



Pollution Prevention & Compliance Successes Through Technical Assistance

Department of Ecology
Hazardous Waste and Toxics Reduction Program

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Program Mission

The mission of the Washington State Department of Ecology's (Ecology) Hazardous Waste and Toxics Reduction Program (HWTR) is to prevent pollution and promote safe waste management.

Pollution prevention is the use of processes or practices that reduce or eliminate the use of hazardous substances and the generation of pollutants or waste at the source. Pollution prevention also includes practices that reduce the use of energy, water, or other resources through conservation or more efficient use.

Purpose of the Report

This report describes the HWTR Program's technical assistance activities and its successes in promoting pollution prevention and compliance with the state *Dangerous Waste Regulations*.

This document is an update to the previous edition, publication number 98-417, published in October 1998. The original publication of "*Pollution Prevention and Compliance Successes Through Technical Assistance*" reports the HWTR Program's technical assistance activities from 1990 through June 1998. This publication covers the program's technical assistance activities from July 1998 to June 1999. This is not a comprehensive summary, but a snapshot of various activities performed by HWTR staff members as they assisted businesses with regulatory compliance and pollution prevention.

What is Technical Assistance?

The HWTR Program characterizes technical assistance as activities that promote sound environmental practices. The program provides information on methods, technologies, regulations, incentives and funding to businesses, agencies and organizations to help them conduct their activities in a manner that protects human health and the environment.

Technical assistance activities are frequently developed through relationships with trade and business associations. The aim is to give businesses “one-stop shopping” — the availability of multiple resources that can help industries achieve compliance and make progress in preventing pollution. This can often be efficiently accomplished through projects focusing on businesses within a selected industry.

Technical Assistance Activities

HWTR technical assistance activities are based on the desire to understand what motivates an industry to manage waste responsibly. This is accomplished through significant interaction, discussion, and cooperation between business and Ecology. Technical assistance activities include helping the hazardous waste generator:

- ✓ interpret and comply with dangerous waste regulations;
- ✓ prepare and implement pollution prevention plans;
- ✓ comply with reporting requirements;
- ✓ reduce, recycle and otherwise properly manage their hazardous wastes and materials;
- ✓ develop industry and Ecology partnerships; and
- ✓ understand the requirements of Water Quality and Air Pollution regulations.

Integrating Pollution Prevention and Compliance Assistance

The HWTR Program provides two types of technical assistance:

- 1) Toxics reduction staff, including engineers and planners, help businesses develop and engineer systems to help reduce or eliminate dangerous waste and associated management costs.
- 2) Environmental specialists provide compliance assistance during routine site inspections. They help businesses comply with the dangerous waste regulations, to ensure proper waste management practices and record keeping.

Far more businesses exist in Washington State than program staff can inspect. Therefore, the program strongly emphasizes helping businesses reduce waste and gain compliance voluntarily through technical assistance and education.

Evaluating the Success of Technical Assistance

Evaluating the success of environmental programs is always a challenge. Whenever possible, the HWTR Program tries to evaluate its technical assistance efforts. This is accomplished through return visits, surveys, or keeping in contact with businesses via meetings and phone calls.

Watch for the stars (★) - they lead you to results of the section you are reading.

Chapter 2

Compliance Assistance

Background

Compliance inspectors perform much of their daily work in a “technical assistance mode.” The inspector serves as a source of regulatory information and provides technical assistance to facility managers by directing them to useful sources of information relevant to problems observed at the facility. The inspector may discuss remedial actions, and may refer questions and problems to other state personnel with pertinent expertise.

Some inspections are either announced as technical assistance visits by the inspector or are requested as such by the facility. Tracking of violations and follow-up are not allowed for technical assistance visits. HWTR Program policy states that the first visit by HWTR inspectors to a business will typically be treated as technical assistance.

In addition to the technical assistance provided in the course of routine inspections, some special compliance assistance projects are described below.

Updated Label Software

‘Hazardous Waste Label’ software enables generators to print their own hazardous waste labels, including risk labels, accumulation labels, and shipping labels. This useful resource has been updated to be more “user-friendly.”

Originally created in 1997, HWTR staff improved the ‘Hazardous Waste Label’ software by reorganizing the label order and preparing a table of contents with “hyperlinks” for easier search capability. Spanish and English versions of the software are available, both for MS Word 6.X and MS Word 97 users. The label software provides a cost effective and consistent method to help facilities comply with dangerous waste labeling requirements.

- ★ HWTR staff have distributed over 500 label software diskettes to hazardous waste generators since this project began.

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- ★ The label software has been a popular and widely requested handout item at our Pollution Prevention and Generator Workshops.
 - ★ The software is an effective “customer service” tool for HWTR staff to help generators comply with the dangerous waste labeling requirements.
 - ★ These labels will be available at our website www.wa.gov/ecology/hwtr.

Delinquent Annual Reporter Project

Each year, many regulated generators fail to submit their required annual dangerous waste report and are considered to be “delinquent.”

HWTR staff at the Northwest Regional Office are helping people who are delinquent in filing their annual reports to understand the reporting requirements, and complete late paperwork. This technical assistance starts with a site visit, in which generators are instructed about reporting requirements, and their questions are answered. The visit is followed-up with a phone call to make sure that the necessary paperwork has been completed.

The companies that receive the visits benefit by having a personal link to Ecology. This allows them a comfortable avenue to ask questions, receive guidance documents, and get referrals to other Ecology staff if needed. The HWTR Program benefits because closed sites are removed from their database.

- ★ 113 sites were visited.
- ★ 32 sites turned in completed paperwork.
- ★ 15 sites were no longer active, so their RCRA Site ID numbers were withdrawn from the database.

Increased Generator Contact Visits

The purpose of Increased Generator Contact (IGC) visits is to cover an entire industry or geographic area of small and medium quantity generators to educate them on safe waste management.

IGC visits allow for a large number of facility contacts in a relatively short amount of time. They are designed to be less than one hour long and are strictly voluntary informational visits. Examples of this type of project follow. (Another example of an IGC visit conducted in partnership with county government is described in Chapter 5 under Kitsap County Increased Generator Contact.)

Crown West Industrial Park Increased Generator Contact
Eastern Regional Office HWTR staff visited more than 100 businesses in a large industrial park in the Spokane Valley. They provided waste management, pollution prevention, and multi-media information.

According to a follow-up survey, generators:

- ★ improved their waste management practices;
- ★ gained a better understanding of Ecology's technical assistance role;
- ★ increased their trust in Ecology as a result of direct personal non-regulatory contact; and
- ★ improved their communication with Ecology.

Puyallup Increased Generator Contact

Southwest Regional Office HWTR staff provided IGC visits in Puyallup. They visited 32 small and medium quantity generators, which represented a variety of businesses. The visits were focused on pollution prevention and stormwater issues in addition to hazardous waste compliance. HWTR staff received support from the City of Puyallup in the form of numerous joint-participation site visits.

Chapter 3

Pollution Prevention Technical Assistance

Background

The 1990 Hazardous Waste Reduction Act established a goal to reduce hazardous waste generation by 50 percent by 1995. Since then, steady progress has been made toward this goal. Much of this progress can be attributed to Ecology's pollution prevention planning program. In Washington State, certain facilities are required to prepare a Pollution Prevention Plan.

This requirement applies to facilities that:

- 1) generate more than 2,640 pounds of recurrent hazardous waste ("recurrent" waste is from a generator's on-going production process), or
- 2) report for the Toxics Release Inventory (required reporting of chemicals released to the environment).

There are close to 700 pollution prevention planning facilities that generate over 90 percent of the reported hazardous waste in Washington State.

HWTR staff play a vital role in the success of these Pollution Prevention Plans by providing technical assistance to business, industry, government, the public, and other Ecology staff. They engage in a variety of activities, including:

- ❖ conducting reviews of hazardous substance use;
- ❖ researching industry-specific hazardous substance and waste reduction techniques;
- ❖ providing on-site consultation to hazardous waste generators;
- ❖ reviewing facility Pollution Prevention Plans, executive summaries, Annual Progress Reports and Environmental Management System documents;
- ❖ analyzing new pollution prevention opportunities and techniques;
- ❖ assisting with cost analysis of pollution prevention opportunities; and
- ❖ helping businesses safely manage hazardous waste.

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Canyon Creek Cabinet Company

Implementation Project
Northwest Regional Office
HWTR staff assessed waste management options for aqueous paint clean-up water at Canyon Creek Cabinet Company. On-site treatment options were evaluated, beginning with an initial cost/benefit analysis. Then the facility was asked to segregate aqueous and non-aqueous waste streams. HWTR staff worked with the local POTW and the permit manager at Ecology to determine on-site treatment requirements.

The project proved to be very successful. Canyon Creek Cabinet Company anticipates the elimination of approximately 2,400 gallons per year of dangerous waste (20,000 pounds), saving about \$9,600 annually.

To evaluate the effectiveness of technical assistance to Pollution Prevention Planning facilities, HWTR staff conducted a survey. Survey respondents said:

- ❖ The planning process was helpful and not difficult.
- ❖ The plan took an average of 38 hours to prepare.
- ❖ The guidance manual was helpful.
- ❖ Technical assistance provided by HWTR staff was the most valuable aspect of the planning process.
- ❖ All facilities planned to implement their plans, and all expected to save a significant amount of money by doing so.

In recent years, a number of important trends in pollution prevention technical assistance have emerged:

- ★ Projects that focused on specific industry groups have been very successful.
- ★ The Internet has provided a wealth of information that HWTR staff use to help companies research new methods and technologies and share successes. For example, HWTR staff developed a “Pollution Prevention (P2) Tool-Box” complete with pollution prevention strategies that are shared with business people.
- ★ An increasing number of companies are developing comprehensive Environmental Management Systems (EMS) that go beyond the required Pollution Prevention Plan. HWTR staff have been helping to promote those efforts.

The technical assistance provided to facilities frequently results in saving them significant amounts of money each year, as well as increasing regulatory compliance and decreasing the liabilities associated with their hazardous substances and wastes.

In addition to the assistance routinely provided to planning facilities, HWTR staff conducted several workshops, round-table meetings, and special projects aimed at improving pollution prevention. These are described further, beginning on the next page.

Workshops for Pollution Prevention Plans and Annual Progress Reports

Northwest Regional Office HWTR staff offered four workshops for hazardous waste generators to assist with their Pollution Prevention Plans and Annual Progress Reports (APRs).

Two of the workshops were geared toward first time pollution prevention planning facilities and facilities needing to complete a Five-Year Update to their original Pollution Prevention Plan. The other two workshops were primarily for planning facilities submitting their first APR and those with new staff in need of assistance.

The half-day workshops presented by HWTR staff included development of a Pollution Prevention Plan for a fictitious metal fabrication company. In addition, the audience offered pollution prevention opportunities using examples from their respective companies. Publications related to waste minimization and hazardous waste compliance matters were provided. A presentation on the benefits of pollution prevention to employee health and safety was one of the more popular segments of the workshops.

There were several positive results of the pollution prevention planning workshops:

- ★ Eighty-one people attended the four workshops.
- ★ Pollution Prevention Plans received from workshop attendees were generally complete, well-prepared, and arrived on time.
- ★ Following the workshops, HWTR staff received numerous site visit invitations and requests for publications or information.

Evaluations indicated that the workshops were very valuable. Many people commented that the workshops helped them understand the planning requirements and that the handouts were useful for reference. One participant stated, "Thanks for being so willing to help and [for being] non-threatening. This kind of accessibility is refreshing"

A representative from a dry dock company gave an unsolicited testimonial and told the rest of the attendees how HWTR staff had helped his company reduce waste, save money and stay in compliance.

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Color Tech, Inc.

Implementation Project
Northwest Regional Office
HWTR staff conducted a site visit to Color Tech, Inc., a metal painting and powder coating facility located in Seattle. The purpose of the site visit was to assist the facility representative with finishing both their Pollution Prevention Plan Update and their Annual Progress Report. Specific pollution prevention opportunities identified included:

Plastic Media:

The facility could lease the plastic media used in paint stripping rather than purchase it. This allows the company owning the media to reuse the ingredients into their raw material feedstock when they make products.

Spent Sandblast Grit:

The facility could send the spent sand-blast grit to a recycler to be used as feedstock in a cement kiln because it does not designate as a dangerous waste.

The facility implemented these recommendations, saving approximately \$12,000, and diverting a considerable amount of waste from the landfill.

The Environmental Management System (EMS) Alternative

The Environmental Management System (EMS) Alternative to pollution prevention planning allows a facility which has a functioning Environmental Management System to substitute documentation of that system for preparation of a new Pollution Prevention Plan or Five-Year Update.

The facility must document how their system meets a set of predefined pollution prevention criteria and agree to an on-site visit by an HWTR staff person before they are approved for this alternative. EMS-alternative facilities are still required to prepare an annual performance report to Ecology, which describes progress toward achieving pollution prevention goals.

Environmental Management System Roundtable

Northwest Regional Office HWTR staff conducted a roundtable meeting to discuss the Environmental Management System (EMS) Alternative. Approximately 30 representatives from public and private pollution prevention planning facilities throughout the state attended. They had either successfully implemented an EMS or shown interest in developing an EMS.

The roundtable meeting allowed facilities the opportunity to share ideas, strategies, and results of the EMS process. A contact list was prepared and distributed to roundtable participants to encourage them to continue networking with one another.

The meeting and a post-meeting survey helped identify facility objectives and the major EMS-related priorities and issues. The survey indicated that 96 percent of the respondents would be interested in attending future EMS meetings. The majority of respondents indicated that their objectives for attending the roundtable had been met.



Helping

City of Seattle Implement its Environmental Management System

The City of Seattle has developed an Environmental Management System (EMS) and formed an Office of Environmental Management (OEM). By visiting individual pollution prevention planners and coordinating with the OEM's Director, Ecology has been able to help implement the EMS.

The city welcomes ongoing assistance from Ecology. The specific type of help needed will vary from department to department.

The results include an increased awareness by individual department personnel of the contents of the EMS, good intergovernmental coordination, increased compliance by departments with hazardous waste regulations, and increased knowledge of pollution prevention techniques.

For more information on this project, visit <http://www.ci.seattle.wa.us/oem/>.

TREE - Basin Frozen Foods

Ecology's Toxics Reduction Engineer Exchange (TREE) team uses engineering analysis to reduce environmental impacts, facility costs and regulatory requirements. HWTR engineers spend three to four weeks working with a facility analyzing what pollution prevention opportunities exist and helping companies implement them. The technical assistance is provided at no cost to the company. Ecology started the TREE program in 1997 when the agency realized that general technical assistance was sometimes not enough to help companies achieve pollution prevention.

Recently, the TREE team assisted Basin Frozen Foods, a potato processor, reduce the amount of water it was using to produce frozen hashbrowns. The company will use the water savings to add a French fry line within their existing water resource and discharge permits. This prevented an increase in discharge that was scheduled with the new fry line.

Using suggestions from the TREE team's report, Basin Frozen Foods reduced water use by 80,000 gallons per day. The report identified an additional 121,000 gallons of water per day that could be eliminated by implementing additional conservation measures. Most of this water will be redirected to the new French fry operation.

Removing much of the starch contaminants from the water improved the quality of the discharged water. The company's wastewater should become about 80 percent cleaner.

Basin Frozen Foods gave a positive recommendation to Prototron Circuits, the next company to be assisted by the TREE team.

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Industrial Rubber and Supply

Industrial Rubber and Supply in Fife switched from methylene chloride-based adhesives to acetone-based formulations, reducing regulated emissions by more than 19 tons per year. This change not only relieved the intense regulatory pressure on this facility, it helped them to achieve compliance with their new air permit, avoid severe penalties and provided time for the facility to search for a more permanent solution (acetone is quite flammable).

Southwest Regional Office HWTR staff discussed the alternatives, advantages and disadvantages with this company. They also worked with the Puget Sound Clean Air Agency to make sure Industrial Rubber was able to comply with their permit.

Background

The HWTR Program conducts sector projects and single-industry campaigns to develop effective technical assistance for specific groups. Focusing on a sector or industry enables staff to better address known pollution prevention problems and research opportunities for increased pollution prevention.

Working closely with a specific industry group helps HWTR staff understand what motivates the industry to improve their pollution prevention and compliance practices. This interaction and cooperation enables HWTR staff and the businesses themselves to identify the pollution prevention and compliance measures that are best suited to the industry. The process is mutually beneficial; both the industry and HWTR staff have the opportunity to develop specific pollution prevention and compliance strategies that are successful.

Working with industry groups also enables Ecology to reach a broader audience. Rather than work with one or two metal finishing shops, for example, it is more productive to share the information gathered with all metal finishing shops statewide. Following are some examples:

“You Auto Recycle”

Promoting environmentally-friendly practices at auto-wrecking yards was the focus of the “You Auto Recycle” project in central and eastern Washington. An HWTR staff person worked closely with the Automotive Recyclers of Washington throughout this project.

Finding new uses for old cars and old car parts is a valuable service provided by auto wreckers. Ecology’s project went a step further by showing auto wreckers how to safely collect vehicle fluids, handle old batteries, and avoid spills and accidents at the work site.

- ★ The “You Auto Recycle” project resulted in distribution of 500 vehicle recycling manuals and videos.
- ★ Three workshops were conducted, with 120 people in attendance.

Hazardous Waste Transporter Project

A staff person from the Eastern Regional Office worked with hazardous waste transporters throughout Washington State. The objective was to help Ecology and transporters gain a better understanding of hazardous waste transportation activities in the state. This project opened communication channels between Ecology and companies that transport hazardous waste. The staff visited many transporters to share information and worked cooperatively with the stakeholder committee to develop new rules.

The next phase of this project is to facilitate educational activities on new regulatory requirements and publish a technical guidance document.

Paint Manufacturing Sector Project

The goal of this sector project was to achieve measurable reductions in material consumption, toxicity and releases to the environment from paint manufacturers in the state. Staff collaborated with the Northwest Paint Council to conduct technical site visits and develop guidance for the industry to help it reduce its wastes. Project achievements were noteworthy. The Paint Manufacturing Sector Project team:

- ★ conducted surveys to assess environmental concerns, practices and issues;
- ★ incorporated survey information into a guidance document;
- ★ provided compliance and pollution prevention technical assistance to all paint manufacturers in Washington State (25 facilities);
- ★ distributed information about pollution prevention, dangerous waste compliance, stormwater compliance, and solid waste issues; and
- ★ developed a cooperative, strong industry-government relationship.

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Lilly Industries

Lilly Industries, a wood coatings manufacturer in Seattle, was one of the companies that received focused technical assistance from members of the Paint Manufacturing Sector Project team. Lilly Industries later reported that they reduced solvent use by 616,000 pounds in 1998, saving \$92,490.

Due to the success of this project, the Paint Manufacturing Sector Project Team was recognized in the report from the Governor's Office "Governing for Results," Edition Number 8.

Metal Machining Sector Project

A team of HWTR staff members worked with the metal machining sector statewide. The purpose of the Metal Machining Sector Project was to evaluate the industry's current practices, identify pollution prevention opportunities and educate program staff about pollution prevention issues and opportunities in this sector.

Metal machining representatives were invited to attend a roundtable discussion on pertinent issues relating to metal machining. At the roundtable, one participant said that, before coming to the roundtable, he felt that his company was one of the top facilities in regards to environmental management, but after attending he felt that there was room for improvement.

Project achievements included:

- ★ site visits were made to 12 facilities;
- ★ 350 sector reports were published and distributed;
- ★ 35 representatives participated in a roundtable meeting hosted by Ecology;
- ★ the team presented the results of the project to 40 agency staff; and
- ★ metal machining industries within Washington improved their understanding of pollution prevention opportunities, best management practices, waste management guidelines, and disposal options.

Korean-American Dry Cleaners

There are numerous Korean-American dry cleaning business owners in the Puget Sound area who have regulatory compliance challenges due to a language barrier. These business owners were provided the technical assistance needed to comply with state dangerous waste regulations by a staff person at Ecology's Northwest Regional Office fluent in both Korean and English.

Vital compliance and pollution prevention topics were discussed in Korean during the site visits. The anticipated benefits of this project include:

- ★ Employee exposure to perchloroethylene, a potential carcinogen, can be minimized.
- ★ Businesses will stop discharging perchloroethylene-contaminated wastewater into sewer systems, which will protect soil and groundwater.
- ★ Business owners can avoid potential site investigation and cleanup costs.
- ★ Korean-speaking dry cleaning business owners are more likely to call Ecology with their questions, because they can speak to someone in their native language.

Fiberglass Reinforced Plastics Sector

A Southwest Regional Office HWTR staff person participates in an on-going sector project with the fiberglass reinforced plastics industry. Activities include keeping up with the industry by going to conferences and participating in workshops and roundtables with the local industry and associated government agencies.

Working in cooperation with the Northwest Pollution Prevention Resource Center, a website for the fiberglass reinforced plastics industry was developed. The website gives an overview of the industry and its environmental problems, and focuses on pollution prevention technologies to reduce air emissions and waste. The web address is <http://www.pprc.org/pprc/sbap/fiber/fibertoc.html>.

Chapter 5 Local Government and School District Partnerships

Background

HWTR staff have increased the effectiveness of technical assistance by working cooperatively with local government and school districts. Sharing expertise and resources helps each organization reach a larger audience and achieve success in their respective missions. Some recent projects are described below.

Whatcom Watershed Project

Ecology's Whatcom Watershed Project connects pollution prevention to improvements in water quality. The project has provided a catalyst for change in Bellingham and the surrounding community.

HWTR staff from the Bellingham Field Office and the Northwest Regional Office are engaging in a wide range of activities addressing local concerns. State and local government employees, aided by a \$250,000 grant from the U. S. Environmental Protection Agency, are working in teams with community members. A key part of the project is the Residential and Business Pledge. Participants sign a pledge to make behavioral changes to benefit the health of their watershed. Here are some of the measures of success to date:

- ★ Residents in the study area have taken the pledge to heart, dramatically changing behaviors to reduce pollution. (For example, 49 percent of the households surveyed reduced weed killer use.)
- ★ Of the 400 businesses visited, 310 (75 percent) have taken a pledge to change business practices to prevent pollution.
- ★ Through a grant from the US Fish and Wildlife Service the project purchased a key five-acre parcel of land. The City of Bellingham donated an additional 45 acres of forested wetland. In July 1999, U.S. Senator Patty Murray dedicated these lands as "Salmon Park, a park for salmon."

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- ★ Baseline chemical and biological sampling has been completed and will be followed-up with long-term monitoring to measure environmental changes. These efforts in Bellingham have attracted attention from Olympia to Washington D.C. Other communities in British Columbia, Oregon and Washington are exploring or implementing their own version of the pledge. On November 4, 1999, Governor Locke awarded the Whatcom Watershed Project the “Governor’s Award for Service and Quality Improvement.”

School Laboratory Project – “Rehab the Lab”

Since the fall of 1998, the HWTR School Laboratory Project team has gone into more than 200 schools across the state, providing free non-regulatory technical assistance, including:

- ❖ rearranging chemicals and wastes into compatible storage systems;
- ❖ prioritizing chemicals for disposal;
- ❖ separating discarded chemicals into Department of Transportation (DOT) hazard classes for transportation and disposal;
- ❖ educating teachers about managing dangerous wastes properly and incorporating better inventory-control practices in their laboratories. The results of this effort were:
 - ★ The team identified approximately 20 tons of chemicals in need of disposal during the 1998/1999 academic year and helped prepare for disposal.
 - ★ Teachers received the information and training needed to improve dangerous waste management practices in their laboratories.
 - ★ Packets with information on pollution prevention and lab management practices were mailed to approximately 100 schools throughout the state that had requested the information.
 - ★ This project is estimated to have saved schools more than \$500,000 in consulting and disposal costs.

Kitsap County Increased Generator Contact Project

Ecology's Northwest Regional Office HWTR staff worked with the Bremerton County Health District (BKCHD) to provide outreach to Kitsap County businesses that are in business parks served by septic systems. The goal was to prevent discharges of hazardous waste or industrial wastewater to septic systems.

HWTR staff and BKCHD's Solid and Hazardous Waste Program created a complete list of businesses in industrial parks served by on-site septic systems. The businesses were notified about the project through the local press and personal letters.

A total of 124 site visits were scheduled and completed. At each site visit, after explaining the purpose of the visit, the discussion focused on the wastes generated and proper disposal. Businesses were given an information sheet, and a survey to assist in evaluating the effectiveness of the visit.

The surveys showed that the visits resulted in increased compliance with state and county regulations, more waste diverted to proper disposal, and reduction in the potential for pollution from business sources getting into the ground and groundwater through the septic system. As a result of the visits, generators responded that they were:

- ★ more comfortable with Ecology;
- ★ better able to understand the dangerous waste regulations;
- ★ more likely to look into waste reduction techniques;
- ★ more likely to contact Ecology with dangerous waste questions; and
- ★ better able to manage their dangerous waste.

The Interagency Regulatory Analysis Committee (IRAC)

The effectiveness of technical assistance is improved by participation of HWTR staff in the Interagency Regulatory Analysis Committee (IRAC). IRAC's mission is to create a more effective and efficient means of protecting public health and safety through coordination of regulatory agencies. In addition to Ecology employees, participating agencies include:

- ❖ Puget Sound Clean Air Agency
- ❖ US Environmental Protection Agency
- ❖ Renton Fire Department
- ❖ Washington Department of Health
- ❖ King County Hazardous Waste Management Program
- ❖ Shoreline Fire Department
- ❖ Washington Department of Labor and Industries
- ❖ Seattle King County Department of Health
- ❖ Seattle Fire Department
- ❖ Port of Seattle
- ❖ Kirkland Fire Department

The IRAC was formed in response to frustration expressed by businesses that multiple agencies inspected their facilities and gave them conflicting advice. The committee provides an opportunity for information and expertise to be shared among agencies. The resulting improvement in communication often reduces conflict with and misinterpretations of the requirements.

Businesses benefit when conflict and overlap between regulations are identified and resolved. Recent issues addressed by IRAC include pesticides in shipping containers, chlorine management at swimming pools, and oil/road dust management issues.

The IRAC work groups have resolved issues by working on code changes and providing clarification and education. The success of this program has been demonstrated in the following ways:

- ★ Similar IRAC groups have been formed by regulatory agencies from other counties including Pierce, Thurston, Whatcom, Island, Skagit, and Snohomish.
- ★ The IRAC's documents have been used as models for identifying and solving conflicting regulations in other counties in Washington, the City of Portland, and in other states.
- ★ King County IRAC was honored with an award

for program innovation from the prestigious North American Hazardous Materials Management Association in 1997.

- ★ The IRAC was showcased at a meeting of officials from the Occupational Safety and Health Association (OSHA) and the Environmental Protection Agency (EPA) in Washington D. C. as an example of a system that improves coordination between the various agencies in Washington State.

Background

Ecology's HWTR Program employs a variety of innovative methods to: educate hazardous waste generators, encourage them to comply with the dangerous waste regulations and engage in pollution prevention activities. These methods include the Governor's Award for Outstanding Achievement in Pollution Prevention, developing website applications, maintaining a Hazardous Substance Information Hotline, and one-on-one help with TurboWaste, the annual reporting software. Additional information on these projects is included below.

Governor's Award for Outstanding Achievement in Pollution Prevention

This annual award program recognizes businesses and facilities that have demonstrated success in pollution prevention and is administered by the HWTR Program for the Governor. In addition to honoring businesses that achieve outstanding pollution prevention, this award serves to educate other businesses about pollution prevention opportunities.

Applications are reviewed and judged by an external panel of experts. Winning facilities are selected because they have demonstrated the benefits of reducing or eliminating use of toxic materials, generation of hazardous waste, emissions to the air and/or discharges to water. They must also have demonstrated excellence in overall environmental commitment and willingness to share their knowledge with the community.

1999 Governor's Award Recipients

Apollo Spas

Apollo Spas, located in Spokane, is a leader in pollution prevention in the fiberglass-reinforced-plastics industry. The company has already reduced its styrene emissions to the air by 99 percent — and it is actively working to achieve “zero discharge.” Apollo Spas has developed a method using an alternative to styrene. The company expects to recover its investment with quicker production time, reduced environmental regulation, and reduced overhead.

Birmingham Steel Corporation

Birmingham Steel, located in Seattle, is the only large-scale steel-melting and recycling facility in the state. Built in 1905, Birmingham Steel purchased the plant in 1991 and invested more than \$145 million to create one of the most efficient and environment-friendly steel plants in the world. Many of the improvements helped to reduce noise and emissions in order to limit their effects on the local community. The company's waste reduction measures include reducing hazardous substance use, recycling waste, and replacing old equipment with energy-efficient machinery that produces less waste and emissions.

Canyon Creek Cabinet Company

This Monroe company is one of the largest kitchen and bath cabinet manufacturers in the northwest, employing about 400 workers. Canyon Creek Cabinet Company was formerly classified as a major source of hazardous waste and emissions. In 1991 the company implemented a pollution prevention plan and adopted a goal of becoming an environmental leader. Working closely with the HWTR Program and the Puget Sound Clean Air Agency, Canyon Creek became the only wood-finishing company in the state to switch to waterborne products. The change greatly reduced hazardous air emissions, and avoided the requirement for a special air permit.

Eden Advanced Pest Technologies

This pest-management company's pollution prevention program focuses on reducing pesticide use. The company focuses on inspection and monitoring, long-term preventative measures, the use of non-chemical methods as a first response, and no automatic spraying unless there is evidence of pests. Pesticides are used judiciously and only as a last resort. Training, tools and new technology for employees are major factors in their success. Eden has service centers in Oregon and Washington, and its corporate office is in Olympia.

Elliott Bay Marina

This 1,200-slip marina in Seattle is known for its commitment to environmental protection. In fact, Elliott Bay Marina was designed and constructed with pollution prevention in mind. The marina provides many valuable services to its clients, such as absorbent pads for use during fueling, and collecting boaters' hazardous waste to ensure its proper disposal. Perhaps the most important service is educating boaters about pollution prevention. Efforts to educate boaters are reinforced by a zero-tolerance policy for boaters pumping anything overboard.

EnviroStars Cooperative

The EnviroStars Cooperative gives businesses incentives and recognition for reducing hazardous waste, and also gives consumers an objective way to identify environmentally sound businesses. The program started in King County and has grown to include Snohomish, Kitsap and Whatcom counties, and the Puget Soundkeeper Alliance. The Cooperative currently reports a total of 184 businesses that have been recognized as EnviroStars. The publicity provided to businesses helps increase the economic value of pollution prevention measures by encouraging people to support businesses that support the environment.

Hytek Finishes Company

This Kent-based company supplies specialized metal-finishing, anodizing and painting services. Hytek helps its customers produce a wide variety of products for aerospace, recreation, electronics and general-industrial markets. The company has a comprehensive pollution prevention program. It was the first in its industry to eliminate the use of vapor-degreasing and chlorinated solvents to clean machinery parts and has been a leader in the drive to adopt plating technologies that do not use cyanide. Hytek's efforts have resulted in reduced use of toxic materials and generation of waste, reduced atmospheric emissions, and improved water conservation. These accomplishments can be attributed to the commitment of management and full participation from employees.

Omega Pest Management

This small Bremerton company has distinguished itself by its strong commitment to finding new, environmentally safer methods to control pests. In an industry that has traditionally relied on using toxic chemicals to terminate pests, Omega has sought to find new methods and to educate others in the industry about integrated pest management. The company removes conditions that encourage pests, uses mechanical rather than chemical methods, chooses the least-toxic product, and targets problem areas instead of an entire building. Safety for workers and customers is first priority, and harmful pesticide contamination of the environment is avoided.

Dangerous Waste Generator Workshops - 1999

A team of seven HWTR staff presented 10 full-day workshops for dangerous waste generators at locations throughout the state. The workshops covered topics related to compliance and pollution prevention. Workshop participants were instructed how to:

- ❖ achieve benefits of lower generator status;
- ❖ designate all industrial wastes before disposing of them;
- ❖ manage waste properly;
- ❖ complete the Dangerous Waste Annual Report quickly and correctly;
- ❖ avoid common compliance violations;
- ❖ minimize purchase of hazardous materials to avoid generating dangerous waste; and
- ❖ reduce waste to increase profits.

HWTR staff used a variety of teaching techniques to deliver the information. Individual presentations were integrated into a skit format, which facilitated participation from members of the audience. In total, more than 900 participants attended the 10 workshops. Evaluations indicated that most people found the workshops to be informative and that they liked the approach.

Comments from workshop evaluations:

- ★ “To the point in a relaxed atmosphere.”
- ★ “Very, very good course – one of the best. Use of video/multimedia apparatus very good. Mock business kept it from being boring.”
- ★ “Professionalism, humor, good info, take-home stuff, friendly, helpful staff, good workbook.”

TurboWaste Technical Assistance

HWTR staff developed a software product, called TurboWaste, which generators can use to prepare their Dangerous Waste Annual Report. TurboWaste has numerous useful features, including data audits, data analysis functions, and the ability for generators to submit their reports on disk or via the Internet, rather than sending in paper copy reports.

During the past three years, HWTR staff have provided both on-site and off-site technical assistance in electronic reporting to companies using TurboWaste. The companies requesting help have been large corporations with multiple reporting sites. Waste management facilities, military installations, and environmental consultants have been helped as well.

During the site visits, companies were assisted with installing the software and importing information from their own data systems into TurboWaste. After learning how to import data, these companies required little further assistance.

Meetings were also conducted to demonstrate TurboWaste was demonstrated and discuss reporting requirements. At each meeting, HWTR staff emphasized the responsibility of the individual companies to submit high-quality data and showed them the software features that could be of most service.

The technical assistance efforts succeeded in reducing reporting errors and increasing data quality.

Hazardous Substance Information Office

This office provides technical and regulatory assistance to the general public, businesses and the news media. Requests are received via the toll-free information line, the Community Right-to-Know website and in writing. Most inquiries relate to questions about hazardous substances/chemicals, Emergency Planning and Community Right-to-Know (SARA Title III), and the hazardous waste education fee. The information line provides direct service for about 450 callers each month. Many other callers opt to be routed to the prerecorded messages for frequently asked questions.

HWTR Website

The website provides online information and assistance on a variety of topics, including electronic annual reporting, the *Dangerous Waste Regulations*, *Toxic Release Inventory Report*, *Pollution Prevention Planning Guidance Manual*, current and back issues of 'Shoptalk,' chemical test methods, and publications. It also provides an Environmental Laws and Rules Home Page and names and phone numbers of all HWTR staff. The website www.wa.gov/ecology/hwtr receives approximately 1200 visitors each month.

Background

Ecology's HWTR Program typically produces 25 to 30 new publications each year. Each publication is distributed to at least 200 recipients, with the most popular documents distributed to as many as 1,000 recipients.

Most publications are intended to help the dangerous waste generator learn Washington's regulations and permitting requirements. In addition, many publications provide information on how to responsibly reduce and dispose of dangerous waste.

Recently, more emphasis has been placed on making publications available on-line through Ecology's website. HWTR's goal is to reduce the number of paper copies produced and improve website publication. Paper copies of publications won't be completely replaced by website publications because some clients do not have easy access to the Internet. However, an effort will be made to encourage people to use the Internet to view or print HWTR publications reducing paper consumption, printing and mailing costs.

The following are examples of publications that support HWTR's technical assistance activities (you can find them at www.wa.gov/ecology/hwtr):

Shoptalk

Shoptalk is the program's quarterly newsletter. It contains "reader-friendly" information for generators about hazardous waste management and pollution prevention. *Shoptalk* is distributed to more than 25,000 readers.

Calculating the True Costs of Pest Control (Publication #97-433)

This guide provides a simple method to help schools and other businesses estimate and compare the total costs of a conventional pest management program with the costs of an Integrated Pest Management (IPM) program.

Step-by-Step Guide to Better Laboratory Management Practices
(Publication #97-431)

This guide was developed to improve hazardous waste management practices and to assist implementation of pollution prevention at community and technical colleges. It explains how to separate, manage and characterize chemicals, minimize laboratory waste and improve laboratory health and safety.

Metal Machining Sector - Pollution Prevention Assessment and Guidance (Publication #99-412)

This report follows up on technical assistance provided to the metal machining industry. The report highlights pollution prevention practices already underway in the industry and recommends additional pollution prevention practices. The report also discusses compliance issues involved in the disposal of waste metalworking fluid.

Conclusion

The Hazardous Waste & Toxics Reduction Program is dedicated to its mission of preventing pollution and fostering safe waste management. Success measures include:

- ❖ reduction in pounds of hazardous waste generated;
- ❖ reduction in pounds of toxic substances released;
- ❖ increases in hazardous waste reduced, recycled, or treated;
- ❖ decreased percent of incidents of environmental threats per inspection; and
- ❖ decrease in percent of businesses with significant compliance violations.

Measures of Success

The success of HWTR's technical assistance is evident from the decline in the amount of hazardous waste generated in Washington State. The Legislative Report for 1998 shows a decrease of 88 million pounds since 1992, the first year facilities were required to submit Pollution Prevention Plans. When the data is adjusted for changes in the economy, the impact is more dramatic. The adjusted level of 165 million pounds in 1998, compared to 317 million pounds in 1992, equates to a 48 percent reduction.

The most recent data shows a 10 million pound decrease from 1997 to 1998. When the data is adjusted to reflect increases in business levels, this equates to a reduction of 13 million pounds for 1998.

HWTR staff members help generators to reduce the amounts of hazardous substances used and hazardous waste generated, and to improve waste management practices. As a result, generators report that they have also succeeded in reducing hazardous emissions to air and water, as well as reducing business costs.

Future Priorities

Technical assistance activities will continue to be a top priority of HWTR in the coming years, with staff members engaging in many of the same activities as described in this report. To maximize the use of HWTR's reduced resources, technical assistance efforts will be focused on the areas of highest need and/or impact.

The following is a list of some planned projects:

- ✓ Painting Contractors Sector Project
- ✓ Toxics Reduction Engineer Exchange (TREE) Projects
- ✓ Additional Increased Generator Contact Visits

Also, the Hazardous Waste & Toxics Reduction Program will continue to improve its web page as a means to distribute technical assistance information. Increasingly, program publications will be designed for and distributed on the Internet to reach large audiences and save on printing and mailing costs.