is to reach out to local business and industry to make available the tools and techniques to manage waste streams and implement pollution prevention strategies.

FUNCTION:
WRAMP's function is both education and technical assistance.

PRESENT ACTIVITIES:
- WRAMP has been actively developing a waste reduction library which includes current books, EPA documents and fact sheets from other waste reduction programs WRAMP is also putting together a regulatory compliance software library.
- WRAMP has made numerous outreach presentations to such groups as engineers, furniture fabricators, local community groups, and local governments officials.
- A 30-member Industrial Advisory Board has held meetings to provide WRAMP with insight and advice on the program.
- Sponsored an Industrial Waste Minimization Conference for Western Michigan businesses.
- Develop interactive computer programs for pollution prevention in auto repair shops and paint manufacturing.

TOOLS:
- The major conduit of information for reaching the public is the Water Resources Review which is the local publication of the Water Resources Institute.
- Maintains a hotline for pollution prevention questions.
- Presents seminars and workshops for various groups.
- Provides speakers on pollution prevention.
- Conducts waste assessments.

FUTURE ACTIVITIES:
- WRAMP co-sponsored the First Annual Waste Exchange on May 8, 1991, which allowed businesses and industries to bring samples of their waste to a central location and interact to set up informal waste exchanges. There was also speakers discussing the concept of a waste exchange.
- WRAMP sent a survey questionnaire to about 900 companies to determine what wastes are perceived as being problems as well as volumes of hazardous and non-hazardous wastes generated.
- In conjunction and with the Industrial Advisory Board, WRAMP will identify model companies who have achieved great strides in waste management and publicize their successes.
- WRAMP will be developing inventory tracking software for wastes.

DEFINITIONS:
P2- reduction and/or elimination of both hazardous and nonhazardous wastes released to air, land, and water.
WR- reduction to hazardous and nonhazardous wastes through source reduction or recycling.
WMIN- reduction, to the extent feasible, of any solid or hazardous waste that is generated or subsequently treated, stored, or disposed of.
SR- reduction of waste through product changes, input materials changes, technology changes and operating practice.
RECYCLING- on-site or off-site use/reuse and reclamation of materials.

HIERARCHY:
EPA's preferred hierarchy
1. Source reduction
2. Recycling
3. Energy recovery
4. Treatment
5. Land disposal

AUDIENCE/CLIENTS:
Local business and industry representatives.

ENABLING LEGISLATION:
None.

ADMINISTRATIVE BASE:
Grand Valley State University Water Resources Institute

BUDGET:
- $33,000 from private industry
- a portion of the University Research for Excellence Fund

SOURCES OF THE BUDGET:
- A $100,000 grant from a local industry over three years
- State of Michigan Research Excellence Fund

PROJECTED BUDGET:
Not known at this time and is dependent on state research funding. There is at least $33,000 available per year.

PROGRAM EFFECTIVENESS:
Success will be measured in general terms relative to the perceived effects of the business and industry outreach. WRAMP is primarily funded by the Michigan Research Excellence Fund which does not require any specific progress report other than answers to narrative questions on the application form for continued funding.

PUBLICATIONS:
- Waste Reduction and Management Program Library Listings, February, 1991. Concentration of Hazardous Chemicals in the Furniture/Wood Manufacturing Finishing Industry, February, 1991.
- 1991 Waste Assessment Survey of Michigan Industries in Kent, Ottawa, Muskegon Counties.
- Software for Automobile Repair shops

STAFF:

NAME	RESPONSIBLILITES	BACKGROUND
1. Janet Vail Coordinator	Planning and implementation of the Waste Reduction and Management Program	Environmental Scientist
2. Robert Heine Consulting Engineer	Provides technical on-site assistance to business and industry	Chemical Engineer
3. Tom Kimball Research Scientist	Computer program development	Computer science
4. Dr. Ronald Ward Director of Water Resources Institute	Oversees all programs of Water Resource Institute	University Professor
5. John Koches Coordinator of Groundwater Education in Michigan Program for GVSU	Assists in groundwater issues affecting business and industry	Regional planning
6. Martha Chase Secretary	Provides support services to WRAMP	

NAME: **Minnesota Office of Waste Management**

ADDRESS: 1350 Energy Lane
St. Paul, MN 55108

PHONE: (612) 649-5750

FAX: (612) 649-5749

MISSION:
OWM's mission is to protect the public health, welfare and the environment as declared by the legislature of the state to encourage toxic pollution prevention. The way OWM prevents toxic pollution is by using techniques and processes that are implemented at the source and that minimize the transfer of toxic pollutants from one environmental medium to another. OMW encourages greater awareness of the need for and benefits of toxic pollution prevention, and this leads to a greater degree of cooperation and coordination among all elements of government, industry, and the public in encouraging and carrying out pollution prevention activities.

FUNCTION:
OWM is non-regulatory. They offer economic incentives, waste exchange programs and research and development activities.

PRESENT ACTIVITIES:
- Information clearinghouse
- Intern program
- Facility Planning
- Facility progress reports
- Waste exchange
- Implementation grants
- Research grants
- Governor's award
- CEO technical conferences

TOOLS:
- Grants
- Reports
- Fees
- Coordinate conferences

FUTURE ACTIVITIES:
- More outreach to generators, releasers, etc.
- Training for pollution prevention plans
- Submit an evaluation of the utility of requiring toxic pollutant use reports and reduction plans to the legislature, January 1, 1993
- Continue with Governor's awards, conferences, etc.

DEFINITIONS:
P2- Eliminating or reducing at the source the use, generation or release of toxic pollutants, hazardous substances and hazardous wastes.
WR-
WMIN-
SR- Equivalent to pollution prevention.
Recycling- not defined in the Toxic Pollution Prevention Act (TPPA).

HIERARCHY:
1. Source reduction
2. Recycling
   - In-process reuse recycling
   - On-site reuse recycling
   - Off-site recycling
3. Treatment
4. Disposal

This is OMW's waste management's hierarchy. The first two are specifically pollution prevention hierarchy.

AUDIENCE/CLIENTS:
TRI and LQG for fees and plants
All eligible recipients in industry for assistance and grants. Eligible recipients are defined as persons who use, generate or release toxic pollutants, hazardous substances or hazardous wastes.

ENABLING LEGISLATION:
1990 Minnesota Toxic Pollution Prevention Act

ADMINISTRATIVE BASE:
State agency

BUDGET:
$1.5 million

WHERE IS THE BUDGET APPROPRIATED FROM:
Fees, general fund and EPA

PROJECTED BUDGET:
Approximately $1.5 million

PUBLICATIONS:
1990 Evaluation Report
1991 Barriers to Pollution Prevention Report
1991 Guidance Manual for Pollution Prevention Plans

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Kevin McDonald	Poll. Prev. Coordinator	Biology and Political Science
2. David Cera	Teamleader for Poll. Prev. Hazardous Waste	Biology and Environmental Health
3. Brett Smith	Supervisor, Hazardous and Problem Waste Unit	Economics
4. Paul Moss	Planner - Fees, Barriers report	Marketing, Technical writing, science degree
5. Janet Pelley	Planner - Conference organizer Barriers report	Technical writing, Ecology
6. Diane Amell	Chemical Engineer - P2 grant program technical advisor	Industry, Chemical engineering
7. Julie Mackenzie	Planner - P2 grant administration	Social Science

NAME: **Minnesota Pollution Control Agency**

ADDRESS: 520 Lafayette Road
St. Paul, MN 55155

PHONE: (612) 296-8643

FAX: (612) 297-1456

MISSION:

FUNCTION:
Technical assistance, education, training

PRESENT ACTIVITIES:
- State Training Action Plan (STAP)
- Training programs for RCRA compliance
- Waste minimization pilot project for waste solvent generation
- Waste reduction fact sheets

TOOLS:
- Sponsored a 1-day solvent waste reduction conference
- Training of RCRA inspectors on how to provide technical assistance to hazardous waste generators.

FUTURE ACTIVITIES:
- Annual review of Toxic Pollution Prevention Plan progress reports
- Assess which types of education and assistance best promoted waste reduction activities among solvent users waste reduction activities.

AUDIENCE/CLIENTS:
RCRA inspectors, solvent users

ENABLING LEGISLATION:
1990 Minnesota Toxic Pollution Prevention Act

ADMINISTRATIVE BASE:

BUDGET:

WHERE IS THE BUDGET APPROPRIATED FROM:

PROJECTED BUDGET:

PUBLICATIONS:

STAFF:
1. Eric Kilberg

NAME: **Minnesota Technical Assistance Program**

ADDRESS: 1313 5th Street SE, Suite 207
Minneapolis, MN 55414

PHONE: (612) 627-4646

FAX: (612) 627-4769

MISSION:
MnTAP assists industry in preventing pollution and reducing and managing waste properly.

FUNCTION:
To provide nonregulatory technical assistance and research to Minnesota businesses.

PRESENT ACTIVITIES:
- Telephone and on-site consultations
- Student intern program
- Development of education and training programs
- Development and dissemination of technical resources
- Pollution Prevention Incentive to States (from EPA-PPD)
- RITTA
- Information clearinghouse

TOOLS:
- On-site technical assistance to generators
- Student interns
- Training workshops and seminars
- Direct mail
- Company teams
- Expertise grants
- Library of resources

FUTURE ACTIVITIES:
- Expand on-site consultations and demonstration projects
- Evaluate use of retired engineer program
- Assist toxic release inventory reporters with pollution prevention plan development and implementation
- Measures of program effectiveness and documenting pollution prevention

DEFINITIONS:
P2- Primary emphasis on source reduction with a secondary emphasis on environmentally sound recycling (not limited to toxics).
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:
1. Source reduction
2. On-site recycling
3. Off-site recycling
4. Treatment
5. Disposal

AUDIENCE/CLIENTS:
The service and manufacturing industries in Minnesota, specifically:
- small quantity generators
- large quantity generators
- toxic release inventory reporters
- generators of nonhazardous industrial waste

ENABLING LEGISLATION:
1990 Minnesota Toxic Pollution Prevention Act
Minnesota Waste Management Act

ADMINISTRATIVE BASE:
The School of Public Health at the University of Minnesota, Division of Environmental/Occupational Health

BUDGET:
$678,000

WHERE IS THE BUDGET APPROPRIATED FROM:
State funds from the Minnesota Office of Waste Management (general fund)
Fees on the release of chemicals on the toxic release inventory data

PROJECTED BUDGET:
FY 92 = $814,000
FY 93 = $814,000

PUBLICATIONS:
There have been various publications produced by the individual staff-in their field of expertise and the individual would need to be contacted to obtain a listing of what they have done.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Cindy McComas Director	Program management, TA for vehicle maintenance	Environmental science, environmental engineering
2. Donna Peterson Assistant Director	Supervision of waste management team, TA for printers, education instruction, solvent red. for cleaning operations	Chemistry, biochemistry and regulatory
3. David Simmons Communications Mgr.	Supervision of comm. staff, direct MnTAP outreach efforts, assist staff in refining	Journalism and english
4. Karl DeWahl Engineer	RITTA and PPIS projects	Chemical engineering, ind. and regulatory
5. Paul Pagel Engineer	WRITE project and TA with plating metal finishing	Chemical engineering, ind.
6. Barb Nehiem Principal Secretary	Reception, general TA, office work	Public administration
7. John Speckhandt Senior Secretary	Office work, general TA	English and psychology
8. Megan Riley Asst. Scientist	TA on regulatory concerns focusing on "inorganic" waste stream	Chemistry
9. Mick Jost Asst. Scientist	TA on regulatory "organic" waste streams	Sociology and envir. consulting
10. John Planski Research Assistant	TA with food processing industry	Animal science and agricultural education
11. Shari Marien Asst. Scientist	Maintain computer system, TA on regulatory concerns and research economic issues dealing with waste reduction	Economics and recycling

NAME: **Division of Litter Prevention & Recycling**

ADDRESS: 1889 Fountain Square Court, Bldg. F-2
Columbus, OH 43224

PHONE: (614) 265-6333

FAX: (614) 262-9387

MISSION:
To prevent litter and encourage recycling in Ohio.

FUNCTION:
DLPR seeks to accomplish its mission by making grants to local governments and state agencies. These grantees, in turn, develop either litter prevention or recycling programs or both, tailored to their respective geographical area's needs -- but within a framework and under guidelines established by DLPR.

PRESENT ACTIVITIES:
- Grant issuance and monitoring grant compliance
- Technical assistance to communities and private businesses
- Education and research
- Public awareness
- Public inquiries assistance

TOOLS:
- Grants
- Technical assistance
- On-site visits
- 45+ member staff
- $10 million annual operating budget funded by earmarked revenue derived from an addition to the corporate franchise tax.

FUTURE ACTIVITIES:
Continuation of current operations. The nature, substance and/or mission of the program may change if pending legislation is enacted by the Ohio General Assembly.

DEFINITIONS:
DLPR recognizes and utilizes the same definitions for these terms promulgated by the US EPA and, in turn, by the Ohio EPA.
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:
We recognize the waste handling hierarchy preferred by the Ohio EPA.

AUDIENCE/CLIENTS:
The people of the State of Ohio.

ENABLING LEGISLATION:
Litter Control Act of 1980

ADMINISTRATIVE BASE:
State agency

BUDGET:
$10 million annually -- stipulated by the 1980 Litter Control Act

SOURCES OF THE BUDGET:
Two-tier corporate franchise tax on corporations doing business in Ohio. The first tier of the tax increases the corporate franchise tax rate on businesses which are subject to more than a $50 minimum tax. The second tier imposes a tax on corporations that manufacture or sell litter stream products. Each tier is limited to a $5,000 maximum tax per business per year. In addition, a tax credit equal to the lesser of one-half of the tax or one-half the cash donation is given to corporations who make cash donations to a grant recipient during the taxable year.

PROJECTED BUDGET:
Our annual budget is fixed by law at $10 million annually.

PUBLICATIONS:
Containment Guide - Discusses various waste containers available for purchase; photos.
Recycling Basics - Discusses recycling as a general concept and offers suggestions on how to recycle specific materials.
Recycling Promotion Guide - Discusses how to advertise and otherwise promote a recycling operation.
PAPERCYCLE - Tells how to conduct an office paper recycling program.
Waste Reduction Guide for Ohio's Business & Industry - Intended for use by small businesses. Discusses solid waste management, waste reduction, waste reuse and recycling; offers advice on how to recycle and reduce waste; suggestions on where businesses can go for help; contains case studies of major businesses that have cut their solid waste disposal costs by recycling.

Brochures: "Ohio's Litter Laws"
"How to Organize a Recycling Drive"
"The Facts About Litter Prevention and Recycling"

STAFF: NAME/POSITION	BACKGROUND
1. George Peters Mgr. Education	Education & Research Unit
2. David Landis Education Specialist	Education
3. Mark Cole Specialist	Public Administration
4. Tom Davis Manager, Recycling Uni	Natural Resources
5. Carol Phillips Recycling Specialist	Wildlife Mgmt.
6. Diane Mellinger Recycling Specialist	Biology
7. Anne Filbert Researcher	Biological Sciences
8. Betsy Sopko Environmental Spec.	Zoology

NAME: **Pollution Prevention Section**

ADDRESS: Ohio Environmental Protection Agency
P.O. Box 1049, 1800 WaterMark Drive
Columbus, Ohio, 43266-0149

PHONE: (614) 644-2917

FAX: (614) 644-2329

MISSION:
Ohio EPA's Pollution Prevention Section's goal is to establish and implement a pollution prevention philosophy at the Agency, and to extend this philosophy to the regulated community and Ohio's citizens. While Ohio EPA has been involved in several waste minimization areas since the early 1980's, this Section will coordinate pollution prevention activities throughout the Agency and with other Ohio agencies, including the Ohio Technology Transfer Organization and the Ohio Department of Natural Resources, and federal agencies. The Section will help integrate the pollution prevention concept into Agency policy and regulations.

FUNCTION:
The Ohio EPA Pollution Prevention Section is composed of three units, which will cover technical assistance, program development and coordination, and technology assessment and information analysis. The Section is or expects to be involved in technical assistance, policy and planning, legislative developments, education of Agency staff and waste generators, waste exchange and data analysis.

PRESENT ACTIVITIES:
- Currently reviewing and developing pollution prevention legislation
- Reviewing activities related to permitting and inspections
- Collecting and analyzing pollution prevention related data
- Demonstration projects for industry
- Investigating opportunities for supporting a waste exchange
- Developing a technical assistance program
- Participating in conferences and seminars
- Conducting outreach
- Distributing information to Ohio EPA staff, other state and federal agencies and industry

TOOLS:
- Newsletters
- Pollution prevention guidance manual for Ohio industry
- Demonstration project through US EPA RCRA Integrated Training and Technical Assistance grant
- Provide educational materials to Ohio EPA staff, other state agencies and industry
- Coordinate pollution prevention activities
- Support pollution prevention activities within Ohio EPA
- Developed a draft pollution prevention bill for Ohio

FUTURE ACTIVITIES:
- On-site visits to various industry to study and identify pollution prevention opportunities
- Analyze the existing environmental regulatory framework and coordinating changes to promote pollution prevention
- Implement and support items identified in Ohio's pollution prevention bill when passed into law
- Target industries for pollution prevention assessments and documenting pollution prevention success stories
- Retired engineers and intern program

DEFINITIONS:
P2- The use of source reduction techniques in order to reduce risk to public health, safety, welfare and the environment and, as a second preference, the use of environmentally sound recycling to achieve these same goals. Pollution prevention includes waste minimization, avoids cross-media in scope, addressing all types of waste and environmental releases to the air, water and land. Examples which do not constitute pollution prevention may include, but shall not be limited to the following:

1) sending waste or toxic chemicals off-site for management other than environmentally sound recycling;
2) incineration or other thermal treatment;
3) treatment to reduce volume;
4) treatment to reduce toxicity;
5) bankruptcy or reduction in production volume;
6) installation of a filter press to reduce water content and volume;
7) installation of equipment to comply with pollution control regulations;
8) delisting of a hazardous waste or toxic chemical; or
9) energy recovery, which includes burning in boilers.

WR- Defined in the "State Solid Waste Management Plan," but not by the Pollution Prevention Section. The "State Solid Waste Management Plan" defines waste reduction as:
Includes waste minimization activities that decrease the initial production of waste material at their point of origin, and reduction activities that reduce the volume of waste materials requiring disposal, such as incineration.
The Pollution Prevention Section does <u>not</u> expect to use this definition, since we expect the Ohio EPA not to include activities such as incineration or waste-as-fuel in the definition of pollution prevention. The definition of "source reduction" is the closest to what most states use for waste reduction.
WMIN- Any effort to reduce or recycle the quantity of hazardous waste generated, and where feasible, to reduce or eliminate toxicity. Treatment of hazardous waste is not waste minimization, unless such treatment is part of a recycling process.
SR- Any effort to reduce, at the source, the quantity of industrial waste generation, toxic chemical use or any release into the environment, through changes if the waste generating or other production process. Source reduction measures include, but are not limited to, process modifications, feedstock purity, good operating and management practices, increases in the efficiency of machinery, and recycling within a waste generating or other production process.
RECYCLING- (on-site, closed-loop, etc.) - To use, reuse or reclaim a material. Recycling does not include incineration or other treatment.
"Reuse" means reutilization of a material in an environmentally sound manner that will not result in a hazard to human health of the environment. A material is reused if it is either:

1) Employed as an ingredient, including use as an intermediate in an industrial process to make a product. A material will not satisfy this condition of distinct components of the material are recovered as separate end products; or

2) Used in a particular function or application as an effective substitute for a commercial product.

"Reclaim" means to regenerate a material, or to process or recover a usable product from a material.

Except as noted, the above definitions are from the Ohio Administrative Code 3745-50 and 51, and the "Ohio Pollution Prevention bill" drafted by the Pollution Prevention Section and introduced as H.B. 960 in the 1989-1990 118th Ohio General Assembly, Regular Session.

HIERARCHY: The hierarchy listed below is that from the proposed "Ohio Pollution Prevention bill" mentioned above:

1. Source reduction of industrial waste and hazardous waste, and reduction in the use and release of toxic chemicals.
2. On-site recycling of industrial waste, hazardous waste and toxic chemicals.
3. Off-site recycling
4. Treatment of industrial waste, hazardous waste and toxic chemicals.
5. Industrial waste, hazardous waste and toxic chemicals shall be disposed of in an environmentally sound manner.

AUDIENCE/CLIENTS:
All of the above, plus citizens interested in the pollution

ENABLING LEGISLATION:
None.

ADMINISTRATIVE BASE:
Ohio EPA, Division of Solid and Hazardous Waste Management
PPS also supports pollution prevention activities throughout all of Ohio EPA's Divisions and throughout the State.

BUDGET:
Approximately $200,000

SOURCES OF THE BUDGET:
RCRA
Grants

PROJECTED BUDGET:
Unavailable

PUBLICATIONS:
Currently in the process of formulating a list of publications prepared by PPS staff.

STAFF: NAME/POSITION	RESP.	BACKGROUND
1. Roger Hannahs Environmental Supervisor	Data management, retired engineers and intern program development, obtaining grants	CERCLA, RCRA, pollution prevention
2. Michael Kelley Environmental Supervisor	Liaison between PPS and Ohio EPA, other state agencies, federal agencies and industry; and capacity assurance requirements	RCRA, capacity assurance and pollution prevention
3. Nancy Moore Environmental Manager	Solid waste pollution prev. and solid waste recycling	Solid waste management
4. Anthony Sasson Environmental Supervisor	Pollution prevention TA, training, plan review and guidance document development	RCRA, water quality management and pollution prevention

NAME: **Ohio Pollution Prevention Technical Assistance**

ADDRESS: Institute of Advanced Manufacturing Sciences
1111 Edison Dr.
Cincinnati, OH 45216

PHONE: (513) 948-2009
(800) 345-4482

FAX: (513) 948-2109

MISSION:
OPPTA is charged with the responsibility of simultaneously increasing the competitiveness of the manufacturing community and reducing waste by helping industry adopt pollution prevention and management concepts in their manufacturing processes.

FUNCTION:
Technical assistance, training and technology transfer to industry.
Interface with government waste reduction programs

PRESENT ACTIVITIES:
- On-site assessments
- Telephone assistance
- Literature searches
- Training programs
- Conferences
- Industry networking opportunities

TOOLS:
- Hotline
- Seminars
- Industry Roundtables
- Site visits
- Case studies

FOCUS:

FUTURE ACTIVITIES:
Continue present level of service.

DEFINITIONS:
P2-multimedia source reduction of wastes.
WR-any conversion of any waste to practical use.
WMIN-hazardous waste reduction through source reduction an on-site or off-site recycling. (Does not include volume or toxicity reductions through treatment.
SR-preventing waste from being created by process changes, chemical substitution, improved housekeeping, closed-loop recycling, etc.
RECYCLING-the use of a waste which may include an initial reclamation.

HIERARCHY:
1. Source reduction
2. Recycling
3. Energy recovery
4. Reduce volume/toxicity
5. Legal disposal

AUDIENCE/CLIENTS:
- Regulated community
- Government at all levels

ENABLING LEGISLATION:
None
Subcontractor to Ohio EPA and Ohio Department of Development.

ADMINISTRATIVE BASE:
Nonprofit

BUDGET:
$171,000

SOURCES OF THE BUDGET:
Federal RITTA grant
Ohio Department of Development grant

PROJECTED BUDGET:
$400,000

EFFECTIVENESS:
Chart the number of contacts, number of site visits, number of reports, attendance at conferences. Also does follow-up contacts for information on waste reduction implementation.

Program is accountable to the state and federal agencies funding the program.

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Harry Stone Center Mgr.	Operations, funding, technical assistance	Chemical industrial experience
2. Jerry Osterman Technical Specialist	P2, Env. compl assistance	Engineering, industrial experience
3. Bob Westbrook Technical Specialist	P2, Waste minimization technical assistance	Engineering, industrial experience
4. Karen Barber Events Coordinator	Conference/Workshop logistics	
5. Lori Nixdorf Asst. Events Coordinator	Conference/Workshop logistics	
6. Art Davies Marketing Mgr.	Marketing events	
7. Debbie Mitchell Advertising Mgr.	Advertising	
8. Ted Ford Institutional Liason	Communications	Former member of Governor's Staff

Total corporate staff of about 40. Used as needed.

NAME: **Wisconsin Department of Natural Resources**

ADDRESS: P. O. Box 7921
Madison WI 53707

PHONE: (608) 267-3763

FAX: (608) 267-2768

MISSION:
A formal mission statement for pollution prevention will be developed as part of the development of the Department's pollution prevention implementation plan. Currently we work under the guidance from the states new pollution prevention legislation, at WDNR's "Environmental Quality 2000", the strategic plan for the DNR's Division for Environmental Quality, and a Secretaries Pollution Prevention objective for 1991. It states that the DNR's Division for Environmental Quality shall help Wisconsin citizens achieve a clean, healthful, attractive and diverse environment.

FUNCTION:
Regulatory, technical assistance, policy and planning, education, economic incentives and waste exchange programs.

PRESENT ACTIVITIES:
•Technical assistance
•information clearinghouse
•workshops
•Staff training and Hazardous Waste Minimization Technical Assistance Program

TOOLS:
•Seminars
•newsletters
•grants/incentives

FUTURE ACTIVITIES:
•Develop DNR Pollution Prevention Implementation Plan
•Pilot Pollution Prevention Projects in each Environmental Quality Program and field office
•Pollution Prevention is Secretaries Objective for 1991-92
•Implement WI ACT 325

DEFINITIONS:
P2- Changes in processes or raw materials that reduce or eliminate the use or production of hazardous substances, toxic pollutants and hazardous waste.
WR-
WMIN-
SR-
RECYCLING- The beneficial use, reuse or legitimate recovery or reclamation of a hazardous waste. Recycling includes the recovery of energy from hazardous waste.

HIERARCHY:
1. Source Reduction
2. Recovery & reuse of resources, excluding incineration
3. Recycling on-site
4. Recycling off-site
5. Treatment of waste, including incineration, to reduce volume and toxicity
6. Disposing of any remaining waste in a manner that minimizes potential harm to this state's water, air and land resources.

AUDIENCE/CLIENTS:
For the pollution and prevention program - Regulated community (all media)
HWMTAP - SQG, LQG

ENABLING LEGISLATION:
1989 Wisconsin Act 325 Hazardous Pollution Prevention and the Wisconsin Hazardous Waste Management ACT (s. 144,60(2)(8)

ADMINISTRATIVE BASE:
State Agency

BUDGET:
$208,000

SOURCES OF THE BUDGET:
Grants $112,000 (RITTA)
General fund $96,000
Fees

PROJECTED BUDGET:
Approximately $206,000

PUBLICATIONS:
Pollution Prevention Information Clearinghouse
Hazardous Waste Minimization Technical Assistance Program
Box 7921 (SW/3), Madison, WI 53707

STAFF:

NAME/POSITION	RESP.
1. John Cain Pollution Prevention Coordinator	Regulatory
2. Lynn Persson Hazardous Waste Minimization Coord.	Regulatory
3. Dina Li Hazardous Waste Minimization Technical Specialist	Regulatory

**Also there is the Pollution Prevention Advisory Committee Members who are regulatory

**Approximately 12 staff from DNR's various programs and District Field Offices Participate on DNR's Pollution Prevention Advisory Committee (staff effort -- .05-10 FTE each)

\NAME: **Solid & Hazardous Waste Education Center**

ADDRESS: University of Wisconsin - Madison
Extension Service
610 Langdon Street
528 Cowell
Madison, WI 53706

PHONE: (608) 262-0385

FAX: (608) 263-2595

MISSION:
To promote pollution prevention.

FUNCTION:
Educational, Technical Assistance, Advisory

PRESENT ACTIVITIES:
- Education and training
- Technical assistance
- Advisory

TOOLS:
- Seminars
- Workshops
- On-site consultations
- Newsletters

FUTURE ACTIVITIES:
- General education
- Targeted seminars to specific generators
- On-site audits

DEFINITIONS:
P2- Reducing or eliminating the use of release of toxic pollutants and hazardous substances through changes in process or raw materials.
WR- Reducing the generation of waste through control measures.
WMIN- Reducing the generation of waste by process modification or substitution.
SR- Reducing the generation of waste by raw material substitution of process elimination.
RECYCLING- Reincorporating materials into the same process that generated them as waste

HIERARCHY:
1. Reduction in waste production at the source
2. Recovery and reuse of resources excluding incineration
3. Recycling on site
4. Recycling off site
5. Waste treatment, including incineration to reduce volume and toxicity
6. Disposal in an environmentally safe manner

AUDIENCE/CLIENTS:
- Industry (all levels)
- Regulatory community
- Other government agencies (e.g., Dept. of Development)
- Public
- Local officials

ENABLING LEGISLATION:
1989 Wisconsin Act 325

ADMINISTRATIVE BASE:
University of Wisconsin-Extension

BUDGET:
$430,000

SOURCES OF THE BUDGET:
Wisconsin General Revenue

PROJECTED BUDGET:
Same as above.

EFFECTIVENESS:
Not defined at this time.

PUBLICATIONS:
No

STAFF:

NAME	RESP.	BACKGROUND
1. Phil O'Leary Co-Director		Engineering professional development
2. Pat Walsh Co-Director		Solid waste specialist
3. David S. Liebl Pollution Prevention Specialist		Environmental chemist
4. Wayne Pferdehirt Pollution Prevention Specialist		Engineer
5. Sherrie Gruder-Adams Recycling Operations Specialist		Community recycling coordinator
6. Holly Johnson Waste Processing Specialist		Regional solid waste planner
7. Mary Kohrell Recycling Markets Specialist		Recycling consultant & recycling program marketing director

NAME: **Wisconsin Department of Development**

ADDRESS: 123 West Washington Ave.
P.O. Box 7970
Madison, WI 53707

PHONE: (608) 266-3075

FAX: (608) 267-2829

MISSION:
To assist users and producers of hazardous substances, toxic pollutants and hazardous waste to eliminate or reduce the generation of hazardous substances, toxic pollutants and hazardous waste by conducting hazardous pollution prevention audits.
The purpose of the audits are:

1. To determine the full costs of using and producing hazardous substances, toxic pollutants and hazardous waste.
2. To identify processes that use or produce hazardous substance, toxic pollutants or hazardous waste and the composition of the hazardous substances, toxic pollutants or hazardous waste.
3. To identify hazardous pollution prevention options.

FUNCTION:
The Department of Development is responsible for administering the hazardous pollution prevention audit grant program. This entails reviewing applications for financial assistance under the program, making recommendations to the Hazardous Pollution Prevention Board which makes the funding decisions, contracting with successful applicants, monitoring the progress of successful applicants and reporting the results of the audit program to the Board.

PRESENT ACTIVITIES:
- Financial assistance to successful applicants
- Assist interested parties apply for funding

TOOLS:
- Grants

FUTURE ACTIVITIES:
No immediate plans to change the focus.

DEFINITIONS:
P2- changes in processes or raw materials that reduce or eliminate the use of production of hazardous substances, toxic pollutants and hazardous waste. Hazardous pollution prevention does not include incinerations, changes in the manner of release of a hazardous substance, toxic pollutant or hazardous waste, recycling of a hazardous substance, toxic pollutant or hazardous waste outside of the process or treatment of hazardous substances, toxic pollutants or hazardous waste after the completion of the process.
WR-any project or incentive to reduce the amount of solid waste generated, reuse solid waste, recycle solid waste, compost solid waste or recovery of energy from solid waste.
WMIN-describes programs specifically designed to reduce hazardous and toxic waste as they affect land disposal as well as contribute to air and water pollution.
SR-reducing waste at the source. This can be accomplished by changing the waste generating process, incorporating reductions in the design, manufacture, sale, purchase and use of products and packaging. Source reduction programs can be targeted to consumers as well as manufacturers.
RECYCLING-the process by which solid waste is returned to productive use as material or energy, but does not include the collection of solid waste.

HIERARCHY:
None. The program is aimed at addressing all of the above items in order to reduce the hazardous waste produced. As such, no preference is given to one way of reduction over another way.

AUDIENCE/CLIENTS:
Eligible applicants under the Hazardous Waste Pollution Prevention Audit grant program are businesses, institutions, or local units of government that use or produce hazardous substances, toxic pollutants or hazardous waste.

ENABLING LEGISLATION:
1989 Wisconsin Act 325

ADMINISTRATIVE BASE:
State government agency.

BUDGET:
$75,000

SOURCES OF THE BUDGET:
General revenue funds

PROJECTED BUDGET:
$75,000

EFFECTIVENESS:
It is anticipated that the program's effectiveness will be tracked by measuring the success of the awardees in identifying and implementing alternatives to using and producing hazardous substances.
The effectiveness of the program will be communicated to the Hazardous Pollution Prevention Board and the Legislature.

PUBLICATIONS:

STAFF:

NAME/POSITION	RESP.	BACKGROUND

There is one staff position allocated to the program. The position has not yet been filled.

Region 6

NAME: **Biomass Resource Recovery Program**

ADDRESS: Arkansas Industrial Development Commission
No. 1 Capitol Mall
Little Rock, AR 72201

PHONE: (501) 682-7322

FAX: (501) 682-7341

MISSION:
Identify and coordinate the solution to problems which affect the profitability of Arkansas industries.

FUNCTION:
Provide technical assistance and information to targeted industries (SIC codes 20-39).

PRESENT ACTIVITIES:
- Technical assistance
- Information clearinghouse
- Waste audits

TOOLS:
- Site visits
- Written follow-up to visits
- Literature library
- Arkansas Manufacturers Exchange
- Distribute the Industrial Materials Exchange Service

FUTURE ACTIVITIES:
- Improved sourcing of excess capacity in select processing codes
- Cross match of by-products, generators and potential users

DEFINITIONS:
P2- Pertaining more to emission and discharge pre-emption and toxic waste. Using reduction, reuse, substitution, recycling and in-plant audits to effect reduced emissions and discharges.
WR- Equates to enhanced efficiency (Waste is just a misplaced resource and is uniformly a product of inefficiency.).
WMIN- Encompasses all waste in manufacturing and distribution processes including labor, energy, material and space. May be approached by two means, Total Quality Management or Prescriptive Engineering.
SR- Tuning the process, tightening the scheduling, input review and approval, elimination of inventory and inspection.
RECYCLING- The manufacture of a new product from secondary material. Everything else is just material handling!

HIERARCHY:
1) Eliminate
2) Reduction
3) Reuse
4) Recycle
5) Market
6) Disposal

AUDIENCE/CLIENTS:
Arkansas manufacturers who fall into SIC codes 20-39 (2800 currently in operation).

ENABLING LEGISLATION:
Act 7 of the 1981 Arkansas General Assembly

ADMINISTRATIVE BASE:
State agency

BUDGET:
$124,071

SOURCES OF THE BUDGET:
$82,800- DOE
$34,500- State
$6,700- EXXON

PROJECTED BUDGET:
$124,071

EFFECTIVENESS:
Program is evaluated by a combination of the following factors;
- calculate actual energy savings
- number of AME and IMES catalogs distributed
- number of on-site visits and written follow-ups
- client response cards

The program is also annually evaluated by Histecon Associates, a private consulting firm.

PUBLICATIONS:
- Is Resource Recovery for You?
- Recycle Arkansas
- Recycling Oil
- Slick Easy Money

The program has also published numerous project specific reports.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Ed Davis Industrial Consultant, State Energy Administration	All program elements	B.S. UCA Geo &Soc. Regulatory

NAME: **Policy and Planning**

ADDRESS: Louisiana Department of Environmental Quality
P.O. Box 82263
Baton Rouge, LA 70884

PHONE: (504) 765-0720

FAX: (504) 765-0742

CONTACT: John Glenn

MISSION:

FUNCTION:

PRESENT ACTIVITIES:

TOOLS:

FOCUS:

FUTURE ACTIVITIES:

DEFINITIONS:
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:

AUDIENCE/CLIENTS:

ENABLING LEGISLATION:

ADMINISTRATIVE BASE:

BUDGET:

SOURCES OF THE BUDGET:

PROJECTED BUDGET:

EFFECTIVENESS:

PUBLICATIONS:

STAFF:

NAME/POSITION	RESP.	BACKGROUND

NAME: **Municipal Water Pollution Prevention Program**

ADDRESS: Facility Operations Section, Surface Water Quality Bureau
New Mexico Environment Department
1190 St. Francis Dr.
P.O. Box 26110
Santa Fe, NM 87502

PHONE: (505) 827-2804

FAX: (505) 827-2836

MISSION:
To prevent surface and ground water pollution in New Mexico by promoting the establishment and maintenance of an adequate and effective municipal wastewater treatment infrastructure.

FUNCTION:
The program has multiple function. The regulatory, technical assistance and education functions are primary.

PRESENT ACTIVITIES:
- Public information promoting the program and appropriate utility management.
- Ongoing technical assistance to municipal wastewater utilities.
- Review, on-site verification and evaluation of self-audits performed by municipal wastewater facilities in areas of design life, operations and maintenance, laboratory staffing, financing, and utility management.
- Recommendations for actions to address identified performance limiting factors.

TOOLS:
- Workshops
- Telephone and on-site visits, follow-up.
- Self audit report and evaluation forms, including a point system.
- Reports and presentations to local government councils.
- Diagnostic evaluations.

FUTURE ACTIVITIES:
- Participation in computer bulletin board services as an information exchange.

DEFINITIONS:
P2- Eliminating water pollution through the effective use, operation and maintenance of pollution control infrastructure. Compliance maintenance.
WR- Reducing the amount of waste produced by certain activities through the elimination of unnecessary pollutant contribution or substitution with alternative technologies.
WMIN-Minimization of the waste contributed to a waste stream from various processes or activities where waste is produced.
SR-Eliminating specific pollutant contributions to a wastestream thereby reducing the total number of contributions overall.
RECYCLING- Reuse of a resource. In municipal water pollution prevention, this could include industrial reuse of process wastewater and municipal reuse of wastewater effluent.

HIERARCHY:
Pollution prevention is primary emphasis at the present time. Waste reduction, waste minimization, source reduction, and recycling are encouraged at present but not fully incorporated into the program. Will be integrated as resources allow and as mandated by the USEPA.

AUDIENCE/CLIENTS:
At this time, clients include NPDES permitted municipal wastewater facilities in New Mexico including all systems discharging greater than 1.0 MGD and those discharging <1.0 MGD but funded with federal PL 92-500 grants.

In the future the program intends to serve all municipal wastewater utilities in New Mexico.

ENABLING LEGISLATION:
Federal Clean Water Act

ADMINISTRATIVE BASE:
State environment agency (New Mexico Environment Department

BUDGET:
$50,000

SOURCES OF THE BUDGET:
Federal grant using funds authorized under the Clean Water Act, Section 104 (B)(3).

PROJECTED BUDGET:
$50,000

EFFECTIVENESS:
- Number of utilities reached with workshops.
- Number of on-site visits, telephone consultations for technical assistance.
- Number of resolutions passed by local governments to address identified problems.
- Numbers of identified performance limiting factors adequately addressed by utilities as judged by follow-up on-site visits and compliance record. Reports must go to USEPA Region 6 office, and ultimately to the state legislature to justify extension of expansion of the program.

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Alex A Puglisi Program Manager	Program management, policy, meeting with municipal officials.	Regulatory, laboratory industrial, pretreatment
2. Patrick Hanson Water Resources Engineering Spec.	Program implementation, technical assistance, training, site visits, evaluation, recommendation, meeting with municipal officials.	Regulatory, treatment plant operation & laboratory, teaching

NAME: **Solid Waste Bureau**

ADDRESS: New Mexico Environment Department
1190 St. Francis Drive
Santa Fe, NM 87502

PHONE: (505) 827-0197

FAX: (505) 827-2836

MISSION:
Manage solid waste in such a manner that will enhance the beauty and quality of the environment, guard against groundwater pollution,conserve, recover and recycle resources and protect the public health, safety and welfare.

FUNCTION:
To provide technical assistance, educational materials, and guidance to institutions, local governments and municipalities. Regulate through permitting, inspections and enforcement activities.

PRESENT ACTIVITIES:
- Community technical assistance
- Program start-up and guidance
- Educational programs
- Grants to local governments
- Facility permitting
- Regulation development
- Inspections and enforcement

TOOLS:
- Workshops
- Technical assistance
- Local government grant program
- Newsletter
- Videos

FUTURE ACTIVITIES:
- Develop comprehensive and integrated solid waste management regulations.

DEFINITIONS:
P2- Preventing harmful and toxic substances from entering and depositing in the environment, leading to a state of dirtiness, impurity, or an unhealthy and unsafe condition.
WR- Decreasing the generation of solid waste. This is accomplished by changing or reducing consumer consumption, increasing product durability, repairability or reusability, changing packaging practices or reducing packaging and introducing new production technologies which are less wasteful.
WMIN-Reduction, to the extent feasible, of hazardous waste generated prior to any treatment, storage or disposal of the waste. It is defined as source reduction or recycling activity that results in either a reduction in the total volume or toxicity of hazardous waste or both, so long as such a reduction is consistent with the general goal of minimizing present and future threats to human health and the environment.

SR-Means any action that causes a net reduction in the generation,volume, or toxicity of the solid waste stream through recycling, composting, reuse of materials, bulk buying, efficient packaging and the use of less toxic substances
RECYCLING- Refers to any process by which recyclable materials are collected, separated or processed and reused or returned to use in the form of raw materials or products.

HIERARCHY:
Pollution prevention is a major, broader environmental goal of the Department. Through education, legislation, regulation and enforcement we are striving to protect the environment and therefore, enhance the health, safety, and natural beauty of all communities in New Mexico. Volume reduction will be addressed through source reduction, recycling, transformation, waste minimization and waste reduction. The Solid Waste Bureau stresses a comprehensive and integrated solid waste management plan.

AUDIENCE/CLIENTS:
Local governments, state agencies, institutions and the private sector.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
State agency

BUDGET:
No separate program budget for pollution prevention.

SOURCES OF THE BUDGET:

PROJECTED BUDGET:
No separate program budget for pollution prevention.

EFFECTIVENESS:
Effectiveness in waste disposal programs is tracked through the permitting/site investigation and enforcement processes and surveys. Reports are provided to the Governor and State Legislature.

PUBLICATIONS:
None

STAFF:

NAME/POSITION	RESP.	BACKGROUND

NOTE: Only one staff member out of twenty six has pollution prevention as their sole focus.

1. Marilyn Brown Environmental Specialist	Recycling, source reduction, and education	

NAME: **Oklahoma Technical Assistance Program**

ADDRESS: Hazardous Waste Management Service- 0205
Oklahoma State Department of Health
1000 NE 10th St.
Oklahoma City, OK 73117-1299

PHONE: (405) 271-7047

FAX: (405) 271-8425

MISSION:
Although the program has no formal "mission statement," the program's mission is to promote pollution awareness and technology transfer.

FUNCTION:
The program's primary function is to oversee the implementation of the pollution prevention grant, to serve as an industry contact, and to collect and disperse information concerning pollution prevention.

PRESENT ACTIVITIES:
- On-site technical assistance program to 15 selected businesses per year for the next three years;
  - program provides for a survey team, composed of Oklahoma State University School of Industrial Engineering graduate students and Dept. of Health personnel, to perform a waste audit at a facility,
  - major wastestreams are reviewed and a report is prepared with alternative Waste Reduction Opportunities (WRO) provided,
  - economic analyses outlining the costs and savings of implementation are also provided.
- One annual workshop for industry on pollution prevention.
- Information gathering and dissemination.

TOOLS:
- Information clearinghouse
- On-site technical assistance
- Annual seminars

FUTURE ACTIVITIES:
- Follow-up on technical assistance to evaluate the program
- Newsletter
- Publication of success stories
- Pollution prevention/waste reduction awards

DEFINITIONS:
P2- the strategy for reducing the amount of pollutants which enter the environment. This includes, but is not limited to, toxic use substitutions, product reformulations, waste minimization techniques, recycling and reuse of materials.
WR-This involves reduction or reuse of materials after the end-of-pipe generation, Includes recycling of materials and waste volume reducers such as sludge filter presses or evaporators.
WMIN- same as waste reduction.
SR- primarily toxic use substitution, product reformulations or phase-outs- strategies to reduce the amount of waste generated at the source.
RECYCLING- the beneficial reuse of waste materials either closed loop (ie., directed directly back into a process line) or recovery of some component through on-site recycling processes (distillation units, etc.)or through delivery of wastes off-site (ie.,metals reclamation). The state definition also includes fuels blend and burning for energy recovery as recycling processes. The waste component must have a useful purpose or add to the efficiency of the product in order to be considered legitimate recycling.

HIERARCHY:
No specific hierarchy is intrinsic in the program or defined by statute, rule or policy.

AUDIENCE/CLIENTS:
The program's focus to-date has been the regulated RCRA community, specifically LQGs of moderate size. The emphasis has been hazardous waste because the disposal costs provide strong incentive for the implementation of pollution prevention strategies. the economics of solid waste disposal or disposal through POTWs or air do not, in our experience, provide sufficient motivation. Our focus on medium-sized facilities is because larger corporations generally have staff and some type of program to review their environmental policies. SQGs receive some attention, however, they most typically need regulatory advisement or advice on more economical waste management techniques.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
State Department of Health- the regulatory agency.

BUDGET:
$133,333/yr

SOURCES OF THE BUDGET:
A three-year, $300,000 grant from USEPA
$33,333 /yr provided primarily by hazardous waste disposal fees

PROJECTED BUDGET:
Same as FY1991.

EFFECTIVENESS:
Effectiveness will be judged primarily by meeting our commitments, ie., number of facilities receiving on-site assistance and through providing annual seminar. Additionally, follow-up on facilities will be completed to assess effectiveness of our on-site visits and survey the perceived value of the program. Other successes are considered to be increased contacts with industry via phone calls or mail-outs as well as positive feedback from the industrial community.

PUBLICATIONS:
The program has produced seven facility specific reports. These reports are available to be copied and distributed, but have not been published.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Chris Varga Sr. Environmental Specialist	Administration and oversight of pollution prevention grant commitments.	M.S. in Environmental Science, Regulatory

NAME: **Office of Pollution Prevention and Conservation**

ADDRESS: Texas Water Commission
P.O. Box 13087, Capitol Station
Austin, TX 78711-3087

PHONE: (512) 463-7760

FAX: (512) 463-8408

MISSION:
To assist hazardous waste generators and TRI reporters to prevent pollution, to assist with the reduction of all releases to all media, and to promote water conservation.

FUNCTION:
To provide training, education, and assistance to hazardous waste generators and TRI reporters.

PRESENT ACTIVITIES:
- Technical assistance
- Information clearinghouse

TOOLS:
- Training
- Seminars
- On-site visits
- Case studies
- Statewide cross-media reduction training

FOCUS:

FUTURE ACTIVITIES:
- Train industry on source reduction/waste minimization planning

DEFINITIONS:
P2-source reduction or waste minimization with a cross media focus
WR-N/A
WMIN-reuse, recycing, some limited forms of treatment.
SR-same as Pollution Prevention Act of 1990
RECYCLING-on and off-site recycling

HIERARCHY:
1. Source reduction
2. Recycle/reuse
3. Treatment to destroy hazardous characteristics
4. Treatment to reduce hazardous characteristics
5. Injection
6. Land disposal

AUDIENCE/CLIENTS:
SQGs, LQGs, TRI and overall regulated community

ENABLING LEGISLATION:

S.B. 1099, Article II (May, 1991)

ADMINISTRATIVE BASE:
State agency- Texas Water Commission

BUDGET:
Not set at this time. Program is under going a restructuring and budget for the pollution prevention aspects are not set.

SOURCES OF THE BUDGET:
- Grants
- Fees
- General revenue

PROJECTED BUDGET:
$500-$700 K (estimated)

EFFECTIVENESS:
- Amount of waste reduced
- Plans in place
- Regulations developed
- Legislative deadlines met

Communicate effectiveness to the legislature and the public.

PUBLICATIONS:
Contact Office of Pollution Prevention or the Texas Water Commission Library.

STAFF:
NAME
1. Nancy Worst
2. Priscilla Seymour, PhD
3. Jeff Voorhis, PE
4. Ken Larker
5. Jeanette Pingehot
6. Hope Castillo
7. Bridgit Layman
8. Jane Scheidler
9. Becky Kurka
10. Gina Guro

Region 7

NAME: **Comprehensive Solid Waste Management Planning**

ADDRESS: Waste Management Authority Division
Iowa Dept. of Natural Resources
Wallace State Office Building
Des Moines, IA 50319

PHONE: (515) 281- 8941

FAX: (515) 281-8895

MISSION:
They provide technical assistance and review of plans to implement programs that will reduce the volume of waste being landfilled.

FUNCTION:
They provide technical assistance and planning.

PRESENT ACTIVITIES:
- Technical assistance
- Regulatory

TOOLS:
- Individual review of plans
- Response letters
- Technical consulting
- Four staff
- Workshops
- Educational materials

FUTURE ACTIVITIES:
Continuation

DEFINITIONS:
P2- EPA's interpretation
WR- In the Iowa law it "means practices which reduce, avoid, or eliminate both the generation of solid waste and the use of toxic materials so as to reduce risks to health and the environment and to avoid, reduce or eliminate the generation of wastes or environmental pollution at the source and not merely achieved by shifting a waste output or waste stream from one environmental medium to another environmental medium." In practice, WRAP includes reduced energy consumption as a form of waste reduction.
WMIN- Follow EPA's definition of waste minimization through source reduction or recycling of any hazardous waste.
SR- Includes methods employed by residents, business and industry that prevent waste from entering the waste stream. Source reduction includes, but is no limited to such practices as backyard composting of yard waste, reduced product packaging, and changes in manufacturing systems. For hazardous wastes, source reduction does not include on-site recycling.
RECYCLING- In Iowa law "means any process by which waste, or materials which would otherwise become waste, are collected, separated, or processed and revised or returned to use in the form of raw materials or products." Recycling does not include any form of energy recovery. Iowa law established on-site recycling as a priority over off-site recycling for hazardous wastes.

HIERARCHY:
Solid waste Hierarchy
1. Source reduction
2. Recycling
3. Energy recovery
4. Incineration for volume reduction
5. Landfilling

The first two are waste reduction hierarchy.

AUDIENCE/CLIENTS:
Permit holders for sanitary disposal projects, cites, and counties.

ENABLING LEGISLATION:
House File 631 - Groundwater Protection Act

ADMINISTRATIVE BASE:
State Agency

BUDGET:
?

SOURCES OF THE BUDGET:
Landfill tonnage fees

PROJECTED BUDGET:
?

PUBLICATIONS:
Guidelines for Solid Waste Comprehensive Plans, Part I: Solid Waste Management Alternatives, (and many others) phone (515) 281-8941

STAFF: NAME/POSITION	RESP.	BACKGROUND
1. Teresa Hay Administrator	Waste Mgmt Authority Div.	Law/Administration
2. Tom Blewett Bureau Chief	Waste Reduction Bureau	Environmental Science
3. Gaye Wiekievak Bureau Chief	Planning & Grants Bureau	Public relations, Communication
4. Stewart Schmitz Environmental Specialist	Grants administration, Toxic Cleanup Days	Regulatory, Chemical Engineering
5. Scott Cahail Environmental Specialist	Infectious waste, comprehensive plans, WRAP	Geography, planning
6. Marilyn Krogulski Program Planner	Grants program, household hazardous materials	Public relations
7. Robert Ribbens Environmental Specialist	Grants program, comprehensive, Toxic Cleanup Days	Environmental Science
8. Bob Meddaugh Program Planner	Recycling, composting	Environmental Science
9. Julie Kjolhede Program Planner	Recycling, composting	Public relations

NAME: **Iowa Waste Reduction Center**

ADDRESS: 75 Biology Research Complex
University of Northern Iowa
Cedar Falls, IA 50614-0185

PHONE: (319) 273-2079

FAX: (319) 273-2893

MISSION:
IWRC's function is to assist small businesses in Iowa with solid waste or hazardous substance management to do the following:

- Reduce the risks to the environment, to employees, and to the public in regard to handling, storing, recycling, and disposing of hazardous substances and solid waste;
- Promote the use of alternatives to land disposal of solid and hazardous waste; and
- Comply with federal, state, and local laws.

FUNCTION:
IWRC provides assistance to small and mid-sized businesses, focusing on reduction of all types of waste, including solid waste, hazardous waste, air emissions, and wastewater. Services are also provided in the area of environmental regulations, and identifying resources necessary to implement waste reduction and regulatory requirements. IWRC presents workshops focusing on areas of business and industry. This year, the workshops will be for workshops for metal finishing, and vehicle maintenance. IWRC also has implemented a proactive system to seek out waste materials and by-products, and actively searches for a home for the materials. IWRC conducts applied research on new and emerging waste reduction and recycling techniques, such as used oil filter recycling or refrigerant reclamation.

PRESENT ACTIVITIES:

- Detailed assistance
- By-product and Waste Search Service
- Used Oil Filter Project
- Cutting Fluid Management Manual
- Foster use of emerging refrigerant recycle technology through a cooperative demonstration project with selected automobile dealers and large building cooling unit contractors.

TOOLS:

- Workshops and presentations
- Newsletter, "The Closed Loop"
- Iowa Waste Reduction Award
- The Waste Reduction Expert Access System, joint with KSU
- Solutions for Rural Waste Management, supported by the Northwest Area Foundation

FUTURE ACTIVITIES:

- Additional work with toxic air emission reduction, and wastewater reduction strategies.

DEFINITIONS:
The only definitions used in the IWRC program are those for the Iowa Governor's Waste Reduction Award.
P2-
WR- The reduction in volume and/or toxicity of waste at the source, or reuse as a raw material in a production process. Reduction measures include process modifications, raw material substitutions, housekeeping/management practices, recycling within a process, or any other measures that reduces, the volume/toxicity of waste exiting a process or requiring treatment, or reuses waste as a raw material in production of goods or services.
WMIN-
SR-
RECYCLING-
Waste- Any solid, liquid, hazardous material, or air emissions that is subject to waste treatment/control or is disposed on or off-site. Both hazardous and nonhazardous wastes are included.

HIERARCHY:
The 1989 legislation established this hierarchy directed toward hazardous waste, which reflects the practices encouraged by IWRC.
1. Source reduction for waste elimination
2. On-site recycling
3. Off-site recycling
4. Waste treatment
5. Incineration
6. Land disposal

AUDIENCE/CLIENTS:
The primary clients of IWRC are business and industry with 200 employees or less; or registered small quantity generators. This includes manufacturers, commercial and service entities, and individuals. Their secondary audience includes municipal, county, state, and federal government agencies, and solid waste authorities. Another audience is trade and professional organizations representing these various groups.

ENABLING LEGISLATION:
The previously noted Groundwater Protection Act of 1987 established the Iowa Waste Reduction Center at the University of Northern Iowa as a statewide assistance program.

ADMINISTRATIVE BASE:
IWRC is an integral part of the University of Northern Iowa, within the Division of Communication and Outreach Services.

BUDGET:
The budget for fiscal year 1991 is $536,000.

SOURCES OF THE BUDGET:
- State - $400,000 per year from solid waste fees.
- Federal - $300,000 three year EPA Pollution Prevention grant.
- Private - $109,000 three year grant from the Northwest Area Foundation.

PROJECTED BUDGET:
The projected budget for fiscal year 1992 is $536,000.

PUBLICATIONS:
1. Cutting Fluid Management in Small Machine Shop Operations
2. Waste Reduction Report for Automobile Dealers

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. John Konefes Director	Management of IWRC, budget planning, public relations, hazardous waste regulatory review	Fisheries and Wildlife, Zoology, Environmental Engineering
2. Kimberly Gunderson Environmental Specialist	Workshop and conference management, publication editor, focus on health care facilities and medical waste	Chemistry, hazardous waste management
3. Jim Olson Waste Management Specialist	Applied research activities including used oil filters, refrigerant recycling, and foundry sand reclamation, underground storage tank and SARA Title III regulatory review	Environmental Engineering, Biology/Business, water/wastewater treatment
4. Carol Huston Waste Reduction Specialist	Wastewater reduction techniques applied research wastewater regulatory review	Chemistry, electroplating industry
5. Mark Trapani Waste Reduction Specialist	Air emissions reduction techniques applied research, air emissions regulatory review	Industrial Engineering, solid waste reduction projects
6. Sue Behrns Research Assistant	Primary responsibility for a demonstration project in northeast Iowa, dealing with improved management of infectious and hazardous waste in a rural setting.	Biology, small business owner

NAME: **Landfill Alternative Grants**

ADDRESS: Waste Management Authority Division
Iowa Dept. of Natural Resources
Wallace State Office Building
Des Moines, IA 50319

PHONE: (515) 281- 8941

FAX: (515) 281-8895

MISSION:
They provide financial assistance in terms of grants for innovative management alternatives for solid waste.

FUNCTION:
Their function is to provide economic incentives.

PRESENT ACTIVITIES:
- Project selection
- Contract management

TOOLS:
- Requests for proposals
- Review committee
- Contracts
- Monthly and final reports
- On-site visits
- 3 staff

FUTURE ACTIVITIES:
Continuation

DEFINITIONS:
P2- EPA's interpretation
WR- In the Iowa law it "means practices which reduce, avoid, or eliminate both the generation of solid waste and the use of toxic materials so as to reduce risks to health and the environment and to avoid, reduce or eliminate the generation of wastes or environmental pollution at the source and not merely achieved by shifting a waste output or waste stream from one environmental medium to another environmental medium." In practice, WRAP includes reduced energy consumption as a form of waste reduction.
WMIN- Follow EPA's definition of waste minimization through source reduction or recycling of any hazardous waste.
SR- Includes methods employed by residents, business and industry that prevent waste from entering the waste stream. Source reduction includes, but is no limited to such practices as backyard composting of yard waste, reduced product packaging, and changes in manufacturing systems. For hazardous wastes, source reduction does not include on-site recycling.
RECYCLING- In Iowa law "means any process by which waste, or materials which would otherwise become waste, are collected, separated, or processed and revised or returned to use in the form of raw materials or products." Recycling does not include any form of energy recovery. Iowa law established on-site recycling as a priority over off-site recycling for hazardous wastes.

HIERARCHY:
Solid waste Hierarchy
1. Source reduction
2. Recycling
3. Energy recovery
4. Incineration for volume reduction
5. Landfilling

The first two are waste reduction hierarchy.

AUDIENCE/CLIENTS:
Local government, private non-profit, or for-profit corporations involved in generation and/or management of solid waste.

ENABLING LEGISLATION:
House File 631 - Groundwater Protection Act

ADMINISTRATIVE BASE:
State Agency

BUDGET:
$3 million

SOURCES OF THE BUDGET:
Landfill tonnage fees

PROJECTED BUDGET:
?

PUBLICATIONS:
Landfill Alternative Grant Program

STAFF: NAME/POSITION	RESP.	BACKGROUND
1. Teresa Hay Administrator	Waste Mgmt Authority Div.	Law/Administration
2. Tom Blewett Bureau Chief	Waste Reduction Bureau	Environmental Science
3. Gaye Wiekievak Bureau Chief	Planning & Grants Bureau	Public relations, Communication
4. Stewart Schmitz Env. Specialist	Grants administration, Toxic Cleanup Days	Regulatory, Chemical Engineering
5. Scott Cahail Env. Specialist	Infectious waste, comprehensive plans, WRAP	Geography, planning
6. Marilyn Krogulski Program Planner	Grants program, household hazardous materials	Public relations
7. Robert Ribbens Env. Specialist	Grants program, comprehensive, Toxic Cleanup Days	Environmental Science
8. Bob Meddaugh Program Planner	Recycling, composting	Environmental Science
9. Julie Kjolhede Program Planner	Recycling, composting	Public relations

NAME **Waste Reduction Assistance Program**

ADDRESS: Waste Management Authority Division
Iowa Department of Natural Resources
Wallace State Office Building
Des Moines, IA 50319

PHONE: (515) 281-8941

FAX: (515) 281-8875

MISSION:
WRAP's mission is to assist larger Iowa businesses in reducing or eliminating all forms of waste to all media to protect human health and the environment.

FUNCTION:
WRAP's function is to provide free, confidential, non-regulatory technical assistance, training, planning assistance, and clearinghouse assistance.

PRESENT ACTIVITIES:
- Technical assistance
- Training
- Information clearinghouse

TOOLS:
- On-site waste reduction opportunity assessment with team of senior (retired) industry professionals
- Formal report with recommendations
- On-site workshop
- Follow-up
- Case studies
- 14 staff (12 are part-time)

FUTURE ACTIVITIES:
- Continue program as is

DEFINITIONS:
P2- EPA's interpretation
WR- In the Iowa law it "means practices which reduce, avoid, or eliminate both the generation of solid waste and the use of toxic materials so as to reduce risks to health and the environment and to avoid, reduce or eliminate the generation of wastes or environmental pollution at the source and not merely achieved by shifting a waste output or waste stream from one environmental medium to another environmental medium." In practice, WRAP includes reduced energy consumption as a form of waste reduction.
WMIN- Follow EPA's definition of waste minimization through source reduction or recycling of any hazardous waste.
SR- Includes methods employed by residents, business and industry that prevent waste from entering the waste stream. Source reduction includes, but is no limited to such practices as backyard composting of yard waste, reduced product packaging, and changes in manufacturing systems. For hazardous wastes, source reduction does not include on-site recycling.

RECYCLING- In Iowa law "means any process by which waste, or materials which would otherwise become waste, are collected, separated, or processed and revised or returned to use in the form of raw materials or products." Recycling does not include any form of energy recovery. Iowa law established on-site recycling as a priority over off-site recycling for hazardous wastes.

HIERARCHY:
Solid waste
1. Source reduction
2. Recycling
3. Energy recovery
4. Incineration for volume reduction
5. Land filling

Hazardous waste
1. Source reduction
2. On-site recycling
3. Off-site recycling
4. Waste treatment
5. Incineration
6. Land disposal

AUDIENCE/CLIENTS:
Companies of 100 or more employees and/or large quantity generators of RCRA hazardous waste.

ENABLING LEGISLATION:
House File 631 - Groundwater Protection Act 1987
Senate File 470 - Waste Minimization Act 1989

ADMINISTRATIVE BASE:
State agency - Iowa Department of Natural Resources

BUDGET:
$100,000 plus additional money from general budget to support another full-time staff.

SOURCES OF THE BUDGET:
Grants

PROJECTED BUDGET:
$111,000

PUBLICATIONS:
- Preassessment questionnaire
- Sample checklist
- Brochures
- Sample report

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Larry Gibson Environmental Engineer	WRAP program manager	Chemical Process Engineer, Economic Analyst, Petroleum and Chemicals
2. Richard Brunn PT Sr. Engineer	WRAP	Plant Engineering and Foundry Operations
3. R. Donald Griebel PT Sr. Engineer	WRAP	Solvent Technology and Plant Applications
4. Thomas Jameson PT Sr. Engineer	WRAP	Chemical Engineering and Facilities Engineering
5. Henry Kadavy PT Sr. Engineer	WRAP	Mechanical Engineering and Technical Sales
6. Wayne Kenfield PT Sr. Engineer	WRAP	Biology, Chemistry, Education, Waste Treatment, Regulation
7. Robert Madison PT Sr. Engineer	WRAP	Technical Service and Troubleshooting at Bell company
8. Leslie Ramsey PT Sr. Engineer	WRAP	Industrial and Facility Engineering, Plastics Tech.
9. George Otto PT Sr. Engineer	WRAP	Metallurgical and Mechanical Process Engineering
10. Francis Rosenkranz PT Sr. Engineer	WRAP	Industrial and Facility Engineering, Plant management
11. Dale Smith PT Sr. Engineer	WRAP	Civil and Facility Engineering Energy Auditor and Consultant
12. Richard Smith PT Sr. Engineer	WRAP	Industrial and Facilities Engineering, Foundry and Fabrications
13. Donald Stewart PT Sr. Engineer	WRAP	Facility and Mechanical Engineering, various facilities

NAME: **Kansas State University RITTA Program**

ADDRESS: Engineering Extension Programs
133 Ward Hall
Kansas State University
Manhattan, KS 66506-2508

PHONE: (913) 532-6026

FAX: (913) 532-6952

MISSION:
None established

FUNCTION:
To provide technical assistance, educational assistance and regulator training.

PRESENT ACTIVITIES:
- On-site technical assistance.
- Publish a quarterly newsletter.
- Industry-specific workshops.
- Regulatory update seminars.

FUTURE ACTIVITIES:
- Inspector training.
- Multi-media technical assistance.

TOOLS:
- Annual waste minimization workshops.
- Hazardous waste hotline.
- The "Kansas Generator" newsletter.
- On-site visits.
- State Training Action Plan (STAP)
- Two primary types and functions of staff 1) technical assistance, workshops, on-site visits, newsletter, conference, and 2) STAP, seminars.

DEFINITIONS:
P2- none given
WR- none given
WMIN- none given
SR- none given
Recycling- none given

HIERARCHY:
none given

AUDIENCE/CLIENTS:
The entire Kansas RCRA regulated community by voluntary participation.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
EPA funded through RITTA grant to the Kansas Department of Health and Environment, subcontracted to Kansas State University and the University of Kansas.

BUDGET:
$100,000

WHERE IS THE BUDGET APPROPRIATED FROM:
RITTA grant

PROJECTED BUDGET:
$100,000

PUBLICATIONS:
- The "Kansas Generator" newsletter
- Waste minimization guides currently being published

STAFF:

NAME	POSITION	BACKGROUND
1. John Holl-Pellerin	Extension Assistant	Engineer, Technical assistance
2. Lani Himegarner	Program Manager	Public relations, STAP
3. Tom Gross	Bureau Chief, KDHE	State EPA contact for grant
4. Dick Hayter	Director, Engineering	Engineering and Extension administration

NAME: **Waste Management Program (WMP)**
Environmental Improvement and Energy Resources Authority (EIERA)
Department of Natural Resources

ADDRESS: P.O. Box 176
Jefferson City, MO 65102

PHONE: WMP (314) 751-3176
EIERA (314) 751-4919

FAX: WMP (314) 751-7869
EIERA (314) 635-3486

MISSION:
Presently there is not a discrete pollution prevention program in Missouri and therefore there is no mission statement. Pollution prevention activities occur both within the Department of Natural Resources' Waste Management Program and Environmental Improvement and Energy Resources Authority. Each activity has its own different emphasis. The overall goal of these efforts is the implementation of pollution prevention through source reduction, reuse and recycling.

FUNCTION:
The DNR is primarily a regulatory agency. However, since there is no regulatory structure for pollution prevention/waste reduction, the department's activities in these areas focus on policy and planning, technical assistance, and education. If proposed legislation (HB 655, SB 422) is enacted, the WMP would be expected to also take on regulatory duties in the area of waste reduction. The EIERA in non-regulatory and has provided pollution prevention workshops, acted as a technical assistance clearinghouse and operated a waste exchange service in cooperation with the Industrial Materials Exchange Service.

PRESENT ACTIVITIES:
•Education

TOOLS:
•Seminars
•Specialized staff

FUTURE ACTIVITIES:
•Planned under the PPIs grant;
- •workshops
- •information clearinghouse
- •demonstration projects
- •self-assessment manual for agrichemical industry

•Pending passage of proposed legislation:
- •conferences
- •establish waste reduction goals
- •develop training programs
- •statewide waste exchange program
- •fund demonstration projects and research
- •information clearinghouse
- •waste audits for SQGs
- •establish loan fund for generators
- •develop LQG pollution prevention plans guidelines

DEFINITIONS:
P2- Not defined.
WR- (as defined in proposed legislation) "to lessen or decrease the amount of hazardous waste encompassing waste reduction, recycling, reuse, treatment, reclassification of waste, and dewatering, the elimination of waste at the source, usually within a process, including process modifications, feedstock substitutions, improvements in feedstock purity, housekeeping and management practices, increases in efficiency of machinery and on-site, closed-loop recycling, or any action that reduces the amount and toxicity of the waste exiting the production process."
WMIN- The same as waste reduction.
SR- Not defined.
RECYCLING- (also defined in proposed legislation) "to utilize a portion of a waste stream through chemical mechanical, thermal, or electromagnetic treatment to regain its valuable components and thereby decreasing the volume, toxicity, or both."

HIERARCHY:
1) Prevent and divert waste production at the source.
2) Reduce waste production at the source.
3) Reuse of the waste as a feedstock or raw material.
4) Recycle and recover on-site, or if that is not feasible, off-site.
5) Treat waste to reduce volume and toxicity, including incineration.
6) Store waste.
7) Dispose of waste.

AUDIENCE/CLIENTS:
The activities of the DNR are to benefit all the citizens of the state and assistance is provided, to the best of our ability, to all persons requesting it. Specific pollution prevention/waste reduction activities have been or will be conducted targeting household hazardous waste, SQGs, and LQGs. The program established under the EPA PPIS grant targets pollution prevention in the agrichemical industry.

ENABLING LEGISLATION:
Proposed

ADMINISTRATIVE BASE:
Department of Natural Resources, a state regulatory agency.

BUDGET:
$121,296- PPIS grant
$30,000- household hazardous waste collection program
$100,000- EIERA funded Household Hazardous Waste Project

SOURCES OF THE BUDGET:
WMP -PPIS grant
-RCRA state grant
-General Revenue Funds
EIERA -fees
-grants

PROJECTED BUDGET:
approximately $221,000

EFFECTIVENESS:
The various pollution prevention activities occurring within the state are each evaluated individually based on that particular activity's goals. For example, the demonstration project proposed as part of the PPIS grant activities will be evaluated by qualifying any reduction in releases and/or potential releases. The audience to which this information is communicated also varies depending on the activity. The effectiveness of activities associated with the PPIS grant must be communicated to EPA. The Effectiveness of any Department of Natural Resources activity needs to be communicated to department administration, the state legislature, the administration of the state and the citizens.

PUBLICATIONS:
The DNR has developed a Waste Minimization Strategy Development Pap[er as part of its 10-year hazardous waste capacity assurance plan. This is a comprehensive plan whicch sets goals and objectives, necessary components of a state waste minimization program, implementation plan, tracking methodology and industry/SIC specific waste minimization techniques.
A full color poster entitled "Make Your Home a Safe Place" was developed as part of the household hazardous waste collection program.
The EIERA's Household Hazardous Project has resulted in the production of an array of educational materials which may be obtained by writing;

Household Hazardous Waste Program
1031 E. Battlefield
Suite 214
Springfield, MO 65807
(417) 889-5000
(417) 889-5012

STAFF:

NAME/POSITION	RESP./BACKGROUND
Waste Management Program	
1. Nicholas Di Pasquale Director	
2. John Doyle Chief	Hazardous Waste Section,
3. June Sullens Waste Reduction Chief	Hazardous Waste Section,
4. Becky Shannon Pollution Prevention Coordinator	Waste Reduction Unit, Hazardous Waste Section,

EIERA

1. Steve Mahfood
   Director

2. Tom Welch
   Assistant for Planning and Project Development

NAME: **Hazardous Waste Section**

ADDRESS: Nebraska Department of Environmental Control
301 Centennial Mall South
P.O. Box 98922
Lincoln, NE 68509

PHONE: (402) 471-4217

FAX: (402) 471-3185

MISSION:
NDEC's mission is waste minimization/ waste reduction at the source of hazardous waste generation.

FUNCTION:
NDEC provides technical assistance, policy and planning, eduction, economic incentives and waste exchange programs.

PRESENT ACTIVITIES:
- Technical assistance
- Waste exchanges
- Library/information clearinghouse

TOOLS:
- Annual training and seminars for the regulated community
- RCRA inspectors who assist in providing waste minimization technical assistance

FUTURE ACTIVITIES:
- Written case studies as follow-up for on-site visits
- Newsletter
- Waste exchange is being formulated

DEFINITIONS:
P2- To encourage product changes, product substitutions or change in product composition; to increase the input of material changes, technology changes, as well as, good management practices; and waste exchanges (recycling on- and off-site to return materials back into the original process and to use as raw material substitution for another material.
WR-
WMIN- The reduction of hazardous waste that is generated or subsequently treated, stored, or disposed of. It includes source reduction and recycling that results in reducing total volume, quantity of hazardous waste, or reduction of toxicity of hazardous waste.
SR- Any activity that reduces or eliminates the generation of hazardous waste at the source, usually a process.
RECYCLING- A material is recycled if it is used, reused, or reclaimed. A material is used or reused if it is either employed as an ingredient to make a product or employed as an effective substitute for a commercial product.

HIERARCHY:
NDEC's primary goal is to reduce hazardous waste at the source of generation.

AUDIENCE/CLIENTS:
NDEC's audience is large and small quantity generators of hazardous waste.

ENABLING LEGISLATION:
The Nebraska Environmental Protection Act

ADMINISTRATIVE BASE:
State Agency

BUDGET:
$18,902 for 3 years

SOURCES OF THE BUDGET:
Grants and general fund

PROJECTED BUDGET:
?

PUBLICATIONS:

STAFF:

NAME	RESPONSIBILITIES
Teri Swarts Waste Minimization Coordinator	Waste minimization waste exchanges, library clearinghouse, on-line data base

Works with a group of RCRA inspectors who have backgrounds in Chemical Engineering, Chemistry, Geology, and Physical Science. However, waste minimization in Nebraska is distinctly separate from the RCRA inspectors, and is not part of the enforcement area.

NAME: **Solid and Hazardous Waste Division**

ADDRESS: Department of Environmental Quality
Hershler Building
122 West 25th Street
Cheyenne, WY 82002

PHONE: (307) 777-7752

FAX: (307) 777-5973

MISSION:
Wyoming, as part of the Western Regional Agreement and the Western States Regional Waste Management Protocol, is committed to implementing public sector initiaves for waste minimization to maximize in-state management of hazardous wastes

The State of Wyoming prepared a waste minimization strategy in April, 1991 in cooperation with representatives from industry, university personnel, environmental groups, and other interested parties in the state. The strategy outlines options available to the state for waste minimization and recommends waste minimization activities most appropriate for the State of Wyoming. The waste minimization and polution prevention program is voluntary.

FUNCTION:
Pollution prevention activities concentrate on technical assistance and education. Department staff incorporate pollution prevention and waste minimization programs into permits and enforcement actions when appropriate.

PRESENT ACTIVITIES:
- Technical Assistance
- Information Clearinghouse
- Education
- Regulatory

TOOLS:
- Library
- Technical assistance manual
- Fact sheets
- Workshops

FOCUS:

FUTURE ACTIVITIES:
- Establish a telephone assistance line
- Develop a voluntary "formal" waste minimization agreement with a petroleum refinery to serve as a model for other such agreements
- Explore ways to provide match monies to qualify for a USEPA pollution preveniton grant

DEFINITIONS:
P2-same as USEPA definition
WR-same as USEPA definition
WMIN-the reduction, to the extent feasible, of hazardous waste that is generated or subsequently treated, stored or disposed with the goal of minimizingpresent or future threats to human health and the environment. This definition includes treatment to reduce volume and toxicity.
SR-same as USEPA definition
RECYCLING-the act of using, reusing, or reclaiming any material

HIERARCHY:
No specific hierarchy exists.

AUDIENCE/CLIENTS:
The entire regulated community.

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
Solid Waste Management Program, Department of Environmental Quality

BUDGET:
$22,000

SOURCES OF THE BUDGET:
$15,000 Capacity Assurance Grant
$7,500 USEPA Recycling Assistance Grant

PROJECTED BUDGET:
The 1992 budget dedicated to waste minimization and pollution prevention activities is estimated at $9,000.

EFFECTIVENESS:
The program measures its effectiveness throu attendance and participant feedback, documents distributed, and contacts. Audiences that receive feedback are the general public and members of the Western Regional Agreement for capacity assurance/

PUBLICATIONS:
1991 Hazardous Waste Minimization Strategy document
Operators Manual for Waste Minimization
Fact sheets

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. David A. Finley Administrator	Division head	Engineering, regulation
2. Dianna Gentry Hogle Recycling Coordinator	Oversee recycling prog.	Geology, regulation
3. Patricia Gallagher Senior Analyst	Solid and hazardous waste regulation, pollution prevention and waste minimization coordinator, capacity assurance coordinator	Geology, regulation

Region 8

NAME: **Pollution Prevention and Waste Reduction Program**

ADDRESS: Colorado Department of Health: Rm 350
4210 East 11th Ave
Denver, CO 80220

PHONE: (303) 331-4436

FAX: (303) 331-4401

MISSION:Being developed

FUNCTION:
- Technical Assistance
- Policy Development for Executive Branch
- Planning
- Education
- Integration of P2 into regulatory activities

PRESENT ACTIVITIES:
- Technical Assistance
- Policy development
- Informational clearinghouse/technical library
- Speakers Bureau
- Coordination of P2 advisory board

TOOLS:
- Training
- Seminars
- Technical library
- On-site visits
- Questionnaires
- Case studies
- Info Bulletins for newsletters

FUTURE ACTIVITIES:Same

DEFINITIONS:
P2-Multi-media
WR-An organized, continual effort to systematically reduce waste generation from many sources but HW is a starting point
WMIN-Same
SR-Operational methods to prevent or reduce waste generation at the source, which may involce operational planning and practice, product changes, material substitution, process replacement or technology modification.
RECYCLING-Reclamation technology for re-use, e.g. solvent recovery or new, fully refrigerated dry to dry closed loop dry cleaning machines

HIERARCHY:
1. Source reduction
2. Recycling

AUDIENCE/CLIENTS:
SQG's, LQG's, TRI reporters,small business especially dry cleaners, print shops, auto repair, other state agencies

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
State agency

BUDGET:
Approximately $180,000

SOURCES OF THE BUDGET:
Federal States P2 Incentive Grant

PROJECTED BUDGET:
$180,000

EFFECTIVENESS:
Fulfilling conditions of grant with EPA, number of businesses and individuals served.

PUBLICATIONS:Fact Sheets on:
- Description of Colorado's P2 and WR program
- How to Start Your Own Program
- P2 in Metal Finishing
- List of Publications Available
- P2 in Parts Cleaning
- P2 in Dry Cleaning
- P2 in Vehicle Repair
- P2 at Home

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Kate Kramer Program Coordinator		Environmental mgmt, Project mgmt
2. Neil Kowley Staff Engineer	Coordination of technical assistance efforts	Mechanical Engineering, Experience(RCRA+CERCLA)
3. Van Simsiman Staff Engineer	On-site Technical Assistance Fact Sheets, Case Studies	Ind/Mfg Engineering Consumer Product Mfg Small Business Owner/ Operator

Region 9

NAME: **Waste Minimization Branch**
Alternative Technology Division
Department of Toxic Substances Control

ADDRESS: California Environmental Protection Agency
P.O. Box 806
Sacramento, CA 95812-0806

PHONE: (916) 324-1807

FAX: (916) 327-4494

MISSION:
To protect and enhance public health and the environment by regulating the management of hazardous waste and promoting its reduction. We empower the people of California to fully participate in the accomplishment of our mission. We recognize that our public policy decisions can have significant impact on all Californians and they should be balanced and based upon sound scientific principles. We value actions based on honesty, integrity and fairness which further our mission and reflect organizational pride and self-worth. We value the staff of the Toxics Program as our greatest resources and promote their personal and professional development. We value the contributions of staff and encourage them to act creatively and innovatively to solve problems. We value personal commitment and responsibility in the performance of duties. We value and promote communication within the Toxics Program. We take risks, openly acknowledge and learn from our successes and failures. We value the ability to make informed decisions and to act responsibly.

FUNCTION:
The Department of Toxic Substances Control is a regulatory program. The Alternative Technology Division has the responsibility of developing pollution prevention technologies, stragegies and programs to institutionalize the pollution prevention concept into all the Department's programs, local government programs, and industries operating in the state of California.

PRESENT ACTIVITIES:
- Technical assistance
- Regulatory assistance
- Information clearinghouse
- Policy and procedures development
- Training
- Provide economic incentives
- Outreach

TOOLS:
- Waste stream specific studies
- Technology clearinghouse and Library
- Grants
- Training
- Seminars and conferences
- Publications

FOCUS:
NA

FUTURE ACTIVITIES:
- Develop and Office of Pollution Prevention
- Put on a series of "Roundtable" workshops for state agency personnel

DEFINITIONS:
P2-to preventi the formation of hazardous waste, industrial waste, or hazardous air constituents. Pollution prevention is a comprehensive and multimedia approach to environmental management.
WR-source reduction, onsite and offsite recycling, and treatment. This term was adopted to describe the Department's objective in the 1980's to reduce the amount of untreated waste going to land disposal. It is an obsolete term.
WMIN-source reduction and recycling (onsite and offsite).
SR-any activity that prevents the generation of hazardous waste. This can include generating a less hazardous species. It does not mean reducint the volume or toxicity or an already generated waste. Source reduction can be achieved through:

a) Input changes: changes in raw materials or feedstocks used in a production process or operation so as to reduce, avoid, or eliminate the generation of hazardous waste.

b) Operational improvements: improved site management so as to reduce, avoid or eliminate the generation of hazardousw waste. This includes administrative steps such as inventory control, employee training or establishing waste minimization policies.

c) Production process changes: using more efficient equipment or changing operating conditions in order to reduce hazardous waste generation.

d) Product reformulation: changing a process, method, or technique which is used to produce a product or desired result, including the return of materials or their components, for reuse within the existing process or operations, so as to reduce, avoid, or eliminate the generation of hazardous waste.

RECYCLING-use, reuse, or reclamation of hazardous constituents. Recycling is secondary in the waste management hierarchy because the hazardous waste is generated, thus representing some hazard to the environment if mismanaged.

a) Use: to directly use a hazardous waste in a different process. It does snot require that the hazardous waste processed before use.

b) Reuse: to directly reuse a hazardous waste in the same process (in-process recycling). Reuse also does not require processing.

c) Reclamation: When a hazardous waste requires processing before reuse, it is known as reclamation. Neutralizarion, filtration, and distillation are examples of processes used to reclaim constituents of hazardous wastes.

Many of these processes are actually treatment processes, with the major differenc e being that the relaaimantis reused in a process. There are permitting requirements for some reclamation processes. Reclaiming "energy" of "heat" is not considered to be recycling by the Department.

Recycling and other waste management techniques always involve some risk of failure. When recycling fails, the waste most often has to be disposed of as hazardous waste.

HIERARCHY:
ATD's preferred hierarchy is to proctice polluiton prevention then waste minimization. ATD also believes that "Environmentally sound" treatment is a viable option after all other pollution prevention options have been explored and implemented.

AUDIENCE/CLIENTS:
ATD's primary audience is all generators of hazardous wastes and hazardous pollutants. (All industries, governmental agencies, etc.) The secondary audience is other governmental agencies that can assist in implementing pollution prevention.

ENABLING LEGISLATION:
ATD operates under a multitude of different legislative acts. The major pieces are as follows;

California Health and Safety Code, Division 20, Chapter 6.5, the Hazardous Waste Control Law.

- Article 7, Treatment, Recycling, and Disposal Technology... (1982)

  Establishes the Resource Recovery Program and the development of a Waste Exchange.

  Establishes a Technical Reference Center.

  Establishes a Technology Clearinghouse Program.

  Requires an industry education program to conduct pilot projects, develop educational pamphlets, audio-visual training programs, and an annual symposium.

- Article 11.8, Hazardous Waste Reduction, Recycling, and Treatment Research and Demonstration Act....(1985)

  Establishes the Waste Reduction grant program. Provides $1.8 million to universities, governmental agencies and private organizations for research and development of waste reduction, recycling and treatment technologies and strategies. The grant funds are appropriated annually.

- Article 11.9, The Hazardous Waste Source Reduction and Management Review Act...(1989)

  Establishes a Facility Planning Program to require source reduction plans from facilities generating 13 tons or more of hazardous waste.

ADMINISTRATIVE BASE:
The Alternative Technology Division is housed in the Department of Toxic Substances Control whis is a state regulatory program.

BUDGET:
$7.8 million for FY 90-91 (operating and personnel expenses)

SOURCES OF THE BUDGET:
Generation and disposal fees.

PROJECTED BUDGET:
Same as FY 90-91.

EFFECTIVENESS:
Each unit within the ATD is required to develop an annual work plan. In the annula work plan we detail the units of work we will accomplish for the fiscal year. These units of work can include:

- technical assistance to industry
- documents prepared and distributed
- reports written
- grants given and concluded
- training given or conferences held
- for Incinerable Waste Minimizatioin Project, amount of waste reduced
- the facility plans reviewed (SB14)
- legislation developed
- responses to phone inquiries
- number of settle agreements with waste minimization language included
- number of permits with waste minimization conditions included

The program's primary audiences are the Agency Secretary, the Department Director, the Legislature, industry, and the public.

PUBLICATIONS:
Program has developed an extensive list of publications. A complete list of these publications can be obtained by writing or calling the address of phone number listed at the beginning of this report.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. James Allen Chief	Toxics Substances Control Program, Alternative Technology Div.	
2. K. Wilhem Sup. Waste Min. Engineer	Waste Minimization	
3. D. Hartley Sr. Haz. Mat'l Specialist	Technology Clearinghouse	
4. T. Macaulay Sr. Waste Mgmt. Engineer	Waste Reduction	
5. R. McCormick Sr. Haz. Mat'l Specialist	Resource Recovery	
6. K. Smarkel Sr. Waste Mgmt. Engineer	Source Reduction	

NAME: **City of Berkeley Toxics Program**

ADDRESS: 2180 Milvia St. Room 308
Berkeley, CA 94704

PHONE: (510) 644-6510

FAX: (510) 644-0615

MISSION:
To promote pollution prevention and source reduction.

FUNCTION:
Technical assistance is the primary focus. Staff are expecting the program to be given regulatory responsibilities in the near future.

PRESENT ACTIVITIES:
- Educational assistance
- Site visits
- Intern program for pollution prevention

TOOLS:
- Monthly newsletter
- Technical library
- Intern program
- Video conference downlinks
- Representation and involvement regionally through the Bay Area Hazardous Waste Reduction Committee

FUTURE ACTIVITIES:
- Considering a local ordinance that would require pollution prevention plans from all generators who produce more than 4000 pound per year.

DEFINITIONS:
P2-NA
WR-NA
WMIN-NA
SR-any action that causes a net reduction in the generation of hazardous waste.
RECYCLING-NA

HIERARCHY:
Program staff use the hierarchy adopted by the State of California in the Hazardous Waste Source Reduction and Management Review Act of 1989.
1. Source reduction
2. Recycling
3. Treatment
4. Disposal

AUDIENCE/CLIENTS:
LQGs & SQGs
TRI reporters
Activists
Citizens of the city

ENABLING LEGISLATION:
None at this time.

ADMINISTRATIVE BASE:
Local government agency

BUDGET:
Approximately $400,000

SOURCES OF THE BUDGET:
Fees

PROJECTED BUDGET:
Uncertain

EFFECTIVENESS:
Staff tracks site visits and isolates success stories

PUBLICATIONS:
Monthly newsletter

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Cheri Eir Administrator	All	MPH in Health Education, BA in Env. Health, 13 yrs. in env. health

NAME: **Environmental Affairs Office**

ADDRESS: City of Irvine
P.O. Box 19575
Irvine, CA 92713

PHONE: General- (714) 724-6251
Tech. Asst.- (714) 724-6235

FAX: (714) 724-6045

MISSION:
The City of Irvine promotes an ethic of toxics use reduction and pollution prevention thoughout the City. Program staff encourage a pollution free environment through community development and operational activitiesand by providing assistance to existing and prospective industries. Program staff also encouragethe development of businesses in the City that provide pollution prevention services to other businesses.

FUNCTION:
Regulate the use and emission of ozone depleting chemicals; provide pollution prevention assistance to Irvine businesses and City operational divisions; provide assistance in the review of new land uses for toxics use and pollution implicaitons; educate staff and businesses about pollution prevention,

PRESENT ACTIVITIES:
- Regulate ozone depleting chemicals
- Provide technical assistance on alternatives to ozone depleting chemicals
- Information clearinghouse on alternatives for ozaone depelting chemicals
- Provide pollution prevention assistance to City operational units
- Train City staff
- Outreach

TOOLS:
- Exemption procedures for use of ozone depleting chemicals and follow-up
- CFC Alternatives newsletter
- Seminars
- Telephone hotline
- Case studies
- Pollution prevention training program

FOCUS:
CFC substitution

FUTURE ACTIVITIES:
- Establish technical assistance program focused on electronics, aerospace, biomedical, and metal finishing
- Integrate technical assistance referrals with business license, building and safety and planning processes
- Establish newsletter for focus industries

DEFINITIONS:
P2-any activity that reduces the amount or hazardousness of pollution created as part of producing goods or services.
WR-any activity that reduces the quantity and/or hazardousness of waste generated as part of producing goods or services.
WMIN-any activity that reduces the quantity and/or hazardousness of waste that enters the environment.
SR-same as pollution prevention
RECYCLING-reuse, with or without processing, of materials that would otherwise be considered pollution if allowed to enter the environment.
TOXICS USE REDUCTION- any activity that reduces the quantity and/or hazardousness of raw materials used in producing goods or services.

HIERARCHY:
1. Toxics use reduction
2. Pollution prevention
3. On-site recycling
4. End-of-pipe controls
5. Off-site recycling
6. Treatment
7. Disposal

Purpose is to minimize worker exposure, threat of accidental releases to the environment, intended releases to the environment.

AUDIENCE/CLIENTS:
Users of ozone depleting chemicals, pollution generators, City staff, local business associations, elected officials.

ENABLING LEGISLATION:
Irvine ordinance 89-21, City Council resolution authorizing Source Reduction and Technical Assistance Project.

ADMINISTRATIVE BASE:
City Manager's Office, City of Irvine

BUDGET:
Approximately $210,000

SOURCES OF THE BUDGET:
- General fund
- Fees
- State grant

PROJECTED BUDGET:
$195,000

EFFECTIVENESS:
Measured by reductions in ozone depleting chemicals use and emissions, reductions in exemptions, number of contacts with business community, feedback from business community to senior management and elected officials

PUBLICATIONS:

CFC Alternatives newsletter

Implementation of CFC Ordinance: Progress Report to Irvine City Council, February 1991

Implementation of CFC Ordinance: Progress Report to Irvine City Council, October 1991

M. Brown and K. Lyon, "Holes in the Ozone Layer: Prediction and Policy Disputes," to appear in D. Nelkin (ed.) Controversy: Politics of Technical Decisions, Beverly Hills, CA: Sage Publicaitons, 3rd ed., forthcoming 1992.

M. Brown and A. Hall, "Reducing the Use of Ozone Depleting Chemicals: The Irvine CA Ordinance," submitted for publication.

M. Brown, "Reducing the Use of Ozone Depleting Chemicals: The Irvine Ordinance," presented at the American Planning Association, California Chapter, Annual Meeting, Newport Beach CA, Sept.11-14, 1990.

M. Brown, "Assessment of a Local CFC Ordinance: City of Irvine, California," presented at the World Congress of Local Governments for a Sustainable Future, New York, NY Sept. 4-8, 1990.

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Michael S. Brown Mgr. of Env. Affairs	Env. and occupational health policy and tech. asst.	Gov't and academia
2. Jan Noce' Adm. Secretary	Administrative coordinator	Government
3. Joseph Farber Tech. Asst. Coordinator	Technical Assistance	30+ years Industrial Experience
4. Alicia Scherer Analyst		Grad student in Social Ecology

NAME: **Pollution Prevention Program**

ADDRESS: Industrial Waste Section
County Sanitation Districts of Los Angeles County
1955 Workman Mill Road
P.O. Box 4889
Whittier, CA 90607-4998

PHONE: (213) 699-7411

FAX: (213) 692-5103

MISSION:
No specific mission/vision statement for current program. The general direction is to have pollution prevention be considered in all aspects of industrial wastewater regulation and pretreatment.

FUNCTION:
Education and information transfer for current program.

PRESENT ACTIVITIES:
- Staff reorientation from pretreatment to prevention.
- Incorporation of pollution prevention awareness and language into the pretreatment regulatory system.
- Information outreach to regulated industries to provide "Best Available Information" on pollution prevention.

TOOLS:
- Training (staff)
- Education (the incorporation of pollution prevention language and outreach materials with regulatory correspondence and new reporting requests. For example, in the notification letter to industrial laundries for the new dischare liminations, pollution prevention was urged to be used for compliance, and n the submittal request for Toxic Organics Management Plans from the metal finishing industries, a pollution prevention outreach fact sheet was included to encourage the permittees to consider prevention for the Management Plan).
- Opportunities checklists (emphasis on industries of concern to POTWs that discharge to the sewer).

FUTURE ACTIVITIES:
This agency is a local sanitation agency responsible for sewage treatment and refuse disposal for approximately half the population in Los Angeles County. Eventually, the pollution prevention program will include an agency policy which will expand the program to include all agency operations including the POTWs and landfills. Currently, the program focusses on the regulated industris that discharge to our POTWs and it is being redeveloped to include;
- Technical assistance (voluntary source reduction waste audits)
- Training (staff)
- Regulatory integration

DEFINITIONS:
P2-the prevention of the generation of wastes from industrial, commercial and residential activities, including the avoidance of crossmedia transfer of pollutants. the waste can be hazardous or non-hazardous, solid, liquid or gaseous, and the means could include waste reduction, source reduction, recycling, clean product development and cultural and habit changes.
WR-the reduction of the quantity and the toxicity (concentration) of a waste, be it hazardous or non-hazardous.
WMIN-the reduciton of the volume and/or toxicity of hazardous wastes.
SR-the reduction of waste generation at the source and exclude out of process recycling.
RECYCLING-the recovery, reuse and reclamation of a waste into the original material for reuse, or alternative material for other uses.

HIERARCHY:
No specific hierarchy. Source reduction is preferred

AUDIENCE/CLIENTS:
The regulated community of industrial wastewater dischargers under the Districts' Industrial Wastewater Discharge Permitting Program.

ENABLING LEGISLATION:
The Liquid Waste Disposal Policy under the Districts' Wastewater Ordinances, which states,

"...Recovery, reuse and waste minimization procedures established by industrial wastewater dischargers to meet the limitations set on theri discharges will be preferred by the Districts over those proceduares designed solely to meet wastewater discharge limitations."

ADMINISTRATIVE BASE:
A local sanitation agency responsible for sewage treatment and refuse disposal.

BUDGET:
No specific budget for this program. 1 full-time and 1 part-time engineer assigned to pollution prevention.

SOURCES OF THE BUDGET:
From general fund within the Industrial Waste Section, which in turn derives its revenues from surcharge fees on industrial wastewater dischargers.

PROJECTED BUDGET:
No additional staffing anticipated at this time.

EFFECTIVENESS:
- General increase in awareness and attitude changes toward pollution prevention among engineers and inspectors on staff.
- Personal initiatives by regulatory staff to incorporate pollution prevention into policies, permit requirements, reporting requirements and enforcement compliance proposals.
- General increase in requests for assistance for permit engineers and inspectors to help regulated industries on pollution prevention.
- The number of written requests for pollution prevention information from various information outreach effors.

Effectiveness is communicated, through a section on pollution prevention in the Annual report, to;
- Supervisors and Section Head of the Industrial Waste Section,
- Head of the Technical Services Department of the Districts,
- Pretreatment program regulators with the USEPA Region 9, California State Water Quality Control Board, and the Regional Water Quality Control Board, Los Angeles Region.

PUBLICATIONS:
Pollution Prevention Opportunities Checklists for the following industries;
- Oil and gas extraction,
- Petroleum refining,
- Chemical manufacturing,
- Metal fabrication,
- Metal finishing,
- Printed circuit board manufacturing,
- Chemicals formulating,
- Photoprocessing,
- Printing,
- Radiator repair,
- Dry cleaning.

Checklist for a Waste Minimization Program
Master Calendar of Pollution Prevention Events
Financial Assistance to Small Businesses for Waste Reduction
Resource List for Further Information

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Theresa Dodge Project Engineer	Develop and implement program	Solid waste mgmt.
2. Philip Lo Project Engineer	Part-time resource person, Program founder	Industrial regulator for 11 years, wastewater facility planning for 4 years

NAME: **Hazardous and Toxic Materials Office (HTM)**

ADDRESS: Board of Public Works
City of Los Angeles
200 N. Spring St. Room 353
Los Angeles, CA 90012

PHONE: (213) 237-1209

FAX: (213) 237-1445

MISSION:
The purpose of this program is to promote the national policy of minimizing hazardous waste generation and to ensure city-wide compliance with hazardous materials and waste requirements. Technical assistance is provided to City agencies and industry through on-site consultation, information dissemination and waste assessments.

FUNCTION:
The HTM Office provides non-regulatory technical assistance and outreach programs for the Los Angeles City departments and private industry to encourage hazardous waste minimization and pollution prevention programs.

PRESENT ACTIVITIES:
- Technical assistance through the L.A. Senior environmental Corps, retiree waste audit program and waste audit case studies performed by consultants.
- Information clearinghouse- library, mail-order requests, telephone assistance
- Public outreach and seminars
- Awards and recognition program

TOOLS:
- Training- workshops for City employees and industry
- Hotline- operates Monday-Friday 7:00 AM through 5:00 PM
- Seminars
- Newsletters- quarterly; one for the City, one for industry
- On-site technical assistance- L.A. Senior Environmental Corps and case studies performed by consultants (East L.A. Metal Platers)

FUTURE ACTIVITIES:
- Expand retiree program
- SQG industry specific workshops
- K-12 education/awareness program
- Intensive pollution prevention marketing campaign
- Conferences

DEFINITIONS:
P2-the new environmental philosophy (paradigm) advocating source reduction and resource conservation in industrial facilities. Pollution prevention stresses multi-media toxics elimination.
WR-the volume reduction of hazardous waste through waste minimization, treatment, incineration, etc.
WMIN-minimizing the generation of hazardous waste through source reduction, on-site recycling, or off-site recycling of industrial by-products and hazardous materials usage.
SR-techniques and technologies that reduce the source of pollution by chemical substitution or reformulation, industrial process modification, improved efficiency and management practices, etc.
RECYCLING-the beneficial reuse or reclamation of hazardous industrial by-products. Closed-loop recycling puts the by-product directly back into the process that generated the waste; on-site recycling recycles the material within the industrial facility; off-site recycling involves transporting material to a recycling facility.

HIERARCHY:
1. Pollution prevention- promoting philosophy is easier than promoting specific technologies.
2. Waste Minimization
3. Waste Reduction
4. Proper treatment and disposal

AUDIENCE/CLIENTS:
The Los Angeles regulated community including SQGs and LQGs (possibly to include TRI reporters in the future).

ENABLING LEGISLATION:
Mayor and City Council executive directive.

ADMINISTRATIVE BASE:
Municipal government, Board of Public Works

BUDGET:
$316,607.

SOURCES OF THE BUDGET:
Primarily City General Fund.
Program staff does seek funking rhough state grants, city proprietary departments, and will be seeking private contributions from large businesses for future SQGs education program.

PROJECTED BUDGET:
$611,861 proposed (program is likely to be awarded on one-half of this amount)

EFFECTIVENESS:
- Standard methods- (number of event attendees, phone log requests, mailing lists, etc.)
- Success stories- (case studies, on-site reports, audit summaries, etc.)

PUBLICATIONS:

HTM Fact Sheets

- "Aresol Containers: What Should I Do with Them when They're Empty?"
- "What Should I Do with My Electroplating Sludge?"
- "Plating with Trivalent Chrome"
- "Eliminating Hexavalent Chromium from Cooling Towers (draft form)"
- "Jewelery Manufactures: Basic Environmental and Business Requirements"
- "Automotive Maintenance Industry:Basic Environmental and Business Requirements (draft form)"

Brochures and Newsletters

- "Los Angeles' Waste Minimization Program, HTM Project Description"
- "Mayor's Award of Excellence in Pollution Prevention; Information and Application"
- "Los Angeles' Pollution Prevention Newsletter: for Business, Industry, and the General Public"
- "HTM City News: City Employee Publication"

Directories and Bibliographies

- "Hazardous Waste Haulers for Los Angeles"
- "Used Oil Collection Facilities for Homeowners"
- "Paint Collection Facilities for Businesses"

Reports and Guidance Manuals

- "Hazardous Waste Management and Minimization Guidelines for Los Angeles City Departments"
- "California Requirements for Generators fo Hazardous Waste" (1989)
- "Waste Minimization Opportunity Assessments: East L.A. Enterprise Zone Metal Plating Facilities"
- "Turning Off the Tap: Strategies for Hazardous Waste Minimization in the City of Los Angeles"
- *"Requisitos Estatales para Generadores de Desperdicio Peligroso"* (1989)

STAFF: NAME/POSITION	RESP.	BACKGROUND
1. Donna Toy-Chen Program Manager	Director of HTM Office	M.S. Biology and Envr. Engineering, 5 yrs. as City Envr. Assoc., CA registered Envr. Assessor
2. Mark N. Nakata Management Asst.	Program implementation, administration	B.A. Geography/Ecosystems
3. Bianca Vite-Gonzalez Executive Secretary	Administration	3 yrs. exp. in the Bureau of Sanitation enforcement
4. Matt Bequette Sanitary Engineer	Coordinate Seniors program	Sanitation enforcement
5. Mistie Joyce Student volunteer	Clearinghouse coordinator	B.S. Industrial Hygiene
6. Steve Gedalje Student volunteer	On-site technical assistance	B.S Petroleum Engineering
7. Andrea Young Student volunteer	Clearinghouse asst.	Industrial Health Inspector
8. Jeanette Harlow Student volunteer	On-site tech. asst.	Undergraduate Chemistry
9. L.A. Seniors Env. Corps (18)	On-site tech. asst.	Varied
10. Jacobs Eng. Group Env. Consultant	Case studies/Audits	
11. Local Govt. Com Contractor	Conference Organization	
12. CA. Safety Council Contractor	SQGs education workshops	

NAME: **Pollution Prevention Program**

ADDRESS: San Diego County Department of Health Services
Hazardous Materials Management Division
P.O. Box 85261
San Diego, CA 92186-5261

PHONE: (619) 338-2215

FAX: (619) 338 2139

MISSION:
Reduce the volme of hazardous pollutants generated within San Diego County by,
- providing leadership to successfully integrate pollution prevention strategies within government agencies, and
- providing guidance to all sectorsfo the community by advocating the importance of the pollution prevention ethic.

Toward this end, program staff will,
- reduce or eliminate regulatory barriers to pollution prevention inplementation by demonstrating successful, integrated, multi-agency pollution preventon programs,
- design a strategy to promote the concept of pollution prevention through cooperative edcuation outreach activities with local environmental compliance agencies,
- encourage cross-training between the staff of local environmental regulatory agencies to enhance the level of consistant information provided to the industrial community about pollution prevention, and,
- implement administrative changes that would provide a more conprehensive evaluation of pollution prevention activities county-wide.

FUNCTION:
- Education (first and foremost)
- Technical assistance
- Policy development and planning
- Regulatory

PRESENT ACTIVITIES:
- Technical assistance
- Information clearinghouse
- Intra-governmental catalyst for multi-media pollution prevention integration

TOOLS:
- Training (within environmental regulatory agencies as well as outreach to industry and the general public)
- On-site visits
- Review of waste minimization plans
- Documents (i.e. Pollution Prevention: A Resource Book for Industry)
- Multi-agency brochure and newsletter (in process)

FUTURE ACTIVITIES:
- Enhance the level of public-private partnerships
- Coordinate additional multi-agency educational ventures

DEFINITIONS:
P2-avoiding the creation of pollution.(can be used interchangeably with source reduction)
WR-general term-includes non-hazardous waste issues.
WMIN-general term-includes non-hazardous waste issues.
SR-administrative or operational factors that reduce the volume of hazardous waste, industrial waste and air pollution emissions.
RECYCLING-the technique used to maintain the quality of a material so as to extend its use.

HIERARCHY:
1. Pollution Prevention/Source Reduction
2. Recycling
3. Other waste management opportunities, including treatment and disposal

AUDIENCE/CLIENTS:
All generators of hazardous waste (including SQGs). In San Diego County there are approximately 7000 businesses under permit with the department.

ENABLING LEGISLATION:
Memorandum of Understanding (MOU) between the State Toxic Substances Control Dept. and the County Health Dept.

ADMINISTRATIVE BASE:
Local government agency

BUDGET:
$54,000

SOURCES OF THE BUDGET:
- State and federal grants
- Permit fees (County Hazardous Materials Management permit)
- Small amount of funding from public/private partnerships.

PROJECTED BUDGET:
$56,000

EFFECTIVENESS:
- Industry survey
- Workshop evaluations

PUBLICATIONS:
- Hazardous Waste Minimization - 1987
- Pollution Prevention: A Resource Book for Industry - 1990

Contributing author/editor to a number of other documents, such as:
1990 California Pollution Prevention Roundtable Proceedings

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Linda G. Pratt Program Manager	Coordinator for all County pollution prevention activities	B.S. Microbiology/Chemistry M.S. Environmental Science

The following do not work directly in the program. They are members of the pollution prevention task force and are responsible for implementing pollution prevention strategies within their own agencies.

2. Terry Morris Chief	Air Pollution Control Dist.	Chemistry & engineering
3. Rod Rippel Supervisor	Industrial Waste Control Program	
4. Perry Frese Supervisor	Industrial Waste Control Program	
5. Ernest Ferrer Supervisor	Industrial Waste Control Program	
6. Karen Woods Supervisor	Industrial Waste Control Program	
7. Gary Orr Supervisor	Industrial Waste Control Program	

NAME: **Pollution and Hazardous Waste Reduction Program**

ADDRESS: Bay Area Air Quality Management District
TAC Evaluation Section
939 Ellis St.
San Francisco, CA 94109

PHONE: (415) 771-6000 ext. 4671

FAX: (415) 928-8560

MISSION:
The Bay Area Air Quality Management District (BAAQMD) proposes to design and implement a program to assist the facilities under its regulatory control to minimize toxic air pollutants. Although this program is in the conceptual stage at this point, it is anticipated that the program will consist of a combination of measures such as those listed in #2 below.

FUNCTION:
The main activity of the BAAQMD is the promulgation and enforcement of regulations pertaining to air pollution control. As such, it is anticipated that the primary methods of encouraging pollution reduction will be regulatory in scope, possibly providing economic incentives for decreases in the use of toxic substances. Secondary functions may include providing basic technical assistance, providing waste reduction information and coordinating with other governmental and industry agencies to ensure effective waste reduction programs and minimization of cross-media pollution problems.

PRESENT ACTIVITIES:
The BAAQMD's program involves the construction of a pollutant inventory for the District, and a mechanism for tracking the reduction in use of identified toxic and hazardous materials. The inventory is in the public domain, and the BAAQMD believes that public access to this information will provide a strong incentive for facilities to voluntarily engage in pollution prevention. Specifically, the Toxic New Source Review rule is designed to prevent new sources from exacerbating existing air pollution problems. High-risk facilities must submit risk reduction plans.

TOOLS:
Possible tools include;
- Regulatory incentives
- Economic incentives
- Site visits
- Information clearinghouse
- Assistance with coordinating with other governmental programs

FUTURE ACTIVITIES:
Continue present activities

DEFINITIONS:
P2-NA
WR-the reduction of primary hazardous waste materials by use of component material substitution, product reformulation, waste recycling mechanisms (both on-site and off-site), and waste stream treatment facilities (both on-site and off-site).
WMIN-same as waste reduction, except it is limited to primary source stream reduction, and recycling
SR-the reduction of primary waste streams from a facility by a change in technology, a change in product or product specifications, a change in materials used, or a change in operating procedures. Treatment and recycling mechanisms are specifically excluded.
RECYCLING-the collection for treatment and reuse of a given waste product. Collection for later disposal in a landfill or other disposal facility is specifically excluded. Recycling can be either at the facility site for reuse in the facility itself, or the waste products can be collected and transported off-site for treatment and reuse either in the producing facility or elsewhere

HIERARCHY:
The BAAQMD prefers the hierarchy adopted by the State of California in SB 14, the Hazardous Waste Source Reduction and Management Review Act of 1989. This Act categorizes hazardous waste management according to the following hierarchy:

1. Source Reduction
2. Recycling
3. Treatment
4. Disposal

AUDIENCE/CLIENTS:
The BAAQMD's target audience is the apporximately 3000 stationary facilities and 3000 gasoline service stations which can produce waste streams capable of contribution to local air pollution. (Most facilities fall into the SQG category.)

ENABLING LEGISLATION:
As the program is still in its conceptual stage, the BAAQMD does not have specific enabling legislation for a waste reduction program. General enabling legislation for such a program can be sound in the State of California Health and Safety Code, Section 91700 (referring to threats to public health).

ADMINISTRATIVE BASE:
The BAAQMD is a regional governmental agency covering all or part of the nine San Francisco Bay Area counties (the counties of San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Marin, and Napa, as well as parts of Sonoma and Solano counties). It covers approximately 5600 square miles, and includes apporximately 6 milling people.

BUDGET:
BAAQMD anticipates the dedication of 2 person years for fiscal 1991.

SOURCES OF THE BUDGET:
Funding for the program will come from fees and penalties assessed by the District.

PROJECTED BUDGET:
BAAQMD anticipates the dedication of 2 person years for fiscal 1992.

EFFECTIVENESS:
The BAAQMD anticipates that effectiveness will be monitored primarily through an analysis of primary hazardous waste streams reduced. Secondary measures of effectiveness may include number of contacts made, and on-site visits/inspections conducted. Progress is documented in an annual report.

PUBLICATIONS:
"Toxic Air Contaminant Reduction Plan," August 1991
"Bay Area Air Quality Management District Annual Status Report." 1991

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Steve Hill Manager, Toxic Air Contaminants (TAC) Evaluation Group	Direct activities of TAC Evaluation Group	Engineering, Regulatory Industrial
2. Catherine Fortney Air Quality Engineer, TAC Evaluation Group	Develop & implement Hazardous Material Source Reduction Plan; integrate it with other District Plans	Engineering, Regulatory Industrial

NAME: **Chief Administrative Officer's Hazardous Waste Management Program (CAO's HWMP)**

ADDRESS: 1145 Market Street, Suite 401
San Francisco, CA 94103

PHONE: (415) 554-3419

FAX: (415) 544-3410

MISSION:
The CAO's HWMP's mission statement is to:
1) provide technical and financial assistance to businesses to reduce the amount of hazardous waste generated,
2) promote the use of safer household products,
3) provide for the safe disposal of household hazardous waste, and
4) develop and implement programs to screen and remove hazardous waste from the city's municipal waste before it is landfilled.

FUNCTION:
The CAO's HWMP provide regulatory assistance, waste reduction, technical and financial assistance, waste classification assistance, waste exchange program, and funds for research and development activities related to waste reduction.

PRESENT ACTIVITIES:
- Waste reduction
- Technical and financial assistance
- Provision of a facility for the collection and recycling of household hazardous waste.

TOOLS:
- Workshops
- Hotline
- Newsletters
- Factsheets
- Grants
- On-visits
- Follow-ups

FUTURE ACTIVITIES:
- Initiate a Retired Engineers Program to work with Large Quantity Generators
- Establish an Information Clearinghouse for the Public
- Subsidize a milk run pickup service for painting contractors and printers
- Develop and disseminate a safer Household Products booklet
- Develop a screening procedure to reduce City agencies purchases of hazardous chemical products

DEFINITIONS:
P2-Reduce the amount of waste going to all environmental media
WR-Reduce waste going to landfills through source reduction
WMIN-Same as WR
SR-prevent waste from being generated
RECYCLING-On-site recycling may be either closed-loop, whereby waste is fed into another process or activity.

HIERARCHY:
1. Source reduction
2. On-site recycling
3. Off site recycling

AUDIENCE/CLIENTS:
SQG's, LQG's, (City agencies in the near future)

ENABLING LEGISLATION:
None

ADMINISTRATIVE BASE:
Part of City and County of San Francisco

BUDGET:
$600,000

SOURCES OF THE BUDGET:
Garbage bills.

PROJECTED BUDGET:
$750,000

EFFECTIVENESS:
- Number of documents distributed
- Number of calls to hotline
- Number of Grants issued
- Number of voluntary waste audits
- Attendance at City's workshops
- Number of people reducing waste
- Amount of waste reduced

PUBLICATIONS:
Call (415) 554-3444

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Bill Quan Program Manager	Supervises Staff	Chemistry, Chemical Engineering
2. Elahe' Enssani Assist. Program Mgr.	Design and implements private sector waste reduction projects	Civil and Chemical Engineering
3. Marla Trapalis-Baird Hazardous Waste Project Specialist	Handles Hotline and develops and implements public education campaigns on the management of household hazardous waste and reduction of hazardous waste	

NAME: **Business Environmental Program**

ADDRESS: Nevada Small Business Development Center
College of Business Administration
Mail Stop 032
University of Nevada, Reno
Reno, NV 89557-0100

PHONE: (702) 784-1717
In Nevada, (800) 882-3233

FAX: (702) 784-4337

MISSION:
The program's mission is to promote compliance with hazardous waste regulations and encourage waste minimization throu information and assistance.

FUNCTION:
The program's function is primarily technical assistance. This assistance includes information on hazardous waste regulations, assistance with regulatory interpretations, and informational and technical assistance related to waste minimization.

PRESENT ACTIVITIES:
- Information clearinghouse
- On-site technical assistance
- Education

TOOLS:
- A toll-free Hazardous Waste Information Line
- Free seminars offered throughout the state on hazardous waste regulations, waste management, and waste minimization.
- Fact sheets on various waste management topics.
- "Nevada Waste Reporter" newsletter

FUTURE ACTIVITIES:
- The program has applied for a USEPA PPIS grant. The grant will provide funds for:
  - a multi-media pollution prevention program
  - pollution prevention training for state and local regulatory personnel
  - a study of the recycling of lead contaminated cupels from a mining process
- Expand funding sources in an effort to provide more services

DEFINITIONS:
P2-activities which prevent the production of wastes which are then subject to treatment or disposal. Includes source reduction and recycling.
WR-also used to describe pollution prevention activities.
WMIN-also used to describe pollution prevention activities, especially as they apply to hazardous and solid waste.
SR-NA
RECYCLING-reuse, recovery and reclamation

HIERARCHY:
1. Source reduction
2. Recycling

A more detailed is counterproductive to the extent that they tend to provide too much information.

AUDIENCE/CLIENTS:
Originally intended to provide assistance to SQGs, the program has expanded its audience to include the entire regulated community. The program has made the mining community a sector of special interest.

ENABLING LEGISLATION:
The program is enabled through legislsation which creates a state Hazardous Waste Fund, and which authorizes the expenditure of a portion of this funding to support a hazardous waste management technical assistance program.

ADMINISTRATIVE BASE:
Operationally, the program is based in the University of Nevada, Reno. It derives its funding from the USEPA and the Nevada Division of Environmental Protection.

BUDGET:
$120,000

SOURCES OF THE BUDGET:
Funding comes from USEPAand Nevada Division of Environmental Protection through the RCRA programs.

PROJECTED BUDGET:
$120,000

EFFECTIVENESS:
Effectiveness is measured by the number of calls answered on the information line, the number of seminars held and attenders, and site visits completed. Program staff also plan to track the number of documents distributed.

PUBLICATIONS:
A Checklist for Selecting a Hazardous Waste Tansporter
Choosing a Hazardous Waste Management Facility
Managing Empty Containers
Waste Minimization Fact Sheet
A quarterly newsletter, "The Nevada Waste Reporter"

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Kevin Dick Manager	Managing and conducting all program elements.	Engineering Gov't regulatory exper.
2. Mike Magera Graduate Assistant	Information line and training assistance	BS in engineering

Region 10

NAME: **Pollution Prevention Office**

ADDRESS: Alaska Department of Environmental Conservation.
410 Willoughby Ave., Suite 105
Juneau, AK 99802-1795

PHONE: (907) 465-2671

FAX: (907) 789-1218

MISSION:
To protect public health and the environment by preventing pollution to all environmental media.

FUNCTION:
Functions include;
- program integration
- technical assistance/outreach
- cross-agency partnerships
- training facilitation

PRESENT ACTIVITIES:
- Technical Assistance
- Information Clearinghouse
- Waste Reduction Matching Grants
- Hotline/Newsletter
- Local government pollution prevention roundtable
- Assist regulatory agencies incorporate pollution prevention into their activities
- School waste reduction and recycling awards program
- Commissioners Annual Awards program
- Cooperative agreement with the US Department of Defense
- Cooperative agreement to work with Alaska supported industrial alliance

TOOLS:
- Training
- Hotline
- Resource Library
- Workshops
- Audits (follow-up)
- Newsletter The Pollution Prevention Bulletin
- Contracts/ Grants

FUTURE ACTIVITIES:
- Pollution prevention awards program
- Oil and Gas Pollution Prevention Project (FY 92-94)
- Programs w/the Pacific NW Pollution Prevention Research Center (2% set aside for Region 10) funds in support of industry specific research
- Local government training

DEFINITIONS:
P2-embraces all the terms below; includes energy conservation and natural resource management
WR-focuses more on industrial sources with an effort to reduce or avoid the generation of waste at the source
WMIN-focuses on single media reductions in hazardous waste- an alternative to land disposal
SR-reduction or elimination of waste in the production (or activity) process
RECYCLING-reuse of material for its original intended purpose

HIERARCHY:
1. Source Reduction
2. Recycling
3. Treatment
4. Disposal
A.S. 46.06.021 directs the department to give primacy to hazardous and solid waste management practices.

AUDIENCE/CLIENTS:
Statewide responsibilities. Focuses on the general public, large and small industry, and federal facilities.

ENABLING LEGISLATION:
House Bill 478- 16th AK Legislature

ADMINISTRATIVE BASE:
Non-regulatory state agency.

BUDGET:
$366,000

SOURCES OF THE BUDGET:
Federal Grants
State General Revenue Funds

PROJECTED BUDGET:
$391,000

EFFECTIVENESS:
This program was created in 1991. A number of mechanisms have been established, including;

- use the Pollution Prevention Technical Assistance Database to track and target technical assistance,
- conducting data analysis of industry responses to waste reduction questionaire,
- conducting follow-up audits,
- developing workplans for Pollution Prevention Liasons in Regional Offices.

PUBLICATIONS:
- 3 in-house fact sheets
- Pollution Prevention Resource Guide
- Regional workplans consist of elements addressing;
  -pollution prevention integration into permits, enforcement actions, etc.
  -technical assistance such as resource library development, training workshops, voluntary initiatives.
  -targeting and reporting.
- Quarterly Pollution Prevention Bulletin
- Waste Minimization for Coast Guard Installations
- Vehicle Repair
- State Agency Waste Reduction and Recycling

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. David Wigglesworth Chief	Development & implementation of the pollution prevention program	9 years in the delivery of technical assistance at local, state and federal level; Public Health
2. Pricilla Wohl Pollution Prevention Liason-SCRO	Implement South Central Regional Office Pollution Prevention workplan	Industry; Costal Zone management; Planning
3. Bob Goff Pollution Prevention Liason-SERO	Implement Southeast Regional Office Pollution Prevention workplan	RCRA; solid waste
4. Sally Edwards Pollution Prevention IPA-SCRO	Implement 2 yr. oil and gas pollution prevention project	Public Health; Toxicology; Risk Assessment
5. Kris McCumby Pollution Prevention Liason-NRO	Implement Northern Regional Office workplan	Solid Waste

NAME: **Waste Reduction Assistance Program**
Alaska Health Project

ADDRESS: 1818 W. Northern Lights Blvd., Suite 103
Anchorage, AK 99517

PHONE: (907) 276-2864

FAX: (907) 279-3089

MISSION:
To provide information and encourage pollution prevention in homes, communities and small businesses.

FUNCTION:
Program staff provide technical assistance to small businesses and communities. We provide educational services and information.

PRESENT ACTIVITIES:
- Information
- Technical assistance
- Research

TOOLS:
- Information- hotline, newsletter, publications and guides, curriculum, speakers.
- Technical assistance- on-site technical assistance for small businesses; community-wide help for Native Americans.
- Research- conducting a 3 year study on waste oil reduction.

FUTURE ACTIVITIES:
Continuing all of the above, with less emphasis on teaching university cources and more emphasis on the delivery of services to rural areas.

DEFINITIONS:
P2-This program has not found it necessary to formally define these terms, in policy statements. Program staff does refer to other's definitions (such as *Hazardous Waste Minimization* by Freeman.) Program staff also incorporates definitions into their publications. For example, in "Profiting from Waste Reduction in Your Small Business" (1988), waste reduction is defined as "any activity that reduces or eliminates the generation of waste at its source, before it becomes a pollutant or a 'lost' resource."
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:
No need for a formal policy. The hierarchy the program teaches is;
1. Source reduction
2. Recycling/reuse
3. Treatment/disposal

AUDIENCE/CLIENTS:
SQGs
Communities (individuals, local governments, organizations)

ENABLING LEGISLATION:
Not applicable.

ADMINISTRATIVE BASE:
Private non-profit.

BUDGET:
For pollution prevention- $268,000

SOURCES OF THE BUDGET:
State contracts and grants
Federal grants
Private foundation grants
Memberships and donations

PROJECTED BUDGET:
For pollution prevention- $305,000

EFFECTIVENESS:
Effectiveness is measured by numbers of information requests answered (or referred) on the hotline, numbers of businesses visited on-site; numbers of publications produced; production of research reports.
Achievements are reported to state, federal, and foundation project managers.

PUBLICATIONS:
- *Industrial Waste Reduction*- a university curriculum for environmental engineering students.
- "Waste Reduction Guides: Dry Cleaning Business"
- "Waste Reduction Guides: Photo Finishing Business"
- "Waste Reduction Guides: Printing Business"

STAFF:

NAME/POSITION	RESP.	BACKGROUND
1. Kristine Benson Environmental Health Specialist	Manage Waste Reduction Assistance Program	Hazardous waste mgmt.; Local government and non-profit
2. Carl Reller Environmental Specialist	Research on reduction of waste oil	Chemistry, Regulatory
3. Margaret Drumm Environmental Engineer	Hotline, newsletter, and production of guide to solid waste planning	Engineering, water quality
4. Carl Hild Executive Director	Administration of the entire agency	Science and Health
5. Marilyn Fisk Senior Clerk	Layout of publications, office mgmt.	Clerical
6. Sandra Snethen	Secretarial	Clerical

NAME: **Hazardous & Solid Waste Division**

ADDRESS: Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

PHONE: (503) 229-6352

FAX: (503) 229-6124

CONTACT: Mr. Dave Rozell

MISSION:

FUNCTION:

PRESENT ACTIVITIES:

TOOLS:

FOCUS:

FUTURE ACTIVITIES:

DEFINITIONS:
P2-
WR-
WMIN-
SR-
RECYCLING-

HIERARCHY:

AUDIENCE/CLIENTS:

ENABLING LEGISLATION:

ADMINISTRATIVE BASE:

BUDGET:

SOURCES OF THE BUDGET:

PROJECTED BUDGET:

EFFECTIVENESS:

PUBLICATIONS:

STAFF:
NAME/POSITION RESP. BACKGROUND

NAME: **Toxics Reduction Waste Reduction, Recycling and Litter Control Program**

ADDRESS: Washington State Department of Ecology
M/S PV-11
Olympia, WA 98504-8711

PHONE: (206) 438-7541

FAX: (206) 438-7789

MISSION:
Goal: To accomplish resource conservation and pollution prevention through waste reduction and recycling.
Mission: To be the leader and authority in Washington state regarding waste reduction and recycling.
To educate the public about waste reduction and recycling.
To assist business, local and state government and the public in achieving waste reduction and recycling.

FUNCTION:
The program's primary function is to provide technical assistance. Program staff also oversee the implementation of the state's facility planning law. Education efforts focus on household hazardous waste reduction.

PRESENT ACTIVITIES:
- Technical assistance
  (The program has recently completed a technical assistance needs assessment and are using the results to complete a comprehensive technical assisstance plan.)

TOOLS:
- On-site consultations for facility planners
- Guidance manual
- Workshops

FUTURE ACTIVITIES:
- Develop comprehensive technical assistance plan
- Develop industry and process specific written materials

DEFINITIONS:
P2-
WR-all in-plant practices that reduce, avoid or eliminate the generation of wastes or the toxicity of wastes prior to generation without creating substantial new risks to human health or the environment
WMIN-
SR-this term is not used. The program uses "hazardous substance use reduction," which isdefined as, "the reduction, avoidance or elimination of the use or production of hazardoous substances without creating substantial news risks to human health or the environment.

RECYCLING-reusing waste materials and extracting valubale materials from a wast estream. "Recycled for beneficial use" means the use of hazardous waste, either before or after, as a subsitiute for a commercial product or raw material. Recycling does not include burning for energy recovery, use constituting disposal, or incineration.

HIERARCHY:
1. Hazardous substance use reduction/waste reduction
2. Recycling
3. Treatment

AUDIENCE/CLIENTS:
- General technical assistance to all media generators
- Facility planners which include TRI reporters and hazardous waste generators that generate more than 2,640 lbs. if hazardous waste per year.
- Training to local governments (local governments are responsible for providing training SQGs).

ENABLING LEGISLATION:
ESHB 2390 codified as Chapter 70.9SC RCW

ADMINISTRATIVE BASE:
State regulatory agency

BUDGET:
Approximately $1 million

SOURCES OF THE BUDGET:
- Fees from facility planners
- Fees from potential hazardous waste generators
- State Toxics Control Account
- US EPA WRITE grant
- US EPA PPIS grant

PROJECTED BUDGET:
$1.8 million

EFFECTIVENESS:
Have not charted their effectiveness at this time. The state legislature and the public will be very interested in the program's activities.

PUBLICATIONS:
- Waste Reduction in Your Business
- Success Through Waste Reduction
- Waste Reduction Guidebook for Electroplaters
- Waste Reduction Guidebook for Dry Cleaners
- Waste Reduction Guidebook for Printers
- Waste Reduction Guidebook for Photofinishers
- Hazardous Waste Faclilty Plan Guidance Manual

STAFF: NAME/POSITION	RESP.	BACKGROUND
1. Bob Burmark Environmental Engineer	WRITE Grant Coordinator	Industrial
2. Mary Harrington Environmental Planner	Cross-program issues	Clean-up
3. Lynn Helbrecht Environmental Specialist	Technical assistance	Training
4. Judy Kennedy Environmental Engineer	Research and development & TA	Engineering
5. Bob Lemke Environmental Planner	Facility planning coordination	Program planning/ budget
6. Larry McCallum Environmental Planner	Fees administration	Local gov't. planning
7. Peggy Morgan Environmental Specialist	Technical assistance	Regulatory
8. Nancy Patterson Technical Writer	Guidance Man. development	Business planning/ Teaching
9. Paige Sorenson Environmental Educator	Public education	Environmental education
10. Stan Springer Environmental Engineer	Section Supervisor	Water quality
11. Patricia Jatczak Environmental Specialist	Local gov't. P2 networking	
12. John Nagiecki Environmental Specialist	Technical assistance	Air
13. Dee Williams Environmental Specialist	Technical assistance	Industrial
14. Max Linden Environmental Specialist	Technical assisance	All media
15. Mark Benedict Environmental Specialist	Technical assistance	
16. Russ Taylor Environmental Engineer	Technical assistance	All media

17. Dennis Johnson Unit Supervisor	Supervisor of the Unit	Solid Waste
18. Paris Greenlee Environmental Engineer	Technical assistance	Regulatory/solid waste
19. Burt Hamner Environmental Planner	Technical assistance	Business-administration, Water quality
20. Dave Williams Environmental Planner	Technical assistance	Legislative