

Air

Protect

LAND



WASHINGTON STATE
DEPARTMENT OF
E C O L O G Y

Water

RESPONDING TO CHALLENGES

TOXICS

PROTECTING THE ENVIRONMENT

PROMOTING STEWARDSHIP

Hazardous

STEWARDSHIP

Sites List

Model Toxics
CONTROL ACT
1994 ANNUAL REPORT

THE MISSION OF THE DEPARTMENT OF
Ecology IS TO PROTECT, PRESERVE
AND ENHANCE WASHINGTON'S
ENVIRONMENT AND PROMOTE THE WISE
MANAGEMENT OF OUR AIR, LAND AND
WATER FOR THE BENEFIT OF CURRENT
AND FUTURE GENERATIONS.

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DIRECTOR'S MESSAGE

Executive summary
MEB

As we look back over the past year we can reflect with pride in the strong successes we have achieved at cleaning up sites with a long history of contamination. As sites become clean, we reduce the risks to the health of our citizens and the environment.

Communities adjacent to these sites are now being revitalized. Here are a few examples of what is being done to transform property contaminated by improper hazardous waste handling or disposal practices into thriving parts of communities.

In Tacoma, 26 parcels are being cleaned up along the Thea Foss Waterway. As each parcel becomes clean and redeveloped, it becomes a viable place for shops, restaurants, and recreational facilities - boosting the city's economy.

The city of Yakima recently held a groundbreaking ceremony to celebrate the development of a criminal justice center. The city is cleaning up the site - contaminated with dry cleaning and other chemicals - to build the center.

In the International District of Seattle, cleanup is underway at the Metro Dearborn site. Plans are becoming a reality to turn the site into a multicultural center for small businesses to take root, elderly citizens to live, and community activities to take place.

Ecology is also helping communities help themselves. In 1994 more than \$13 million was spent to help local governments in eastern and western Washington clean up contaminated landfill sites. Additional grant dollars helped fund local projects aimed at pollution prevention, waste management, and cleanup. We are committed to continue funding these activities.

We are also committed to emphasizing the connections between improper waste management and the quality and availability of our resources. For example, when groundwater is contaminated, less water is available for drinking, irrigation, and other uses.

Looking at these connections is the best way to help local governments and businesses deal with the competing needs of growth and environmental protection as they carry out their waste management activities.

We've done well and we want to do even better.

As we begin a new year we will face new challenges in protecting the environment. Revenue is down, while site investigation and cleanup is on the rise. This year alone, we have investigated nearly 3000 complaints.

To keep pace with the accomplishments we've already made, we are exploring innovative approaches and technologies to get the job done, and get it done quicker. We're looking at ways to speed up cleanup, and we're seeking new cleanup methods that will make sense both environmentally and economically.

As more and more sites become clean, as less waste is generated, and as releases are prevented, Washington State citizens can take pride in the legislation they crafted six years ago. They can take credit for restoring scarred habitat and revitalizing communities - and they can feel confident that we will continue to improve the quality of life in the Northwest.

Mary Riveland

PROSPECTIVE PURCHASER AGREEMENTS DRAFT

One of Ecology's goals is to return cleaned up properties to Washington's citizens for their use. For many reasons, some of these properties will take years to become available again. In 1994, the state legislature authorized "prospective purchaser" agreements to help expedite cleanup of a site planned for redevelopment. The prospective purchaser agreement, which is filed as a consent decree, allows contaminated properties to be cleaned up and restored to use more quickly.

By law, if a person who is not already liable for cleanup wishes to purchase a cleanup site for redevelopment or reuse and can demonstrate substantial public benefit, they may file an application with Ecology to negotiate a prospective purchaser agreement. In 1994 prospective purchaser agreements went on record for four sites: Seattle Commons Project, Northlake Shipyard, Inc., Pierce Transit, and the city of Yakima.

- ❖ As part of an ambitious plan to redevelop a large area of property between Lake Union and downtown Seattle, Ecology agreed to a prospective purchaser settlement on a key parcel with the Seattle Commons group. Seattle Commons plans to develop the parcel into a waterfront park on Lake Union. As part of the settlement, Ecology approved a prior leaking underground storage tank cleanup and a new proposal for groundwater monitoring and sediment evaluations. This will fulfill the cleanup obligations of Seattle Commons and facilitate redevelopment.
- ❖ An agreement with Northlake Shipyard, Inc. allowed them to purchase United Marine International, Inc. on N. Northlake Way and pay into a fund for future cleanup of contaminated underwater sediments. Because the previous owner of the property is in bankruptcy proceedings, future cleanup and use of that property would probably not have occurred without this agreement.
- ❖ Pierce Transit will acquire two city blocks near the Tacoma Dome for redevelopment into a four-story, 1600-car, park-and-ride facility. Under this agreement, Pierce Transit will clean up soils contaminated by petroleum leakage as part of the site redevelopment.
- ❖ To purchase property currently owned by Goodwill Industries, the city of Yakima agreed to clean up soil contaminated with perchloroethylene and monitor the groundwater for two years. The cleanup will be conducted during excavation for the new criminal justice center to be built on site. Other potentially responsible parties on the site will be responsible for groundwater remediation.

WASHINGTON RANKING METHOD REVISED

During the 1994 legislative session, Ecology was requested to revise the way contaminated sites are ranked. The goal was to better reflect the priority given to sites where drinking water is or has a high potential of being contaminated.

Sites are scored and ranked using the Washington Ranking Method following a site hazard assessment. Sites are ranked between "1" and "5", where "1" represents the highest relative risk to human health and/or the environment, and "5" the lowest. This ranking method considers numerous human health and environmental factors to determine the potential threat a contaminated site can pose to surface water, air, and groundwater.

Revisions to the ranking matrix were made with input from an advisory committee and the public. As a result of the revisions, 20 sites were re-ranked from a "4" to a "2"; 33 sites were changed from a "5" to a "3"; and 17 sites remained at a rank of "5". Most of the sites that were re-ranked higher are undergoing some type of cleanup action rather than awaiting remedial action.

HOW SITES ARE CLEANED UP

The Model Toxics Control Act allows a hazardous waste site to be cleaned up through a formal process directly overseen by the state at the expense of potentially liable persons, or when possible, independent of Ecology oversight. Independent cleanups are encouraged for sites such as leaking underground storage tank sites where established methods and technology can be applied predictably.

Site Discovery

Sites where contamination has resulted from a history of improper hazardous waste handling or disposal practices must be reported to Ecology's Toxics Cleanup Program. Potentially liable persons may choose to conduct independent cleanups without assistance from the department, but cleanup results must be reported to Ecology. Special reporting requirements apply to leaking underground storage tanks.

Initial Investigation

The Initial Investigation is Ecology's first look at a contaminated site. Within 90 days of receiving a report of a possible site, Ecology will visit the site and investigate available historical information. Sites are added to Ecology's hazardous sites data base, given a "No Further Action" determination, or passed to the appropriate local, state or federal authority for action.

Site Hazard Assessment

A Site Hazard Assessment is Ecology's first chance to characterize a hazardous waste site. Ecology gathers information to 1) confirm or rule out contamination, 2) identify hazardous substances, 3) identify the site's environmental characteristics, 4) evaluate potential threats to human health and the environment.

Ecology determines either that no further action is needed or ranks the site relative to others that have undergone the same scrutiny. Sites needing cleanup are placed on the Hazardous Sites List and prioritized for further action.

Interim/Emergency Cleanups

The goal of all hazardous waste cleanups is to reduce risk to humans and the environment. Interim and emergency cleanups are used to *speed risk reduction* on portions of a site that pose the greatest threat without waiting for an in-depth study to be finished. Interim or emergency cleanups often occur simultaneously with a phase in the long-term cleanup process. **Public notice and comment required.**

Remedial Investigation/Feasibility Study

Eliminating human health and environmental impacts at a hazardous waste site is a sizable engineering project. Careful study and planning are needed to make sure the chosen cleanup methods make sense environmentally and economically.

The remedial investigation provides specific and detailed information about the extent of contamination at a site. During the feasibility study, Ecology and the potentially liable persons use that information to develop and evaluate options for the cleanup.

Public notice and comment required.

Cleanup Action Plan

Ecology chooses a preferred cleanup option from alternatives in the feasibility study and presents its decision for public comment as a "cleanup action plan." The plan identifies a preferred method of cleanup and specifies cleanup standards ("how clean") and other requirements at the site.

Public notice and comment required.

Cleanup Construction

Actual cleanup begins once the cleanup action plan is finalized and a consent decree or enforcement order is issued. Cleanup includes plan design, construction, and the operation and monitoring of cleanup actions.

Ecology requires the use of permanent cleanup methods whenever practical. Techniques for handling hazardous substances on a site are listed in preferred order:

- 1) Reuse or recycle
- 2) Destruction or detoxification
- 3) Removal and treatment/destruction of contaminants
- 4) Immobilization
- 5) Disposal in a properly designed landfill
- 6) Isolation or containment in place
- 7) Deed/access controls and monitoring

Public notice and comment required.

Operation & Maintenance/Monitoring

Before removal from the Hazardous Sites List, all sites go through a period of performance monitoring to make sure the cleanup was effective. Many sites also require operation and maintenance of the chosen cleanup method. For example, cleanup of contaminated groundwater often requires the operation of a "pump and treat" system for many years.

Removal From the Hazardous Sites List

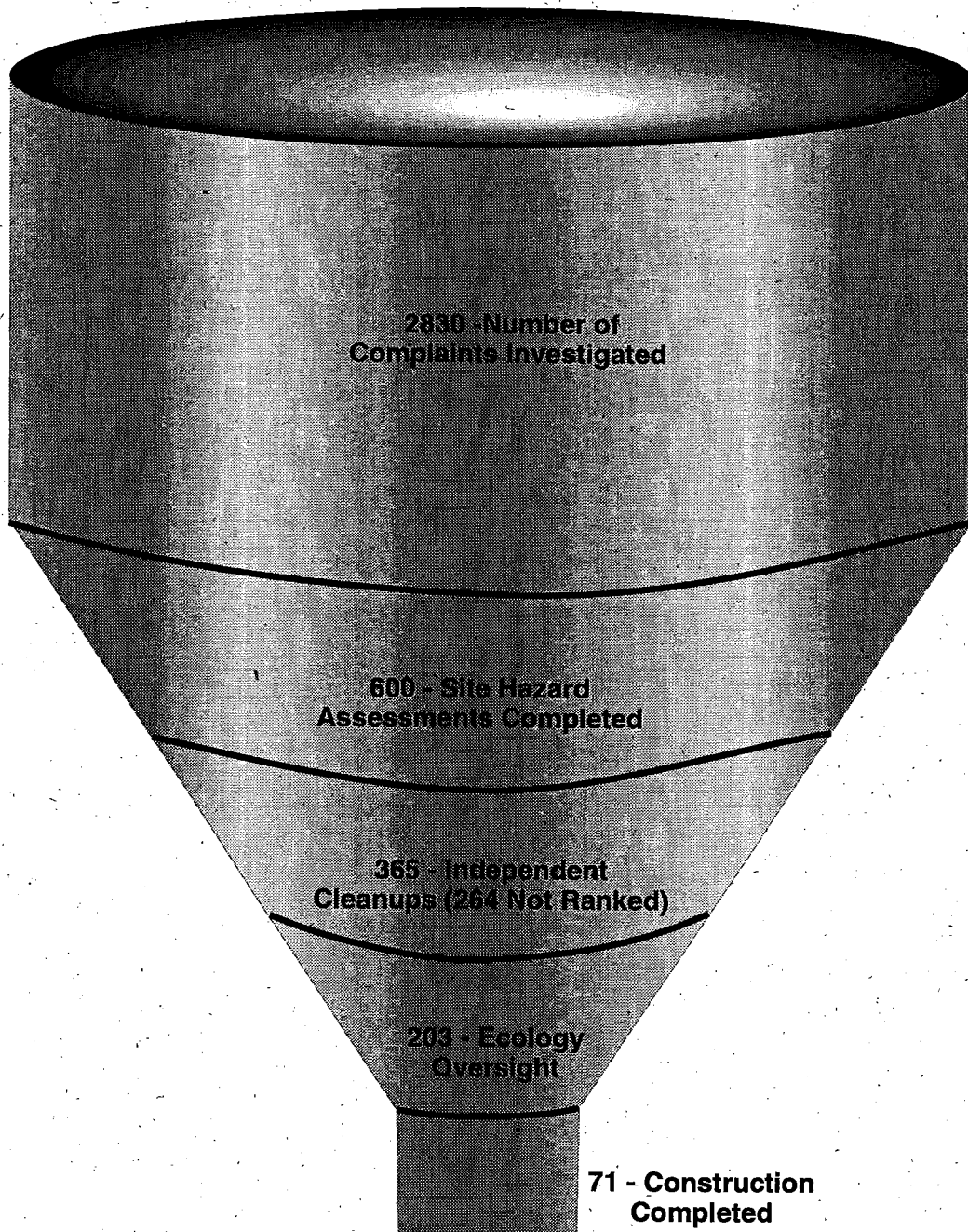
A site may be removed from the list once cleanup standards have been met or containment and control of contaminants have proven effective. Monitoring must be conducted to confirm the long-term effectiveness of the cleanup. The length of the monitoring period depends on the nature of the site and the cleanup methods used.

Public notice and comment required.

WHAT HAPPENS AFTER A SITE IS CLEANED UP?

When a site is removed from the Hazardous Sites List or an independent cleanup has passed Ecology review, it is given a status of "No Further Action." This is a formal, public statement by Ecology that it does not intend to pursue additional cleanup work at the site. However, a cleaned-up site can be revisited if it is recontaminated or if previously unknown contamination is discovered.

WHERE WE STAND

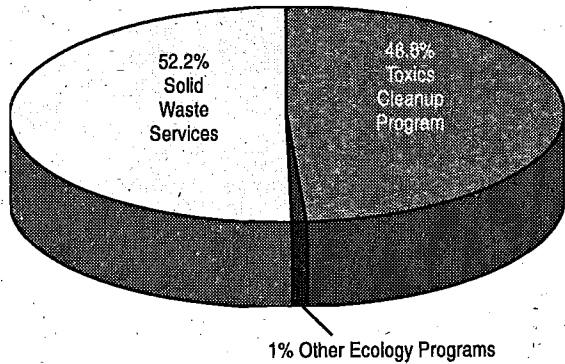


MIRA Program
1988 - Sept 1991

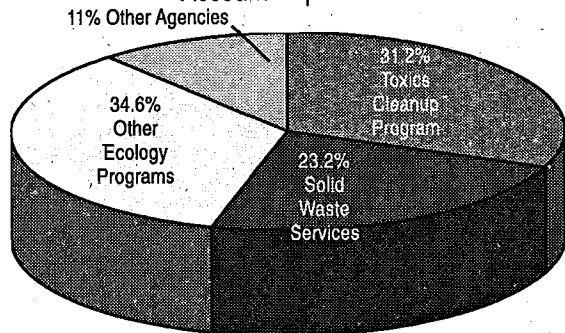
13 - Removed from the Hazardous Sites List

FINANCIAL Analysis

Local Toxics Control Account Expenses



State Toxics Control Account Expenses



Emily footnote says where assoc costs have been included.

	LOCAL TOXICS	STATE TOXICS
REVENUE		
Tax Collection	\$18,160,386	\$16,015,323
Cost Recovery	\$0	\$3,300,122
Penalties	\$0	\$302,110
Hanford Consent Decree	\$0	\$2,741,514
Miscellaneous	(\$108,053)	\$1,311,448
TOTAL REVENUE EXPENSES	\$18,052,333	\$23,670,517
DEPARTMENT OF ECOLOGY EXPENSES		
Air Program	\$0	\$0
Agency Administration	\$314,715	\$4,251,895
Central Program/Spill Response	\$0	\$1,804,322
Environmental Investigations & Lab Services	\$0	\$753,137
Water Quality	\$0	\$604,260
Nuclear Waste	\$0	\$1,555,859
Hazardous Waste & Toxics Reduction	\$0	\$4,795,797
Toxics Cleanup Program	\$17,306,494	\$8,094,234
Solid Waste Services:		
Solid Waste	\$184,196	\$1,006,410
Waste Management Administration	\$921,303	\$0
Waste Management Grants	\$16,714,831	\$210,786
TOTAL DEPARTMENT OF ECOLOGY	\$35,441,539	\$23,076,700
OTHER AGENCIES:		
Department of Agriculture	\$0	\$818,723
Department of Community, Trade & Economic Development	\$0	\$466,000
Department of Health	\$0	\$1,420,484
Department of Revenue	\$0	\$29,526
Office of Marine Safety	\$0	\$107,219
TOTAL EXPENDITURES/ALL AGENCIES	\$35,441,539	\$25,918,652
<i>(Program only TCP)</i>		
ECOLOGY-CONDUCTED CLEANUPS		
Interim Actions	\$0	\$194,896
Pre-Remedial	\$0	\$181,725
Remedial Investigation/Feasibility Studies	\$0	\$51,044
Cleanup Actions	\$0	\$357,198
Urban Bay Activities	\$0	\$67,880
Operations & Maintenance	\$0	\$1,264
Permits	\$0	\$40,330
Total Ecology-Conducted Cleanups	\$0	\$894,337
OVERSIGHT OF POTENTIALLY LIABLE PERSON-CONDUCTED CLEANUPS		
Interim Actions	\$0	\$94,849
Pre-Remedial Actions	\$0	\$258,167
Remedial Investigation/Feasibility Studies	\$0	\$814,819
Remedial Design	\$0	\$16,489
Technical Assistance	\$0	\$115,753
Cleanup Actions	\$0	\$269,952
Operations & Maintenance	\$0	\$19,365
Permits	\$0	\$16,926
Natural Resource Damage Assessment	\$0	\$231,624
Hazard Assessment	\$0	\$58,349
Total Potentially Liable Person-Conducted Cleanups	\$0	\$1,896,293
GENERAL OPERATIONS & MANAGEMENT		
Public Information	\$0	\$138,253
Program Development	\$0	\$534,427
Program Implementation	\$0	\$1,435,886
Management	\$0	\$668,855
Training	\$0	\$236,644
Total Operations & Management	\$0	\$3,014,065
ASSOCIATED STAFF COSTS		
Administrative Support	\$0	\$340,888
Leave/Holiday	\$0	\$881,830
Comp/Exchange	\$0	\$213,964
Regional Support	\$0	\$471,241
Total Support	\$0	\$1,907,923
Sub-Total	\$0	\$7,712,618
Ecology Match for Federal Assistance	\$0	\$50,872
STCA Leaking Underground Tank Activity	\$0	\$321,667
TOTAL	\$0	\$8,085,157
Adjustments	\$0	\$9,077
GRAND TOTAL	\$0	\$8,094,234

REVENUE & EXPENSES

HAZARDOUS SUBSTANCES TAX

Funding for Model Toxics Control Act (MTCA) activities is provided through two accounts: the State Toxics Control Account for state programs, and the Local Toxics Control Account for state grants to local governments. The primary source of revenue to these accounts is the Hazardous Substances Tax. Currently over 8,000 different hazardous substances are subject to the tax based on the wholesale value. Revenue is also generated through cost recovery actions, penalties and other legislative appropriations.

The Department of Revenue oversees collection of the tax, which is imposed on the first in-state possessor of hazardous substances at a rate of 0.7 percent or \$7 per \$1,000 of wholesale value. More than 85 percent of receipts from the tax come from petroleum products.

CURRENT REVENUE TRENDS ARE:

In fiscal year 1994 Hazardous Substances Tax revenue amounted to \$34,445,024, a 12.7 percent decline from FY 1993.

While current projections are for the fund to resume a moderate growth rate, actual tax revenues remain flat. As a result, Ecology has instituted a hiring freeze and has significantly cut back on contracted cleanup work for all State Toxics Control Account-funded programs.

COST RECOVERY

As of July 1994, Ecology was pursuing active cost recovery actions on 89 sites. The amount billed to potentially liable parties was \$3.7 million compared to approximately \$2.5 million over the previous fiscal year. At press time the total amount recovered was \$2.8 million. Recovered funds are placed back into the Toxics Control Account and are available for future cleanup activities.

When the Cost Recovery Program first began, defense sites were billed in the same way as other cleanup sites. Since February 1994, Ecology has been operating under a cooperative agreement known as the Defense-State Memorandum of Agreement (DSMOA). As part of the agreement, Ecology does not have to recover costs for cleanup at defense sites. Instead, federal grant funds are allocated to Ecology to oversee cleanup activities at facilities such as Fairchild Air Force Base, Fort Lewis, and Puget Sound Naval Shipyard.

HOW THE MONEY IS SPENT

Legislative appropriations are made for both the State Toxics Control Account and the Local Toxics Control Account based on the expected balances in the accounts as well as revenue estimates. Through the legislative process, a determination is made regarding which agencies and programs receive funds.

Currently, funds from the state account are allocated to the departments of Ecology; Agriculture; Community, Trade and Economic Development; Health; Revenue; and the Office of Marine Safety. Money is spent on activities authorized by the Model Toxics Control Act including site cleanup, health assessments, waste pesticide identification and disposal, hazardous materials training and oil spill prevention.

Funds from the local account are given through state grants to local governments. Ecology administers the grants program. Local governments may use grants for cleanup of contaminated sites and for plans and programs designed to reduce solid and hazardous waste. Funds from this account can also be used to provide drinking water supplies to local governments with wells affected by contamination from hazardous waste sites.

INDEPENDENT

CLEANUPS

The Model Toxics Control Act encourages potentially liable parties to clean up their sites independent of Ecology oversight whenever possible. This has allowed hundreds of smaller or less complex sites to be cleaned up quickly without having to go through the formal state process.

The law requires the owner/operator of an independent cleanup site to notify Ecology upon discovery of a release of hazardous substances to the environment. When property owners decide to do an independent cleanup, they must report the results of the cleanup actions within 90 days of completion. Although Ecology does not approve or disapprove the cleanup actions, it can require more cleanup work if needed or issue notice that no further action needs to be taken at the site. Since 1988, more than 350 independent cleanups have been reported to Ecology (not including leaking underground storage tank sites - see next page).

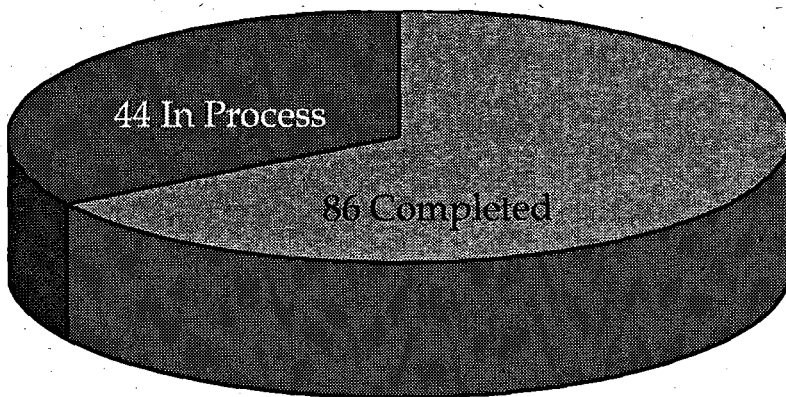
INDEPENDENT REMEDIAL ACTION PROGRAM

Without state oversight, buyers and lenders are sometimes reluctant to get involved unless the state approves that work. In 1993, the Independent Remedial Action Program was created. Under the program, Ecology offers a speeded up review of independent cleanups for a fee which ranges from \$1,000 to \$15,000 depending on the cost of the cleanup.

Once the review is complete, staff provide a written determination indicating whether the cleanup meets Model Toxics Control Act standards. Satisfactory cleanups are given a No Further Action (NFA) designation. This can benefit property owners by expediting the sale of their property or the removal of their site from the Hazardous Sites List.

As of September 30, 1994, Ecology received 130 cleanup reports for review. Eighty-six reviews have been completed and the sites deemed to require no further cleanup work. Ninety-two of the 130 reports were for leaking underground storage tank sites. The fees billed for those reviews totaled \$155,114. Of the 130 cleanup reports, 44 are currently under review.

INDEPENDENT REMEDIAL ACTION PROGRAM (IRAP)



July 1993 - Sept 1994

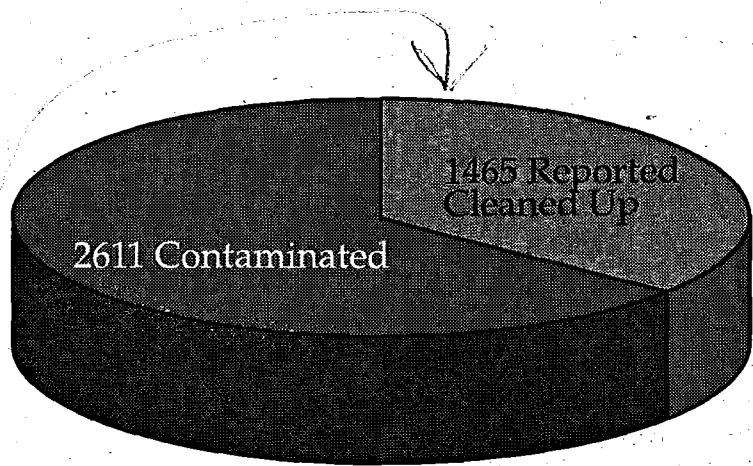
INDEPENDENT

CLEANUPS

LEAKING UNDERGROUND STORAGE TANKS

The majority of independent cleanups are for leaking underground storage tanks. In 1994, 1029 releases were reported to Ecology by private consultants, tank service providers, and tank owners. Cleanups were initiated on 927 releases, and of those, 589 were reported to be completed.

Leaking tanks often threaten or contaminate local drinking water supplies and in some cases create a safety hazard. Washington has a comprehensive program for underground storage tanks. The program is aimed at preventing leaks, reducing contamination when leaks do occur, and making the tank owner or operator responsible for the cost of cleaning up a leak. Tank owners/operators must meet leak detection, tank upgrades, and financial responsibility requirements or face enforcement actions.



MCTA LEAKING UNDERGROUND STORAGE TANK SITES

BINGO FUEL STOP

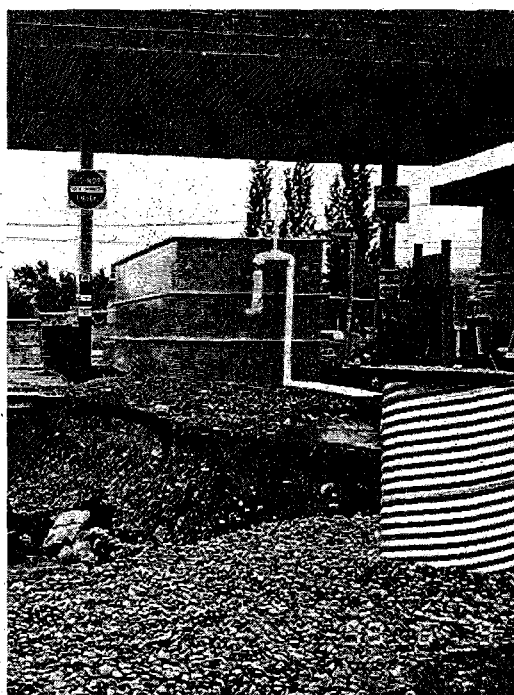
During an independent cleanup, explosive levels of gasoline fumes were found rising from a large pool of gasoline floating in an open pit near the Bingo Fuel Stop. This discovery prompted Ecology and local fire officials to close the station in February 1992. During the remedial investigation, completed by Burns Brothers in January 1994, the extent of contamination was fully identified. It was also determined that two aquifers exist under the site. Bioremediation treatment of petroleum-contaminated soils removed during tank excavation is nearly completed.

The penalty Ecology issued to Burns Brothers for noncompliance with underground storage tank regulations resulted in a creative settlement which benefited the citizens of Central Washington. In April 1994, Burns Brothers gave three "first-response" trailers containing combustible gas indicators and spill response equipment to be used by counties in the Central Region. The firm also sponsored an underground storage tank management seminar for Central Washington tank owners and paid a cash penalty of \$34,000.

Ecology has approved the feasibility study submitted by Burns Brothers. The company plans to excavate the rest of the contaminated soil and treat it with bioremediation. The contaminated groundwater has been undergoing bioremediation since 1992, when recovery of floating gas and diesel fuel began. Water is pumped into a bioreactor tank, treated, and reintroduced upgradient. Treatment will continue until the groundwater meets state cleanup levels.

A draft cleanup action plan describing final cleanup is expected to be out for public review in early 1995.

Bioreactor tank where contaminated groundwater is treated at the Bingo Fuel Stop.



SITE Highlights

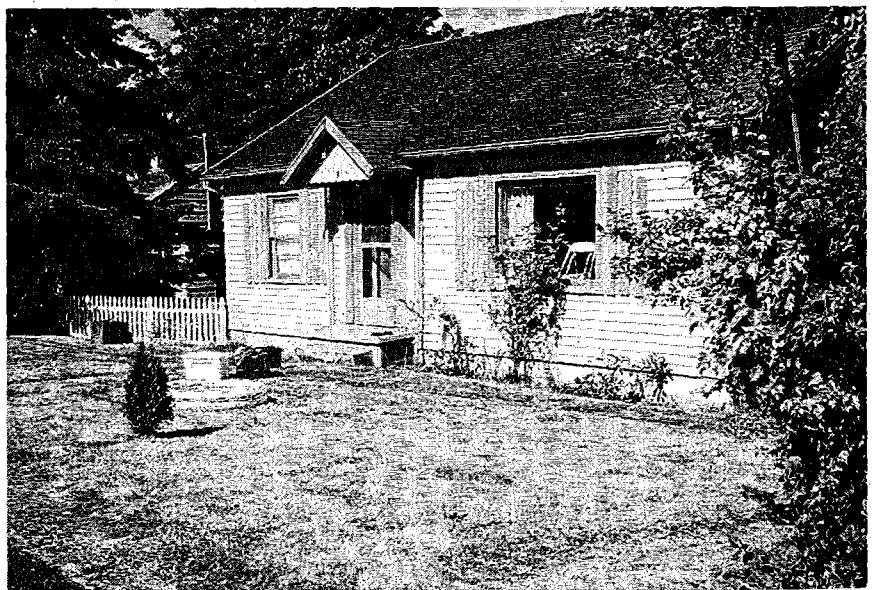
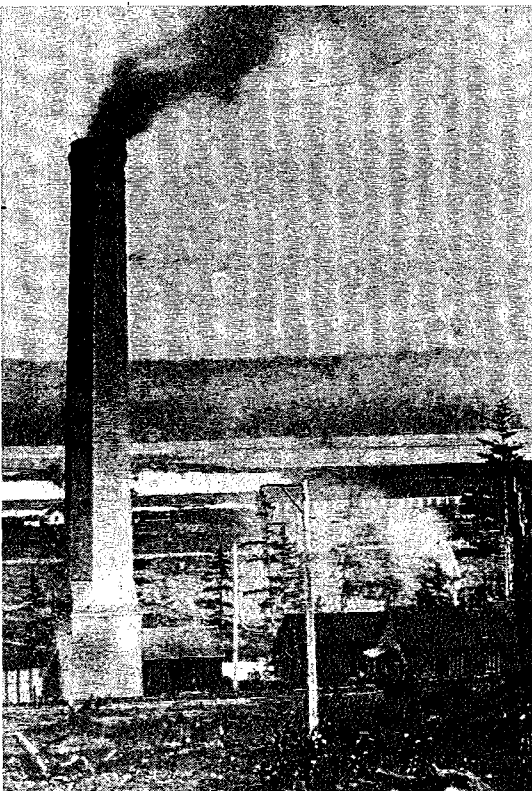
EVERETT SMELTER SITE

Asarco submitted a draft remedial investigation/feasibility study to Ecology in July 1994. Ecology is working with Asarco to revise the report and negotiate additional data collection. While the investigation is continuing, previous interim actions are being inspected and maintained. Asarco has purchased about 20 homes in the most heavily contaminated area. Most of these homes are now vacated and Asarco is fencing off the area and providing additional lighting and site security.

Since the smelter closed in 1912, the site has been used for a variety of industries. Now the site is primarily residential. Ecology ranked the site a high priority for cleanup because of the extremely high level of contamination in residential soils. Contaminants of concern include arsenic, cadmium, and lead. Groundwater, although not used for drinking water, is heavily impacted.

Health monitoring for citizens living in the Everett Smelter area has taken place. The Agency for Toxic Substances and Disease Registry, in coordination with the Department of Health, conducted some limited testing of area residents. Test results suggest that area residents may have been exposed to elevated arsenic levels. The potential for exposure is high through ingestion, inhalation, skin contact, and consumption of garden vegetables. Advisories cautioning citizens to avoid contact with soil at the site have been distributed and are periodically updated by the Snohomish Health District.

At left is the former smelter, operated by Asarco in the early 1900's. Below is one of the homes now located in the area of the smelter site.



CASCADE POLE-OLYMPIA

Located at the north end of the Port of Olympia peninsula between the east and west bays of Budd Inlet, Cascade Pole Company operated a wood-treating facility from 1957 to 1986. A variety of toxic substances have been identified on site (many of them suspected carcinogens) including creosote, pentachlorophenol, copper, dioxins, and petroleum hydrocarbons. Elevated levels of these contaminants are found on site in soil, surface and groundwater, sediments, and clam tissue.

In 1986 immediate threats to human health were reduced when Cascade Pole Co. closed the plant and restricted public access by building a fence around the property. The Thurston County Health Department posted multi-lingual signs along the shoreline warning people not to eat shellfish from that area.

Interim actions taken at the site have been successful in protecting human health and the environment from the worst of the contaminants. Actions include the operation of a groundwater pump-and-treat and oil recovery system, and the installation of a steel sheet piling barrier wall along the site shoreline. Currently, Ecology, Cascade Pole Co., and the Port of Olympia are negotiating a plan for the long-term remediation of the site.

YAKIMA RAILROAD AREA

The Yakima Railroad Area is located in the heart of downtown Yakima and Union Gap and covers approximately six square miles. During an investigation by the Environmental Protection Agency in 1987, perchloroethylene (PCE) was found in the soil and groundwater. PCE is used in dry cleaning, pesticide application, and machine shops.

When Ecology took on this site, 10 potentially liable persons (PLPs) were named. The number of PLPs has changed over time - new ones have been added, and others have reached a *de minimis* settlement with Ecology and have exited the cleanup process.

Sites within the Yakima Railroad Area are:

- ✓ Westco Martinizing
- ✓ Yakima County (Crest Linen)
- ✓ Frank Wear Cleaners
- ✓ Nu-Way Cleaners
- ✓ Yakima Valley Spray
- ✓ 5th Wheel Truck Repair
- ✓ Hahn Motor Company
- ✓ Cameron-Yakima, Inc.
- ✓ CMX Corporation
- ✓ Crop King/Woods Industry (BNRR)
- ✓ Briar Development
- ✓ Agri-Tech/Yakima Steel Fabricators

A number of individual studies and work plans are complete. Others are still underway or are in various stages of review by Ecology. Generic remedial investigation work plans were prepared by Ecology to assist some of the area businesses.

A thermal desorption unit is being used to treat about 20 cubic yards of contaminated soil at the Crop King site. Thermal desorption is an innovative treatment technology which heats the soil and vaporizes the contaminants.

The cities of Yakima and Union Gap have been installing water mains and connecting homes to city water systems under a \$6.4 million grant from Ecology. About 1,000 households will be connected by fall of 1995. Until the connections are completed, residents will continue to receive free bottled water.

GE SPOKANE

From 1961 to 1980, GE operated an apparatus repair shop on its property located on Mission Avenue in Spokane. Electrical transformers containing PCBs were repaired at the shop. This is the only known site that has PCB contamination in the groundwater. In September 1989, EPA placed the site on the federal Superfund list. Ecology is the lead agency responsible for oversight.

Vitrification is the preferred method for cleaning up PCBs at the General Electric Service Shop in Spokane. A pilot melt was conducted this past summer. Preliminary results indicate it was successful at destroying the contaminants. This new technology uses 2600°F temperatures to melt soil, turning it into glass.

To protect human health and the environment, deed restrictions were placed on the property. This site is now restricted to industrial uses, and groundwater under the site may not be extracted or used.

WASHINGTON WATER POWER CENTRAL STEAM PLANT

Washington Water Power (WWP) and Ecology have entered into a consent decree to conduct a remedial investigation/feasibility study (RI/FS) of a downtown Spokane petroleum release. The study will further characterize the extent of petroleum contamination and any potential risks to people and the environment.

WWP operated this coal-burning steam plant from 1916 to 1986. The plant was modified to burn sawdust and wood shavings in the late 1930s, then natural gas and petroleum products from the mid 1960s to 1970. Between 1966 and 1975, seven underground petroleum storage tanks were installed. In 1982, Ecology issued an order to WWP to investigate and mitigate a release from one of its tanks. In 1984, Ecology determined that all requirements of the order had been met and monitoring of the release was discontinued.

In 1991 WWP conducted further investigations to determine if petroleum had migrated. Soil borings and monitoring wells confirmed that the release was greater than originally indicated. WWP then entered into a pre-payment agreement with Ecology for state oversight. The consent decree signed in November 1994, governs further investigation. WWP will install additional monitoring wells, do additional soil borings and and conduct further chemical characterization. Once an RI/FS is complete, Ecology and WWP will negotiate a cleanup action plan.

SITE Highlights

Handy Andy

Cleanup of Handy Andy No. 8 is progressing quickly because of Time Oil's early intervention.

Handy Andy No. 8, a convenience store/gasoline station, is located in a residential area of Vancouver. When gasoline-contaminated soil was discovered in August 1991, Time Oil removed the tanks and 620 cubic yards of contaminated soil. Further investigation revealed that groundwater was contaminated 1800 feet away from the source and was moving toward Burnt Bridge Creek. In May 1993, gasoline was also discovered floating on groundwater within 50 feet of a private home.

Time Oil proceeded with its independent cleanup and performed sampling activities, conducted a study to determine the extent of contamination, and initiated off-site interim cleanup actions. These actions eliminated the immediate risk to human health and the environment. An agreed order signed by Ecology and Time Oil provides for Ecology oversight of the cleanup.

SEATTLE MARKETING TERMINAL (UNOCAL)

Between 1910 and 1975, Unocal operated a petroleum bulk storage and distribution facility near Pier 70, located at Elliott Avenue and Broad Street. In 1981 contamination was detected on the property and by 1988 Unocal completed a voluntary three-phase remedial investigation and feasibility study.

A variety of studies show that soil and groundwater have been contaminated on the property. A plume of petroleum has migrated through soil and secondary conduits like storm drains, tunnels, and pipelines into groundwater. Sediment testing is currently being evaluated to determine the extent of contamination if any.

Previous cleanup actions resulted in treating about 34,000 cubic yards of soil with bioremediation in the "upper yard" of the site. In addition, 4,500 gallons of petroleum free product was recovered from the pump and treat system at the "off-site area." Bioremediation efforts were not as successful in the lower yard because the contaminated soil contained a heavier petroleum that is resistant to biological treatment.

Ecology is currently negotiating with Unocal to arrive at appropriate cleanup methods.

HAMILTON ISLAND LANDFILL

Hamilton Island, a 240-acre demolition and disposal site on the Washington side of the Columbia River, is located 40 miles east of Portland, Oregon, and about two miles downstream from the Bonneville Dam. About 19 million cubic yards of demolition and construction debris were placed on this site during the construction of Bonneville Dam's second powerhouse.

In October 1992 EPA placed the site on the National Priorities List (NPL). Subsequent investigations revealed that only a few contaminated samples were found at very low levels. Petroleum hydrocarbons were found in only small, isolated areas above the screening levels and it was determined that no further investigation was required.

Ecology supports a No Further Action recommendation and proposes to delist Hamilton Island from the state's Hazardous Sites List. The Environmental Protection Agency also supports delisting Hamilton Island from the federal NPL. Hamilton Island will either be returned to the town of North Bonneville or left as wildlife habitat pending legislation.

AT HAZARDOUS WASTE SITES

Ecology's Toxics Cleanup Program places a high emphasis on involving communities and concerned citizens in the investigation and cleanup process at hazardous waste sites requiring state oversight. Public involvement activities are considered key to making sure those potentially or directly affected by a cleanup are well informed and able to communicate concerns to Ecology. Public involvement specialists in each region work with communities that are in and around hazardous waste sites. At many sites a community group forms and meets on a regular basis during the cleanup process. Often community needs can be provided for through the resources of the potentially liable persons or other agencies involved in Model Toxics Control Act activities.

Here are a few examples of how the public is actively involved in site investigation and cleanup issues:

Olympic View Environmental Review Council (OVER-C)

The Olympic View Environmental Review Council (OVER-C) was formed in 1991 to monitor cleanup activities at Submarine Base (SUBASE) Bangor and Keyport. Funded by the Washington Environmental Council and supported by grants from Ecology, EPA, and the Bullitt Foundation, OVER-C now has 50 members. The group participates in fund-raising and short-term projects related to the sites and produces a newsletter to keep members informed of cleanup progress. Members also participate at public meetings and on technical review committees.

Yakima Railroad Site

Contamination at this site affects residents living in a six-square-mile area of the cities of Yakima and Union Gap. More than half the residents are non-English speaking Hispanics. A large percentage of residents are at or below the poverty level. To facilitate community participation and inform residents about cleanup issues that affect them, Ecology has made interpreting and translating standard in all public outreach activities. Bilingual English/Spanish fact sheets and materials are provided, and an interpreter is available at public meetings. Spanish radio stations are also used to further public outreach efforts.

Everett Smelter Site

Citizens of Northeast Everett, agencies and interested persons have been meeting each month since December 1993 to address the concerns and educational needs of residents living on or near the site. Each meeting's agenda is set by the residents. Ecology leads the meetings and has helped bring in experts to present information and answer questions related to living at a contaminated site. Recent issues have been "Dealing with ongoing, unresolved stress" and "Site Security."

The citizens group is actively involved in shaping how decisions are made regarding cleanup at the site, and in requesting resources to help them maintain a healthy life-style in the interim. For example, the group has asked for soil sampling in areas where neighborhood children play, and for human health testing to see if they have been exposed to arsenic, lead, and cadmium. The group will continue to meet throughout the cleanup process.

Citizen Advisory Committees

Public participation is also achieved through "regional citizen's advisory committees." These committees are the conduit through which information and opinions are passed between Washington citizens and Ecology. Committees meet at least twice per year to review policies under development and recommend ways for Ecology to respond to public needs. A list of committee members is shown below.

THE COMMITTEE MEMBERS ARE:

Central	Eastern	Northwest	Southwest
Wally Budke	Lloyd R. Bourne	Reuben Baybars	Helen Berg
Phil Small	Micki L. Martin	Janet Ferguson	Allan Hoover
Laura Mracheck	Sally A. Simmons	Michael McNickle	Bruce Lanchey
Daniel Snipes	Eric A. Kincanon	Peg Monaghan	Tim Moore
Earl Derry	Robert N. Hager	Felix Rodriguez	Dave Palmer
Harold Jones	Frank T. Yuse	Kathleen Toensjost	Scott Sedberry
Don Wiens	Sandra S. Morton	John Drotts	
Larry Feller	David A. Hoppens	Debra Hughes	
Cindy O'Halloran		Denis Murphy	
		Kate Rhoads	
		Shirley Golden	
		Phillip Johnson	

Public Involvement

OTHER PROGRAMS

Solid Waste Services

Ecology's Solid Waste Services Program supports and supplements efforts by local governments to handle "moderate-risk waste" (hazardous waste from households or businesses that generate only small quantities of hazardous waste). Statewide, local jurisdictions are operating under approved and current plans for managing solid and hazardous wastes. The plans allow governments to manage "moderate-risk waste" and interpret standards for landfills.

In 1994, Ecology helped local governments establish and/or operate 33 permanent or mobile moderate-risk waste collection systems, host 70 household hazardous waste collection events and four collection events for small businesses, and develop local hazardous waste plans.

In addition, information on household hazardous waste collection events was provided to more than 7,400 households and businesses who called in to Ecology's 1-800-RECYCLE line. Businesses received information and referral opportunities regarding toxic waste reduction or recycling in coordination with local government moderate-risk waste activities. Most of the businesses served were small-quantity generators.

Ecology also has a Resource Center that houses nearly 5,000 documents on solid and hazardous waste reduction, recycling, and disposal issues. The Resource Center is in Lacey, with branches maintained in each regional office.

HAZARDOUS WASTE AND TOXICS REDUCTION

Ecology's Hazardous Waste and Toxics Reduction Program promotes pollution prevention and facilitates hazardous waste regulatory understanding and compliance. In fiscal year 1994 the program spent \$4.58 million from the State Model Toxics Control Account on education and technical assistance, compliance activities, policy developments, and pollution prevention projects and campaigns.

The program responded to over 7,500 requests for information and made 500 pollution prevention technical assistance visits — 76 to businesses which had notified Ecology of their new hazardous waste generator status. More than 400 businesses were assisted with preparing pollution prevention plans and other activities.

A total of 362 compliance inspections were conducted in 1994. Although most enforcement actions resulted in informal warning letters, 10 compliance/enforcement orders were signed, and 10 separate penalties were assessed totaling \$271,000.

Major new amendments to the Dangerous Waste regulations were adopted this fiscal year, including:

- ✗ Making hazardous waste facility closure standards consistent with Model Toxics Control Act cleanup levels.
- ✗ Introducing a new approach to corrective action cleanups at currently operating facilities.
- ✗ Allowing generators to treat their own dangerous waste on-site.
- ✗ Changing the list of carcinogenic substances.

In addition, a regulatory reform project is underway to improve the rules governing hazardous waste management in Washington. Local government, environmental groups, industry associations, and scientific experts are involved in this effort.

Other Programs

LOWER COLUMBIA RIVER BI-STATE WATER QUALITY PROGRAM

This bi-state program, created and funded in 1990 by the legislatures of Washington and Oregon, the Northwest Pulp and Paper Association and public ports in both states, is a cooperative effort between the two states. The goal is to assess whether fisheries, recreational, and industrial uses on the river are adversely affected by water quality. Government agencies' management of water quality in the lower Columbia River is also being examined.

Research, data gathering, and a reconnaissance survey, done during the first phase of the effort have been completed and a draft report has been issued. Reports on the effects of pollutants on fish and wildlife and human health are due in early 1995. Data analysis and public involvement will occur during the last phase. The entire project is expected to be completed in 1996.

The final report of the bi-state program efforts is due early in 1996. The report will include technical findings, will identify problems, and will recommend ways to improve water quality in the Columbia River. A management plan for the lower Columbia River and/or the entire river basin may result.

WASTE MANAGEMENT GRANTS

Landfill cleanups pose an expensive problem for local governments, but grants from the Local Toxics Control Account help ease the burden on ratepayers. In Fiscal Year 1994, grants for just three landfill cleanups — at Mica, Kent Highlands and Centralia — totaled more than \$13.1 million. Smaller, but just as significant, are grants for pollution prevention projects. Together they support the ongoing partnership between Ecology and local governments in Washington to deal responsibly with waste.

The Local and State Toxics Control Accounts funded \$35,421,539 in new grants in FY94. This funding leveraged \$71,734,962 worth of pollution prevention and cleanup projects that helped local government:

- ✓ Plan for their waste management needs
- ✓ Educate and help people generate less waste at home and work, while reducing its toxicity
- ✓ Provide safe ways for people to dispose of hazardous waste from their homes and businesses
- ✓ Close 13 old landfills to meet current standards

Citizen groups and not-for-profit organizations also used grant funding to educate and involve the public in waste issues.

Besides new grants, the Local Toxics Control Account also provided \$394,208 in amendments to existing grants. For a complete listing of grants awarded, see pages 18 and 19.

EMERGENCY Spill RESPONSE

Ecology is the lead state agency responsible for environmental emergencies statewide. The responsibilities include policy and plan development; plan review, approval, and inspections; drills and enforcement; emergency response and cleanup; education; and resource damage assessments. During FY 1994 the State Toxics Control Account funded 17 FTEs at an annual cost of \$1,305,171, including cleanup contractor costs.

1994 PROGRAM ACCOMPLISHMENTS

In recent years Ecology has built a strong and comprehensive spill prevention and control program. This level of emphasis continued in 1994:

- X Responded to 855 spills of oil or hazardous substances and conducted successful cleanups and resource damage assessments as needed.
- X Implemented new procedures for identifying hazardous substances in the field which reduced the need for expensive contractor costs, resulting in an estimated savings of \$115,000.
- X Performed a lead role in the federal area oil and hazardous substances contingency planning process.
- X Participated in 37 emergency response drill exercises with other agencies and industry.
- X Completed a study on the need for HAZMAT teams in Washington.

OTHER AGENCIES

DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT

HAZARDOUS MATERIALS TRAINING PROGRAM

The Hazardous Materials Training Program provides academic and "hands-on" training for first responders and firefighters to meet the requirements of the Washington Industrial Safety and Health Act. The program enhances emergency preparedness planning, response skills, and incident command training necessary to mitigate a hazardous materials incident.

Specialized hazardous materials training continues to be a significant need within our state. The frequency of transportation of hazardous chemicals and other environmental conditions promoting chemical disasters is increasing. Firefighters must have specialized training in order to safely handle these life-threatening incidents.

Lead arsenate was commonly used as an insecticide in apple orchards from 1913 until the 1960s. This container was collected in Ellensburg in 1993.



From July 1992 through June 1994, classes were taught to over 8,000 firefighters in the state, providing approximately 97,000 hours of student contact time. The State Toxics Control Account provided \$466,000 for this effort. Funding from this account helps to serve the needs of Washington's 25,000 firefighters through the Hazardous Materials Training Program.

AGRICULTURE

The Department of Agriculture's Waste Pesticide Identification and Disposal Program's two goals are to eliminate the backlog of prohibited pesticides stored on farms and other similar locations, and prevent future accumulations of unusable pesticides through education covering product storage, handling, and improved planning prior to purchase.

Many pesticides have become unusable due to government actions. As of December 1993, the program collected 35,682 pounds of Dinoseb, 29,889 pounds of DDT and 14,265 pounds of Endrin. Most of the collected pesticides are at least 15 years old and many were manufactured in the 60s and early 70s. Some date back prior to World War I, with the oldest, so far, being a bag of lead arsenate from 1913.

More than 220 tons of unusable pesticides have been collected and disposed of from 1,488 participants in the program's six years. Seven collections were held in FY 1994, with 58.3 tons collected from 453 participants at a total cost of \$619,607.90. This represents a significant reduction of unusable pesticides stored in Washington. Although this amount is five times the initial 1987 estimate, there is reason to believe a significant amount remains. This is evident with the increasing demand for collection. Last year, participant cutoffs had to be established for the first time in the program's history, due to demand exceeding resources.

DEPARTMENT OF HEALTH

The Department of Health has several programs aimed at preventing or mitigating adverse human health effects resulting from exposure to hazardous substances in the environment such as:

- ✓ Conducting public health assessments,
- ✓ Providing consultations and education concerning hazardous substances exposures and their effects,
- ✓ Leading health studies of communities or populations exposed to hazardous substances, and
- ✓ Monitoring and testing of potentially contaminated drinking water supplies.

During fiscal year 1994, the department received \$1,530,000 in State Toxics Control Account funds to perform program activities which resulted in:

- ✓ Locating contamination at 7 sites and taking action to eliminate or reduce exposure,
- ✓ Conducting 10 health assessments, 9 consultations, and 28 investigations surrounding hazardous waste sites, and
- ✓ Developing a biomonitoring program to assess potential exposures to residents living on or near the Everett Smelter site.

New policy initiatives concerning environmental equity, data compilation, and shellfish contamination education will continue in the next biennium. Health plans to work with Ecology to further investigate environmental justice issues at hazardous waste sites; use a geographic information system to compile health assessment and exposure data; and identify and implement appropriate methods of education within Asian Pacific Islander communities to alert them to environmental risks for harvesting shellfish near hazardous waste sites.

OFFICE OF MARINE SAFETY

Washington's Office of Marine Safety (OMS) was established as an independent agency by the 1991 Legislature in the wake of the Exxon Valdez spill in Prince William Sound. In FY 1994, OMS received \$149,000 from the State Toxics Control Account to be used strictly for vessel oil spill contingency planning.

FUNDS WERE USED TO:

- ✓ Evaluate vessel oil spill contingency plans for completeness,
- ✓ Evaluate and approve completed contingency plans,
- ✓ Inform industry of the necessary requirements,
- ✓ Negotiate safety provisions with industry (as appropriate),
- ✓ Approve primary spill response contractors,
- ✓ Develop response planning benchmarks,
- ✓ Evaluate required spill exercises,
- ✓ Coordinate monthly contingency plan review meetings with Department of Ecology and Oregon Department of Environmental Quality, and
- ✓ Participate in the Geographic Response Planning efforts undertaken by the Coast Guard Area Committee.

In fiscal year 1994, the Office of Marine Safety's Operations Division worked cooperatively with Ecology to approve five spill response contractors. Sixteen vessel oil spill contingency plans were received, and all four of the major plans (which cover most of the vessels entering Washington waters) and a number of corporate plans received conditional approval and have undergone a series of resubmissions.

OTHER AGENCIES

GRANTS STATUS Report

PUBLIC PARTICIPATION GRANTS

RECIPIENT	GRANT #	TOTAL PROJECT COST	LTCA FUND DOLLARS	SIGNATURE DATE
CLARK CO HAZ WST CITIZEN TASK FORCE	G9400238	37,300	18,650	3/14/94
COLUMBIA RIVER UNITED	G9400219	20,000	10,000	2/14/94
ECONOMIC DEVELOP ASSOC OF SKAGIT CO	G9400230	29,535	14,767	3/11/94
ENVIRONMENTAL RESOURCE SERVICES	G9400233	9,990	4,995	3/10/94
ENVIRONMENTAL WORKS	G9400036	35,100	17,550	7/29/93
EXCEPTIONAL FORESTERS INC	G9400232	33,316	16,658	3/10/94
FRIENDS OF R.S.V.P.	G9400304	30,000	15,000	6/7/94
HANFORD FAMILY THE	G9400237	10,000	5,000	4/12/94
HEART OF AMERICA NORTHWEST	G9400305	20,000	10,000	5/25/94
METROCENTER YMCA	G9400043	37,860	18,930	8/31/93
METROCENTER YMCA	G9400234	25,000	12,500	3/11/94
OLYMPIC VIEW ENVIRON REVIEW COUN	G9400207	50,000	25,000	2/1/94
PHINNEY NEIGHBORHOOD ASSOCIATION	G9300323	15,000	15,000	7/29/93
POMEGRANATE CENTER THE	G9400250	23,460	11,730	3/21/94
SUSTAINABLE DESIGN COUNCIL	G9300314	33,000	33,000	7/21/93
WA STATE DRYCLEANERS ASSOC	G9400214	6,420	3,210	2/4/94
WASHINGTON CITIZENS FOR RECYCLING	G9400253	18,140	9,070	6/21/94
WASHINGTON RETAIL ASSOC	G9400231	20,000	10,000	3/28/94
WASHINGTON TOXICS COALITION	G9400037	15,000	7,500	8/23/93
		469,121	258,560	

REMEDIAL ACTION GRANTS

CENTRALIA CITY OF	G9400155	10,000,000	5,000,000	5/25/94
LACEY CITY OF	G9400301	99,970	49,985	6/15/94
MOUNT VERNON CITY OF	G9400081	50,000	50,000	11/17/93
PORT TOWNSEND PORT OF	G9400068	50,000	50,000	9/28/93
SEATTLE CITY OF	G9400077	3,975,000	1,987,500	10/5/93
SEATTLE-KING CO PUBLIC HEALTH DEPT	G9400106	100,000	100,000	3/7/94
SHELTON PORT OF	G9400220	150,000	112,500	3/4/94
SPOKANE COUNTY	G9400069	13,311,618	6,655,809	12/3/93
SPOKANE COUNTY HEALTH DISTRICT	G9300326	100,000	100,000	7/21/93
SUMAS CITY OF	G9400210	47,470	15,000	2/17/94
SW WASHINGTON HEALTH DIST	G9300327	100,000	100,000	7/29/93
TACOMA PORT OF	G9400221	5,000,000	2,500,000	2/17/94
TACOMA-PIERCE CO HEALTH DEPT	G9400197	100,000	100,000	4/14/94
THURSTON COUNTY	G9400044	50,000	50,000	8/16/93
		33,134,058	16,870,794	

COORDINATED PREVENTION GRANTS

ADAMS COUNTY	G9400127	189,272	83,548	1/5/94
ADAMS COUNTY HEALTH DISTRICT	G9400129	40,000	26,000	1/5/94
ASOTIN COUNTY	G9400141	241,000	114,400	1/10/94
ASOTIN COUNTY	G9400327	500,000	325,000	6/30/94
BELLEVUE CITY OF	G9400201	278,847	65,878	4/6/94
BENTON COUNTY	G9400135	623,580	215,792	1/13/94
BENTON-FRANKLIN DIST HEALTH DEPT	G9400111	115,500	77,000	1/10/94
BREMERTON-KITSAP CO HEALTH DIST	G9400122	276,553	146,991	1/4/94
CHELAN COUNTY	G9400178	382,097	103,494	2/10/94
CHELAN-DOUGLAS HEALTH DIST	G9400149	160,037	93,005	2/10/94
CLALLAM COUNTY	G9400167	138,180	52,500	1/26/94
CLALLAM COUNTY	G9400168	200,852	139,976	1/18/94
CLARK CO PUBLIC WORKS DEPT	G9400115	456,265	38,365	3/3/94
COWLITZ CO HEALTH DEPT	G9400158	102,667	77,000	4/14/94
COWLITZ COUNTY	G9400146	224,080	151,930	1/18/94
CRESTON TOWN OF	G9400188	228,598	148,589	2/1/94
DOUGLAS COUNTY	G9400120	420,144	97,881	1/12/94
DOUGLAS COUNTY	G9400268	609,160	395,954	6/15/94
DOUGLAS COUNTY	G9400269	515,970	335,381	6/15/94
EPHRATA CITY OF	G9400161	12,150	5,175	1/11/94
FERRY COUNTY	G9400189	169,034	105,400	2/8/94
FRANKLIN COUNTY	G9400108	254,410	126,695	12/14/93
FRIDAY HARBOR TOWN OF	G9400256	600,000	390,000	4/14/94
GARFIELD COUNTY	G9400148	117,621	58,659	1/4/94
GRANDVIEW CITY OF	G9400109	346,250	259,688	1/3/94
GRANT COUNTY	G9400182	218,287	119,372	1/19/94
GRANT COUNTY HEALTH DEPT	G9400142	95,196	71,397	1/13/94
GRAYS HARBOR CO HEALTH DEPT	G9400186	66,666	50,000	2/1/94
GRAYS HARBOR COUNTY	G9400183	331,092	167,820	2/1/94
ISLAND CO HEALTH DEPT	G9400145	128,333	77,000	3/16/94
ISLAND COUNTY	G9400143	364,053	129,698	1/4/94
JEFFERSON COUNTY	G9300302	1,138,712	500,000	7/14/93
JEFFERSON COUNTY	G9400242	27,053	17,584	4/14/94
KELSO CITY OF	G9300112	56,980	42,735	8/19/93
KING COUNTY SOLID WASTE DIVISION	G9400211	1,209,847	557,830	3/31/94
KITSAP COUNTY	G9400174	1,510,756	288,059	3/1/94
KITTITAS COUNTY	G9400273	266,730	149,759	4/14/94
KLICKITAT COUNTY	G9400195	228,588	135,620	2/9/94

GRANTS STATUS REPORT

COORDINATED
PREVENTION
GRANTS
CONTINUED

RECIPIENT	GRANT #	TOTAL PROJECT COST	LTCA FUND DOLLARS	SIGNATURE DATE
LEWIS COUNTY	G9400228	322,302	104,084	3/4/94
LEWIS COUNTY HEALTH DISTRICT	G9400227	143,883	96,395	3/10/94
LINCOLN CO HEALTH DISTRICT	G9400162	56,000	36,400	1/10/94
LINCOLN CO PLAN & BLDG DEPT	G9400217	96,400	62,660	3/3/94
MASON COUNTY	G9400126	141,387	94,983	12/29/93
MASON COUNTY HEALTH DEPT	G9400130	108,520	73,000	12/29/93
MERCER ISLAND CITY OF	G9400156	59,010	35,406	1/12/94
NORTHEAST TRI-COUNTY HEALTH DIST	G9400173	50,799	38,099	5/19/94
ODESSA TOWN OF	G9400249	368,000	239,200	3/31/94
OKANOGAN CO HEALTH DIST	G9400170	93,333	70,000	1/24/94
OKANOGAN COUNTY	G9400190	205,172	93,843	3/1/94
OKANOGAN COUNTY	G9400285	490,000	367,500	5/11/94
PACIFIC COUNTY	G9400114	220,822	133,038	12/20/93
PEND OREILLE COUNTY	G9400179	183,962	103,453	1/24/94
PEND OREILLE COUNTY	G9400270	666,667	500,000	4/29/94
PEND OREILLE COUNTY	G9400271	666,667	500,000	4/29/94
PIERCE COUNTY	G9400206	1,298,311	570,000	3/7/94
PORT ANGELES CITY OF	G9400055	134,280	100,710	9/20/93
RENTON CITY OF	G9400213	127,042	40,140	3/10/94
SAN JUAN COUNTY	G9400140	220,622	105,667	1/24/94
SAN JUAN COUNTY	G9400257	769,231	500,000	4/26/94
SEATTLE CITY OF	G9400153	1,541,887	437,408	3/1/94
SEATTLE-KING CO PUBLIC HEALTH DEPT	G9400125	128,333	77,000	2/8/94
SEATTLE-KING CO PUBLIC HEALTH DEPT	G9400199	2,321,515	1,392,909	4/21/94
SHELTON CITY OF	G9400123	63,406	499	12/29/93
SKAGIT CO PUBLIC WORKS DEPT	G9400100	1,000,000	500,000	2/3/94
SKAGIT CO PUBLIC WORKS DEPT	G9400144	435,810	149,000	1/31/94
SKAGIT COUNTY HEALTH DEPT	G9400139	152,763	91,658	2/9/94
SKAMANIA COUNTY PUBLIC WORKS DEPT	G9400180	141,766	49,975	2/23/94
SNOHOMISH CO HEALTH DISTRICT	G9400128	320,901	192,540	12/20/93
SNOHOMISH CO SOLID WASTE	G9400054	1,286,665	771,999	12/3/93
SNOHOMISH CO SOLID WASTE	G9400150	1,694,328	758,592	1/26/94
SPOKANE CITY OF	G9400172	1,766,066	693,107	2/1/94
SPOKANE COUNTY HEALTH DISTRICT	G9400187	83,333	50,000	2/15/94
STEVENS COUNTY	G9400177	253,867	140,613	2/1/94
SW WASHINGTON HEALTH DIST	G9400116	107,692	70,000	2/8/94
SW WASHINGTON HEALTH DIST	G9400117	620,781	367,140	12/29/93
TACOMA CITY OF	G9400203	769,375	176,750	4/12/94
TACOMA-PIERCE CO HEALTH DEPT	G9400204	107,692	70,000	3/7/94
TACOMA-PIERCE CO HEALTH DEPT	G9400205	282,940	183,911	3/7/94
THURSTON COUNTY PUBLIC HEALTH	G9400131	550,976	312,393	1/10/94
THURSTON COUNTY PUBLIC WORKS	G9400124	422,645	72,346	1/27/94
WAHIAKUM COUNTY	G9400166	97,384	57,884	1/14/94
WALLA WALLA & COLUMBIA COUNTIES	G9400154	553,513	255,784	1/24/94
WHATCOM COUNTY	G9400151	1,058,038	343,995	1/26/94
WHITMAN COUNTY	G9400147	305,745	143,160	1/4/94
WHITMAN COUNTY	G9400216	769,231	500,000	2/22/94
YAKIMA CO HEALTH DISTRICT	G9400110	213,333	141,864	1/16/94
YAKIMA COUNTY	G9400113	1,814,828	275,344	1/4/94

38,131,783 18,081,624

GRAND TOTAL 71,734,962 35,210,978

BREAKDOWN OF
COORDINATED
PREVENTION
GRANTS BY
TASK

Household Hazardous Waste Planning	126,170
Household Hazardous Waste Plan Implementation	2,283,429
Household Hazardous Waste Collection & Disposal	4,277,619
Small Quantity Generator Implementation	1,178,312
Solid Waste Planning	212,954
Solid Waste Enforcement	1,638,519
Waste Reduction Recycling Activities	2,540,820
Waste Reduction Recycling Capital	207,013
Groundwater Monitoring	155,476
Landfill Closure	5,461,312

Total 18,081,624

HAZARDOUS SITES LIST

HAZARDOUS SITES LIST

After studying state cleanup sites, Ecology uses the Washington Ranking Method to estimate the potential threat to human health and the environment. This estimate is based on the amount of contaminants, how toxic they are, and how easily they could come into contact with people and the environment. The potential for contamination of surface water, air, and groundwater are evaluated for each site. Sites are ranked relative to each other on a scale of one to five. A score of one represents the highest level of concern and five the lowest.

Information about sites is published in the Site Register. Changes to the Hazardous Sites List (HSL) are announced by Ecology twice each year. Owners, operators, and potentially liable owners and operators of hazardous waste sites are notified when their site is ranked and placed on the list.

Hazard ranking helps Ecology decide where to spend cleanup funds. Additional factors Ecology takes into consideration when prioritizing sites include public concern, a need for immediate action, and available cleanup staff and funding. In cases where groundwater is the only affected media and is the primary source of drinking water, Ecology may give a higher priority for cleanup than the hazard ranking designates.

Of the 538 sites on the Hazardous Sites List, 40 sites were ranked and added this year; 135 sites are ranked number 1. Three sites have been cleaned up and removed from the list this past year; Yakima Platting; Washington State Department of Transportation; and USN SUBASE, Bangor, Operable Unit 5.

To place your name on the Site Register mailing list, contact Sherrie Minnick at (360) 407-7200, or toll free at (800) 826-7716, and (360) 407-6006 to use Ecology's telecommunications device for the deaf (TDD).

Legend for Hazardous Sites List:

Site Name: # New site added to the ranked list, August 1994.

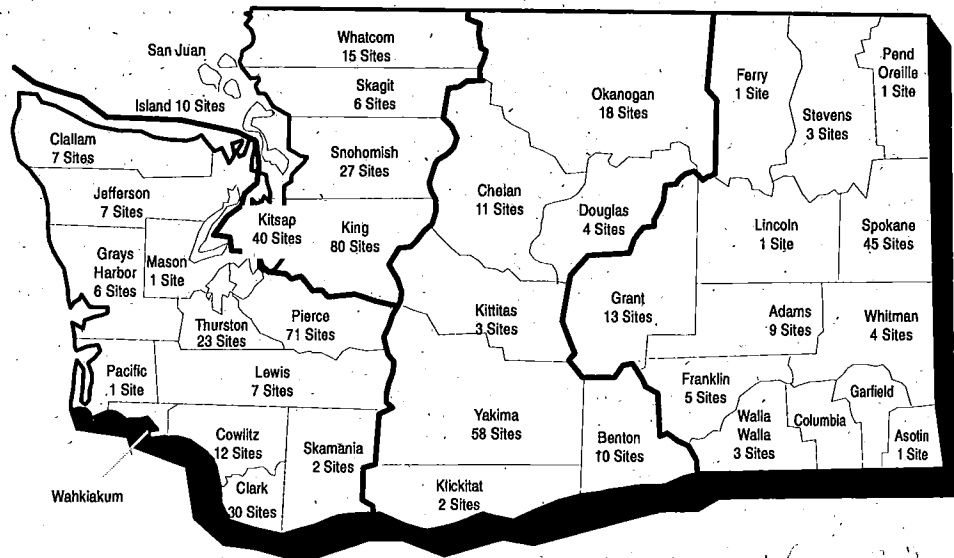
[] New site added to the NPL list

Rank: Highest relative risk = 1 and lowest = 5. Note: A site's rank may change when the HSL is updated because a site's relative placement may change.

* Groundwater is the only affected pathway at this site. the site has been changed to reflect the revised WARM matrix.

National Priorities List: Sites ranked under the Federal Hazard Ranking System (HRS) 0+ Federal (EPA) lead, 0@ State lead, 0= Co-lead, 0~ Federal Facilities Agreement.

Status: (RA) Remedial Action



HAZARDOUS SITES LIST

CENTRAL REGION
 Contact Persons: Jim Chulos (509) 454-7294
 Michael Spencer (360) 407-7195

County	Site Name	Nearest City	Rank	Status
Benton	Ben Franklin Transit Co.	Richland	3*	Independent RA
	CENEX, Kennewick	Kennewick	2*	Independent RA
	J.R. Simplot Co.	Prosser	4	Independent RA
	New City Cleaners	Richland	1	Awaiting RA
	Oggies Mini Mart	Prosser	3*	Independent RA
	Wellsian Way Well Field	Richland	2*	Awaiting RA
Chelan	Cascade Helicopter	Cashmere	2	RA in Progress
	Cashmere Landfill	Cashmere	1	Awaiting RA
	Dryden Landfill	Dryden	4	Awaiting RA
	Glacier Park (Boyd-Cascade)	Leavenworth	1	RA in Progress
	Glacier Park (Budget Fuel)	Leavenworth	1	Awaiting RA
	Holden Mine Tailing/Wenatchee	Holden	1	Independent RA
	Manson Landfill	Manson	2	Awaiting RA
	Unocal Bulk Plant #0082	Chelan	1	Awaiting RA
	Unocal Bulk Plant #0853	Wenatchee	1	Awaiting RA
	Unocal Service Station #4942	Wenatchee	2*	Awaiting RA
Douglas	WSU Tree Fruit Research Unit	Wenatchee	3	Independent RA
	Beebe Orchard Dump	Chelan Falls	5	Awaiting RA
Kittitas	Inland Air Service	E. Wenatchee	4	Awaiting RA
	Silicon Metaltech (lab site)	Rock Island	5	Awaiting RA
	Silicon Metaltech (lagoon)	Rock Island	4	Awaiting RA
	Big B Mini-Mart	Ellensburg	4	Awaiting RA
Klickitat	Bingo Fuel Stop	Thorp	2	RA in Progress
	Mid-State Aviation	Ellensburg	3	RA in Progress
	Town Pump Station	White Salmon	1	RA in Progress
Okanogan	Alder Mill	Twisp	2	Awaiting RA
	Arden's Country Store	Majort	3	Construction Complete
	Brett Pit	Grand Coulee	2	Awaiting RA
	Coca Cola Dist. Co.	Omak	2*	Independent RA
	Eisen's Chevron	Oroville	2	RA in Progress
	Gebbers Farm	Brewster	1	Awaiting RA
	Jackpot Food Mart 01-081	Oroville	3*	Independent RA
	Lloyd's Logging - Exc. Soil	Twisp	5	Independent RA
	Lloyd's Logging - Equip Yard	Twisp	5	Awaiting RA
	#Loomis Chevron	Loomis	5	Awaiting RA
	Minnie Mine	Carlton	2	RA in Progress
	Molson Dump	Molson	5	Awaiting RA
	Oroville Dump	Oroville	5	Independent RA
	Pariseau Farm	Brewster	2	Awaiting RA
	Tonasket Post & Rail	Tonasket	5	Awaiting RA
	#UNOCAL 0855	Omak	2	Awaiting RA
	USDOI-BLM Kaaba Texas Mine	Nighthawk	1	RA in Progress
Yakima	Alder's Chevron	Yakima	2*	Independent RA
	Bay Chemical	Yakima	2	RA in Progress
	Bee-Jay Scales	Sunnyside	1	Awaiting RA
	Briar Development Company	Yakima	2	Awaiting RA
	Buena LUST	Buena	2*	Awaiting RA
	CMX Corporation	Yakima	3	Awaiting RA
	#Carlos Motors	Yakima	1	Awaiting RA
	Cascade Natural Gas	Sunnyside	1	RA in Progress
	Circle L	Sunnyside	1	Awaiting RA
	Cliff's Battery Service	Sunnyside	4	Awaiting RA
	Comet Trailer	Selah	1	Awaiting RA
	Consolidated Freightways	Yakima	4	Independent RA
	Evergreen Products	Parker	3	Awaiting RA
	Irwin Research & Development	Yakima	2	Awaiting RA
	Jackpot Station - Union Gap	Union Gap	2*	Awaiting RA
	Johnny's Texaco	Sunnyside	4	RA in Progress
	Kellogg's Kerner	Sunnyside	1	Construction Complete
	Kelly Oil	Yakima	3*	Awaiting RA
	La Rosita	Sunnyside	2*	Awaiting RA
	Maid O' Clover	Yakima	2	Independent RA
	Maid O'Clover - Sunnyside	Sunnyside	3	Awaiting RA
	Manhole 34	Sunnyside	1	RA in Progress
	Northwest Truck Repair	Union Gap	3*	Awaiting RA
Old Selah Dump	Selah	5	Awaiting RA	
Outlook School	Outlook	3*	Independent RA	
Pederson Farm	Moxee	3	Independent RA	
Pit Stop - Naches	Naches	4	Awaiting RA	
Rainier Plastics Company	Yakima	3	Awaiting RA	
Richardson Airways, Inc.	Yakima	2	RA in Progress	

HAZARDOUS SITES LIST

County	Site Name	Nearest City	Rank	Status	
Yakima	Roza Irrigation District	Sunnyside	3*	Awaiting RA	
	Section 18 Dump	Wapato	3	Awaiting RA	
	Shields Bag & Printing Co.	Yakima	5	Awaiting RA	
	Snipes Mountain Landfill	Sunnyside	4	Awaiting RA	
	Southgate Laundry	Yakima	3	Awaiting RA	
	Sunnyside Municipal Well	Sunnyside	3*	Awaiting RA	
	Superior Asphalt	Yakima	1	RA in Progress	
	Terrace Hts Landfill(pesticide)	Yakima	5	Awaiting RA	
	Texaco Bulk Plant/R.E. Powell	Grandview	2*	Awaiting RA	
	Tiger Oil (16th St. & Nob Hill)	Yakima	2	Awaiting RA	
	Tiger Oil (North First Street)	Yakima	3	Awaiting RA	
	Tiger Oil Co (24th & Nob Hill)	Yakima	1	RA in Progress	
	Toppenish School Dist.	Toppenish	2*	Awaiting RA	
	Unocal Bulk Plant #0766	Sunnyside	1	Independent RA	
	Valley Dry Cleaners	Sunnyside	2	Awaiting RA	
	VanCleave Body Shop	Yakima	1	Awaiting RA	
	WA DOT Rimrock	Naches	3*	Independent RA	
	WA DOT Union Gap	Union Gap	3*	Independent RA	
	Yakima Railroad:				
	Cameron - Yakima, Inc.	Yakima	1	RA in Progress	
	Crest Linen (former)	Yakima	1	RA in Progress	
	Frank Wear Cleaners	Yakima	1	RA in Progress	
	Hahn Motor Company	Yakima	5	RA in Progress	
	Nu-Way Cleaners	Yakima	1	RA in Progress	
	Paxton Sales Corporation	Yakima	1	RA in Progress	
	Woods Industries (Crop King)	Yakima	1	RA in Progress	
	Yakima Valley Spray Co.	Yakima	1	RA in Progress	
	#Yakima Steel Fabricators	Yakima	2	RA in Progress	
	Zwight Logging	Yakima	3	Awaiting RA	

EASTERN REGION
Contact Persons: Patti Carter (509) 456-6167
Michael Spencer (360) 407-7195

Adams	Adams Co. Maint. Shop (Othello)	Othello	3*	Independent RA	
	Burlington Northern (Othello)	Othello	1	RA in Progress	
	CMC Real Estate (Othello)	Othello	5	Independent RA	
	Harold's Deli	Othello	5	RA in Progress	
	Puregro (Othello)	Othello	5	Awaiting RA	
	Puregro (Ritzville)	Ritzville	5	Awaiting RA	
	Soil and Crop	Othello	2	RA in Progress	
	T-16 Ranch	Lind	5	Independent RA	
	W W T Batum Facility	Batum	5	Awaiting RA	
	Asotin	Asotin County Landfill	Clarkston	5	Awaiting RA
	Ferry	Hecla Knob Hill Mine	Republic	5	Awaiting RA
Franklin	Glen's Metals	Pasco	5	Awaiting RA	
	Pasco Landfill	Pasco	0@	RA in Progress	
	Port of Pasco	Pasco	1	RA in Progress	
	Puregro (Pasco)	Pasco	1	Awaiting RA	
	Smith Canyon Haz Waste Site	Pasco	5	Independent RA	
Grant	City of Moses Lake Maintenance Facility	Moses Lake	2*	Independent RA	
	Duncan Crane Service, Inc.	Moses Lake	3*	Independent RA	
	Grant Co-Ephrata Landfill 1	Ephrata	5	Awaiting RA	
	Grant Dangerous Waste Site	Royal City	5	Awaiting RA	
	International Titanium	Moses Lake	4	Awaiting RA	
	Larson Substation, Grant Co. PUD	Moses Lake	4	Awaiting RA	
	Port of Moses Lake Pumphouse 1	Moses Lake	2*	Independent RA	
	Puregro (Moses Lake)	Moses Lake	5	Awaiting RA	
	Puregro (Quincy)	Quincy	5	Awaiting RA	
	Puregro (Warden)	Warden	5	Awaiting RA	
	Vista Comer-Texaco	Moses Lake	3	Independent RA	
Lincoln	Puregro (Wilbur)	Wilbur	5	Awaiting RA	
Pend Oreille	Cusick School District	Cusick	3*	RA in Progress	
Spokane	Alaska Steel and Supply	Spokane	4	Awaiting RA	
	Aluminum Recycling Corp.	Spokane	2	Awaiting RA	
	American Tar Company	Spokane	3*	Awaiting RA	
	Argonne Road	Spokane	3	RA in Progress	
	B J Carney & Company	Spokane	3*	Awaiting RA	
	Burlington Northern-Hillyd.	Spokane	4	Independent RA	
	Cummins Northwest (Spokane)	Spokane	5	Independent RA	
	Four Lakes Tire Fire (FLTF)	Four Lakes	5	Awaiting RA	
	Geiger-SIA-Fuel Farm	Spokane	3*	Independent RA	

HAZARDOUS SITES LIST

County	Site Name	Nearest City	Rank	Status
Spokane	General Electric-Old Site	Spokane	0@	RA in Progress
	Greenacres Landfill	Spokane	0@	RA in Progress
	Inland Empire Plating	Spokane	1	Independent RA
	Inland Pit	Spokane	0@	RA in Progress
	#Jeld-Wen Inc.	Spokane	3	Independent RA
	Koch Materials - Trent Ave.	Spokane	3	Independent RA
	Marshall Landfill	Marshall	4	Awaiting RA
	Mica Landfill	Mica	0@	RA in Progress
	North Market Street	Spokane	0@	RA in Progress
	Sicilia Trucking	Spokane	3	Independent RA
	Sparks & Buttercup Subdivision	Spokane	2	Independent RA
	Spokane Fire Dept. Training Facility	Spokane	3*	Awaiting RA
	{Spokane Junk Yard	Spokane	0+	Awaiting RA
	Spokane Transit Auth. Bus Barn	Spokane	5	Independent RA
	URM Stores, Inc.	Spokane	5	Independent RA
	USAAC Geiger Field(GF001	Spokane	2	Awaiting RA
	USAAC Geiger Field(GF003	Spokane	5	Awaiting RA
	USAAC Geiger Field(GF004	Spokane	3*	Awaiting RA
	USAAC Geiger Field(GF005	Spokane	4	Independent RA
	USAAC Geiger Field(GF006	Spokane	3*	Awaiting RA
	USDOE-BPA Bell Substations	Spokane	3*	Independent RA
	United Parcel Service	Spokane	3*	Independent RA
	Washington Air Nat'l Guard	Spokane	3*	Independent RA
Stevens	Colville Post and Pole	Colville	3	Awaiting RA
	L-Bar Products	Chewelah	4	RA in Progress
	Whitten Oil Exxon	Colville	3	RA in Progress
Walla Walla	Corps of Engineers Motor Pool	Walla Walla	2*	Independent RA
	Pantorium Cleaners	Walla Walla	3*	Independent RA
	Walla Walla Farmers Coop	Walla Walla	1	Construction Complete
Whitman	Endicott School District	Endicott	4	RA in Progress
	Garfield School District	Garfield	3*	Construction Complete
	Palouse Producers	Palouse	1	Construction Complete
	WA State Univ Landfill	Pullman	4	Awaiting RA

INDUSTRIAL SECTION

Contact Person: Paul Skyllingstad (360) 407-6949

Clallam	Daishowa America Company Ltd.	Port Angeles	5	Independent RA
	ITT Rayonier PA Finish Rm Site	Port Angeles	2	RA in Progress
Clark	ALCOA Vancouver{	Vancouver	0@	Construction Complete
	ALCOA Vancouver{NPL			Construction Complete
	ALCOA Vancouver{PCB			Independent RA
	ALCOA Vancouver{Rod Mill			RA in Progress
	ALCOA Vancouver{TCE			RA in Progress
Cowlitz	Columbia Marine Lines	Vancouver	4	Construction Complete
	Longview Fibre	Longview	5	Awaiting RA
	Reynolds Metals - Longview	Richmond	5	Awaiting RA
Klickitat	Weyerhaeuser(Wyco) Co Longview	Longview	1	RA in Progress
	Columbia Aluminum Corporation	Goldendale	3	Awaiting RA
Pierce	Kaiser Aluminum Tacoma Works	Tacoma	4	Construction Complete
Snohomish	Weyerhaeuser-Everett(West Site (OU)	Everett	1	RA in Progress
Skagit	Texaco February Oil Spill	Anacortes	2	Construction Complete
Spokane	Kaiser Aluminum Mead Works	Spokane	0@	RA in Progress
Whatcom	Georgia Pac-Bio Trtmt Lgn	Bellingham	2	Awaiting RA
	Georgia Pacific Corporation	Bellingham	5	RA in Progress

NORTHWEST REGION

Contact Persons: Norm Peck (206) 649-7047

Michael Spencer (360) 407-7195

Island	#Comet Bay Marina	Oak Harbor	5	RA in Progress
	Unocal/Coupeville Bulk Plant	Coupeville	1	Independent RA
King	ARCO - Tank Farm	Seattle	2	RA in Progress
	Ace Galvanizing Inc.	Seattle	4	Awaiting RA
	Advance Electroplating	Seattle	5	Awaiting RA
	Alaska Pacific Fisheries	Seattle	1	Awaiting RA
	Asko Processing Inc.	Seattle	5	Independent RA
	Auburn Abandoned Fire Station	Auburn	3	Independent RA
	BNR Maint. & Fueling Facility	Skykomish	1	RA in Progress
	#BP Station #11352	Bothell	3	RA in Progress
	Balmer Yard/BNR	Seattle	5	Independent RA
	Boeing Co- North Field	Seattle	5	Independent RA

HAZARDOUS SITES LIST

County	Site Name	Nearest City	Rank	Status
King	Boeing Co- Plant 2	Seattle	1	Independent RA
	Borden Chemical Company	Kent	1	Independent RA
	C and F Auto Wrecking	Duvall	1	Awaiting RA
	Cedar Hills Landfill	Maple Valley	5	Independent RA
	Central Painting	Seattle	2	Awaiting RA
	Champion Intransit- Ballard Mill	Seattle	1	Construction Complete
	Chemcentral Solvents Co.	Kent	1	Independent RA
	Christensen Petroleum	Enumclaw	1	Independent RA
	#Circle K Station #1461	Seattle	3	RA in Progress
	Earle M. Jorgensen Co.	Seattle	5	Independent RA
	Eastern Supply Co.	Seattle	2	RA in Progress
	GACO Western, Inc.	Tukwila	3*	RA in Progress
	Gas Works Park (Wa Nil Gas)	Seattle	1	RA in Progress
	General Elec. Apparatus Srv Ct	Kent	3	Independent RA
	Great Western Chemical	Seattle	1	RA in Progress
	Harbor Island	Seattle	0+	RA in Progress
	Hydraulic Repair & Design, Inc.	Kent	3*	Independent RA
	Interbay BNR	Seattle	1	Independent RA
	J H Baxter & Company Inc.	Renton	1	RA in Progress
	James Oil Co.	Enumclaw	1	Awaiting RA
	Kenmore Industrial Park	Kenmore	1	Awaiting RA
	Kent Highlands Landfill	Kent	0@	RA in Progress
	LIDCO	Kent	1	RA in Progress
	Laidlaw	Seattle	4	Awaiting RA
	Lake Union Dry Dock Co.	Seattle	1	Awaiting RA
	Lake Union Steam Plant	Seattle	5	Independent RA
	Lake Washington School Dist.	Kirkland	5	Construction Complete
	Landsburg Mine-Rogers Seam	Ravensdale	1	RA in Progress
	Lindal Property	Kent	4	Awaiting RA
	Lockheed Shipbldg Co Yd 2	Seattle	1	RA in Progress
	Longview Fibre Co.	Seattle	5	Independent RA
	Malarkey Asphalt Co.	Seattle	1	Independent RA
	Maralco	Kent	2	RA in Progress
	Marine Vacuum Service, Inc.	Seattle	3	Awaiting RA
	Markey Property, Parcel 4	Seattle	3	Independent RA
	Metro Lake Union Facility	Seattle	1	RA in Progress
	Metro South Base	Seattle	1	Independent RA
	Midway Landfill	Kent	0@	RA in Progress
	Mobil/BP Bulk Facility- Renton	Renton	5	Independent RA
	Monterey Apartments Site	Seattle	3	RA in Progress
	Newcastle/Coal Creek Landfill	Issaquah	5	Awaiting RA
	Northwest Cooperage Co., Inc.	Seattle	4	Awaiting RA
	Northwest Powder Coats	Kent	3*	Awaiting RA
	Old Lawson Rd.	Black Diamond	2	Awaiting RA
	PACCAR	Renton	0@	RA in Progress
	Pioneer Enamel Manufacture	Seattle	5	Awaiting RA
	Precision Engineering	Seattle	1	Independent RA
	Quendall Terminals	Renton	1	RA in Progress
	Reichold Chemical/Lone Star	Seattle	1	Awaiting RA
	S. 252nd St./Pacific Hwy. S.	Kent	4	Awaiting RA
	Shell, Old- Term 18/Port of Seattle	Seattle	5	RA in Progress
	Shell- Tank Farm	Seattle	4	RA in Progress
	Slag Disposal/Beckwith Proptry	Kent	3	RA in Progress
	Sternoff Metals	Seattle	5	Independent RA
	Sunset Park/Tub Lake Dump	SeaTac	3	Independent RA
	Texaco Marketing & Refining-HI	Seattle	2	RA in Progress
	#TIKI Car Wash	Bellevue	3	RA in Progress
	UNIMAR	Seattle	4	Awaiting RA
	Union Station Site	Seattle	3*	Awaiting RA
	Unocal-Seattle Marketing Term.	Seattle	4	RA in Progress
	VIOX	Seattle	5	Independent RA
	Western Batteries, Inc.	Seattle	3	Independent RA
	{Wyckoff Co. (Pacific Sound Resources)	Seattle	0+	Awaiting RA
	Zandt Brass Foundry	Seattle	4	Awaiting RA
Kitsap	Bainbridge Island Landfill	Bainbridge	1	RA in Progress
	Bethel - former Texaco	Port Orchard	3*	RA in Progress
	Chevron Tank Farm/Port WA Nar.	Bremerton	2	Independent RA
	Country Junction Store	Port Orchard	4	RA in Progress
	Day Road Industrial Park	Bainbridge Island	5	Independent RA
	#Hansville General Store	Hansville	3	RA in Progress
	Hansville Landfill	Hansville	1	RA in Progress
	Lothus Bulk Plant	Bremerton	1	Awaiting RA
	Norseland Site	Port Orchard	2	RA in Progress
	Olympic View Sanitary Landfill	Port Orchard	2	Independent RA

HAZARDOUS SITES LIST

County	Site Name	Nearest City	Rank	Status	
Kitsap	Stone Property	Bainbridge Island	4	Awaiting RA	
	Strandley/Manning Site	Port Orchard	3	RA in Progress	
Skagit	Skagit Manufacturing	Sedro Woolley	3	Independent RA	
	#Truck City Truck Stop	Mt. Vernon	3	RA in Progress	
Snohomish	Unocal/Mt. Vernon Bulk Fuel	Mt. Vernon	1	Independent RA	
	#Bill Pearson Timber	Sultan	3	Awaiting RA	
	Christianson Co.	Arlington	5	Awaiting RA	
	East Waterway	Everett	2	Awaiting RA	
	Everett Landfill/Tire Fire	Everett	1	RA in Progress	
	Everett Smelter/Slag Site	Everett	1	RA in Progress	
	Fishermen's Boat Shop Inc.	Everett	3	Independent RA	
	J H Baxter & Company- Arlington	Arlington	4	Awaiting RA	
	Ken's Radiator Service	Lynnwood	2	Independent RA	
	Lynnwood Plating	Lynnwood	4	Awaiting RA	
	#Monroe Auto Salvage	Monroe	1	Awaiting RA	
	Nord Door Co.	Everett	5	Independent RA	
	Parson's Diesel	Snohomish	5	Awaiting RA	
	Pop's Automotive/Roloff Prop.	Everett	3*	Construction Complete	
	Pump Crete	Lynnwood	5	Awaiting RA	
	Rubatino's Truck Care	Everett	5	Independent RA	
	Snohomish Co. PUD/Lynnwood Stn	Lynnwood	2	Independent RA	
	#Stan's Radiator	Everett	4	Awaiting RA	
	US- Defense Fuel Supply Point	Mukilteo	1	RA in Progress	
	Unocal Bulk Plant/Arlington	Arlington	2*	Independent RA	
	Unocal Edmonds Bulk Fuel Term.	Edmonds	1	RA in Progress	
	Urban Accessories	Sultan	5	Awaiting RA	
	Wallace River Park Well	Startup	4	Construction Complete	
	Washington Natural Gas/Everett	Everett	5	Independent RA	
	Wellington Hills Assoc.	Woodinville	2	Independent RA	
	Weyerhaeuser-Everett)	Everett	1	Independent RA	
	Whatcom	Boulevard Park	Bellingham	1	Awaiting RA
		Cornwall Avenue Landfill	Bellingham	2	Awaiting RA
Georgia Pacific Airport Landfill		Bellingham	4	Independent RA	
Murray Chris-Craft Cruisers-W.		Bellingham	2	Independent RA	
Oeser Cedar/Lite Squalicum CRK		Bellingham	1	Awaiting RA	
R.G. Haley Intl Corp		Bellingham	3	Awaiting RA	
Sunshine Cleaners (Former)		Bellingham	2	Independent RA	
Trans Mountain Oil Pipe Line		Bellingham	1	RA in Progress	
Whatcom Waterway		Bellingham	1	Awaiting RA	
Wilder Landfill	Ferndale	1	Awaiting RA		

NUCLEAR AND MIXED WASTE PROGRAM - HANFORD PROJECT

Contact Person: Roger Stanley (360) 407-7108

Benton	HANFORD - 100-AREA (DOE) (includes 27 operable units)	Richland	0~	RA in Progress
	HANFORD - 1100-AREA (DOE) (includes 3 operable units)	Richland	0~	RA in Progress
	HANFORD - 200-AREA (DOE) (includes 43 operable units)	Richland	0~	RA in Progress
	HANFORD - 300-AREA (DOE) (includes 5 operable units)	Richland	0~	RA in Progress

SITE CLEANUP SECTION

Contact Persons: Tim Nord (360) 407-7226

Michael Spencer (360) 407-7195

Sites managed by the Site Cleanup Section are large and complex sites. To make them more manageable, these sites are often divided into smaller units referred to as "operable units." If a site has "operable units," they are listed below (along with their status) under the corresponding site name.

Clark	Frontier Hardchrome	Vancouver	0+	RA in Progress
	US BPA Ross{	Vancouver	0~	RA in Progress
	US BPA Ross{OUA			RA in Progress
	US BPA Ross{OUB			RA in Progress
	Vancouver Wtr Sta #4	Vancouver	0+	RA in Progress
	Grant Moses Lk WF{	Moses Lake	0+	RA in Progress
Island	Moses Lk Wf(Skyline			RA in Progress
	USN Whidbey{	Oak Harbor	0~	RA in Progress
	USN Whidbey{HWES			RA in Progress
	USN Whidbey{OU1			RA in Progress
	USN Whidbey{OU2			RA in Progress
	USN Whidbey{OU3			RA in Progress

HAZARDOUS SITES LIST

County	Site Name	Nearest City	Rank	Status	
Island	USN Whidbey{OU4			RA in Progress	
	USN Whidbey{OU5	Oak Harbor	0~	RA in Progress	
	USN Whidbey{Lake Hancock		1	RA in Progress	
Jefferson	{USN Port Hadlock{	Port Hadlock	0@	RA in Progress	
	USN Port Hadlock{Area 10 & 21			RA in Progress	
	USN Port Hadlock{Area 11			RA in Progress	
King	USN Port Hadlock{Area 12			RA in Progress	
	Queen City Farms A{	Issaquah	0+	RA in Progress	
	Queen City Farms A{4 Tek			RA in Progress	
	Queen City Farms A{Buried Drum			RA in Progress	
	Queen City Farms A{IRM			RA in Progress	
Kitsap	Queen City Farms B	Issaquah	0+	RA in Progress	
	Western Processing Co Inc	Kent	0+	RA in Progress	
	Eagle Harbor{	Bainbridge	0+	RA in Progress	
	Eagle Harbor{E			RA in Progress	
	Eagle Harbor{W			RA in Progress	
	Eagle Harbor{Wyckoff			RA in Progress	
	Eagle Harbor{Wyckoff{GW	RA in Progress			
	{USACE Manchester Annex	Port Orchard	0+	RA in Progress	
	{USN Jackson Park{	Bremerton	0@	RA in Progress	
	USN Jackson Park{Shoreline			RA in Progress	
	USN Jackson Park{Upland			RA in Progress	
	USN Keyport{	Keyport	0~	RA in Progress	
	USN Keyport{OU1			RA in Progress	
	USN Keyport{OU2			RA in Progress	
	{USN PSNS{	Bremerton	0@	RA in Progress	
USN PSNS{OUA			RA in Progress		
USN PSNS{OUB			RA in Progress		
USN PSNS{OUB{IA106			RA in Progress		
USN PSNS{OUB{IA588			RA in Progress		
USN PSNS{OUC			RA in Progress		
USN PSNS{Tanks			RA in Progress		
USN Subase{	Silverdale	0~	RA in Progress		
USN Subase{OU1/Ord.Disp			RA in Progress		
USN Subase{OU2			RA in Progress		
USN Subase{OU3			RA in Progress		
USN Subase{OU4			RA in Progress		
USN Subase{OU6			RA in Progress		
USN Subase{OU7			RA in Progress		
{USN Supply Center	Bremerton	0@	RA in Progress		
Lewis	American Crossarm & Conduit	Chehalis	0+	RA in Progress	
Okanogan	Silver Mountain Mine	Loomis	0+	Construction Complete	
Pierce	Asarco{	Tacoma	0+	RA in Progress	
	Asarco{Demolition			RA in Progress	
	Asarco{Offshore			RA in Progress	
	Asarco{Smelter			RA in Progress	
	Lakewood/Ponders Corner	Lakewood	0+	Construction Complete	
	Ruston/N Tacoma	Tacoma	0+	RA in Progress	
	S Tacoma Field	Tacoma	0+	RA in Progress	
	Tacoma Landfill	Tacoma	0=	Construction Complete	
	Tacoma Tar Pits	Tacoma	0+	RA in Progress	
	USA Ft Lewis Landfill5	Tacoma	0+	Construction Complete	
	USA Ft Lewis Landfill 4/SRCP	Tacoma	0~	RA in Progress	
	USA Ft Lewis Log Center	Tacoma	0+	RA in Progress	
	USA Ft Lewis Multi Site	Multi-Site	Tacoma	0~	RA in Progress
	USAF MAFB Am Lk Gdn	Tacoma	0~	Construction Complete	
	USAF MAFB Washrack	Tacoma	0~	Construction Complete	
Well 12A	Tacoma	0+	Construction Complete		
Skagit	EDB 2 Skagit County	Mt. Vernon	1	Construction Complete	
Skamania	USACE Hamilton Is Landfill	N. Bonneville	0~	RA in Progress	
Snohomish	Tulalip Landfill	Marysville	0+	Awaiting RA	
Spokane	Colbert Landfill	Spokane	0=	RA in Progress	
	Northside Landfill	Spokane	0+	Construction Complete	
	US FAA Mica Peak	Spokane	4	RA in Progress	
	USAF (FAFB) Fairchild AFB{	Spokane	0~	RA in Progress	
	USAF (FAFB) Fairchild AFB{			RA in Progress	
	USAF FAFB{Pr1			RA in Progress	
	USAF FAFB{Pr1{FT-1			RA in Progress	
	USAF FAFB{Pr1{LTM			RA in Progress	
	USAF FAFB{Pr1{PS-2			RA in Progress	
	USAF FAFB{Pr1{WW-1			RA in Progress	
USAF FAFB{Pr2			RA in Progress		
USAF FAFB{Pr3			RA in Progress		

HAZARDOUS SITES LIST

County	Site Name	Nearest City	Rank	Status
Thurston	EDB 1 Thurston County	Olympia	2	Construction Complete
	Restover Truck Stop	Tumwater	3	RA in Progress
Whatcom	EDB 3 Whatcom County	Lynden	3	Construction Complete
	NW Transformer-Harkness	Everson	0+	RA in Progress
	NW Transformer-Mission Pole	Everson	0+	Construction Complete
Yakima	FMC Yakima	Yakima	0+	Construction Complete

SOUTHWEST REGION

Contact Persons: Dick Heggen (360) 407-6267
Michael Spencer (360) 407-7195

Clallam	Chevron Bulk Plant #61001372	Port Angeles	1	Awaiting RA
	PenPly (ITT Rayonier)	Port Angeles	5	RA in Progress
	Port of Port Angeles Log Yard	Port Angeles	1	Awaiting RA
	Truck Town	Port Angeles	3	Awaiting RA
Clark	Unocal Bulk Plant 0601	Port Angeles	1	Independent RA
	AIRCO Industrial Gases	Vancouver	1	RA in Progress
	BN Maintenance Yard, Vancouver	Vancouver	1	Awaiting RA
	Carborundum Company	Vancouver	1	Awaiting RA
	Chevron Bulk Plant #61001854	Vancouver	1	Awaiting RA
	Circle C Landfill	Ridgefield	1	Construction Complete
	#Colf Landscaping	Vancouver	4	Awaiting RA
	Custom Care Cleaners	Vancouver	5	Awaiting RA
	Fargher Lake Grocery	Yacolt	3*	Construction Complete
	GATX Terminals Corporation	Vancouver	1	Awaiting RA
	Gen. Chemical Corp-Vancouver	Vancouver	5	Awaiting RA
	Jim's BP	Battle Ground	2*	RA in Progress
	L & C Dell	Vancouver	4	Construction Complete
	Larch Mountain (DNR)	Yacolt	2	Independent RA
	Lechner Brothers Landfill	Vancouver	3	RA in Progress
	Orbit Industries	Washougal	4	Awaiting RA
	Pacific Northwest Plating - Boomsnub	Vancouver	1	RA in Progress
	Robertson's Paint Shop	Vancouver	5	Awaiting RA
	Tidewater Barge Lines, Inc.	Vancouver	2	Independent RA
	Time Oil/Handy Andy #8	Vancouver	1	RA in Progress
{Vancouver Water Station #1	Vancouver	0+	RA in Progress	
Vancouver Wellfield #3	Vancouver	2*	RA in Progress	
Cowlitz	Chevron USA, Longview	Longview	1	Awaiting RA
	Cliff Koppe Metals	Kelso	2	Awaiting RA
	Gardner Forest Products	Longview	4	Independent RA
	Mt. Solo Landfill	Longview	1	Awaiting RA
	Olympic Pipeline Company	Castle Rock	1	Awaiting RA
	Ostrander Rock Disposal	Longview	4	Awaiting RA
	Reed Landfill	Kelso	1	Awaiting RA
	Unocal Bulk Plant #0321	Kelso	1	Awaiting RA
	West Coast/Mobil Oil Co.	Longview	1	RA in Progress
	Hungry Whale Grocery	Westport	2*	RA in Progress
Grays Harbor	ITT Rayonier (Sawmill)	Hoquiam	2	Independent RA
	Most Western Laundry	Hoquiam	1	Awaiting RA
	Roderick Timber Co.	Junction City	1	Awaiting RA
	Saginaw Mill	Aberdeen	1	Awaiting RA
	Snook Residence	Oakville	1	Awaiting RA
Jefferson	Chevron Bulk Plant	Port Townsend	1	Independent RA
	Olympic Testing Lab	Quilcene	2	Awaiting RA
	Port Townsend Texaco	Port Townsend	2	Awaiting RA
Lewis	Centralia Landfill	Centralia	0@	RA in Progress
	Cowlitz BP	Toledo	2	RA in Progress
	Grange Supply, Chehalis/Cenex	Chehalis	1	RA in Progress
	Packwood Lumber Company	Packwood	4	Awaiting RA
	Traller Village	Centralia	2*	Awaiting RA
	Utility Transformer Service	Pe Ell	4	Awaiting RA
Mason	Pt of Shelton (All Star Aero)	Shelton	4	RA in Progress
Pacific	Weyerhaeuser Truck Shop	Raymond	1	RA in Progress
Pierce	B & L Woodwaste Landfill	Tacoma	1	Construction Complete
	Buffalo Don Murphy-Waller Road	Tacoma	1	Awaiting RA
	Calhoun's Service Station	Tacoma	2	Awaiting RA
	Cascade Pole, Tacoma	Tacoma	1	RA in Progress
	Cascade Pole-McF/ Sitcum	Tacoma	4	RA in Progress
	Cascade Timber #1	Tacoma	1	RA in Progress
	Chevron Bulk Plant	Tacoma	3	Independent RA
	Comm Bay-Nearshore/Tideflats	Tacoma	0+	RA in Progress
	Cascade Timber #3 - POT	Tacoma		RA in Progress
	Cascade Timber #3 - US Oil	Tacoma		RA in Progress

HAZARDOUS SITES List

County	Site Name	Nearest City	Rank	Status	
Pierce	PRI Northwest	Tacoma		RA in Progress	
	Sound Battery	Tacoma		RA in Progress	
	Superior Oil	Tacoma		RA in Progress	
	Tacoma Coal Gasification	Tacoma		RA in Progress	
	Taylor Way Properties, Inc.	Tacoma		RA in Progress	
	Thorne Road Slag Site	Tacoma		RA in Progress	
	USG Plant Site	Tacoma		RA in Progress	
	Coski Industrial Dump	Tacoma	5	Awaiting RA	
	D Street Petroleum	Tacoma	4	Construction Complete	
	Dorman Tire Yard (Fire)	Roy	2	Awaiting RA	
	Elf Atchem - 2901 Taylor Way	Tacoma	1	Construction Complete	
	Frederickson Industrial Park	Tacoma	1	RA in Progress	
	General Metals	Tacoma	1	RA in Progress	
	Hidden Valley Landfill (Thun Fld)	Puyallup	0@	RA in Progress	
	Landscaping by Pat Boring	Tacoma	4	Awaiting RA	
	Lincoln Avenue Ditch	Tacoma	3	Awaiting RA	
	Louisiana-Pacific	Tacoma	1	Construction Complete	
	Manke Lumber Co., Sumner Plant	Sumner	5	Awaiting RA	
	Murray Pacific #1	Tacoma	1	RA in Progress	
	Music Machine, The	Tacoma	2*	RA in Progress	
	Nalley's Fine Foods	Tacoma	2	Independent RA	
	National Oil Dump	Tacoma	4	Awaiting RA	
	Occidental Chemical, Marine Vw	Tacoma	3	Awaiting RA	
	Parkland Cleaners	Parkland	3	Independent RA	
	Petroleum Reclaiming Service	Tacoma	2	Awaiting RA	
	Puget Power-Electron Power	Orting	2	Independent RA	
	Rhone Poulenc/Basic Chemical	Tacoma	3	Awaiting RA	
	Robert Rosch Property	Roy	1	Independent RA	
	Summit Exxon	Tacoma	1	Independent RA	
	Sumner National Auto Parts	Sumner	1	Awaiting RA	
	TAM Engineering Corporation	Tacoma	1	Awaiting RA	
	Tacoma Metals Inc.	Tacoma	2	Awaiting RA	
	Tacoma Storm Drains	Tacoma	1	Awaiting RA	
	Union Pacific RR-Tunnel	Tacoma	3	Awaiting RA	
	Unocal Service Station (Conan)	Gig Harbor	1	Awaiting RA	
	Valley Refinishing	Sumner	1	Awaiting RA	
	WA St Nat'l Guard/Camp Murray	Tacoma	1	Independent RA	
	WSU Buckley Dairy	Buckley	1	Awaiting RA	
	Wasser Winters	Tacoma	1	Construction Complete	
	Weyerhaeuser-Dupont #1	Dupont	2	RA in Progress	
	Xytec Plastics	Tacoma	2	Awaiting RA	
	-Xytec)Clorox/Lakewood	Independent RA			
	Skamania	Unocal Bulk Plant #0761	Stevenson	1	Awaiting RA
	Thurston	Black Lake Grocery	Olympia	2	RA in Progress
		Cascade Pole, Inc. - McFarland	Olympia	1	RA in Progress
		Cedar Creek Corrections (DNR)	Littlerock	2	Independent RA
		Fourth Street Mobil	Olympia	3*	RA in Progress
	Hytec, Littlerock	Littlerock	4	Awaiting RA	
	Hytec, Tumwater	Tumwater	3	Awaiting RA	
	Lacey Compound (DNR)	Lacey	4	Independent RA	
	Lacey Laundromat	Lacey	1	Awaiting RA	
	Lacey Valve Grinding	Lacey	3*	Awaiting RA	
	Minitrie Tire Fire	Rochester	1	Awaiting RA	
	Monarch Bullet	Rochester	1	Independent RA	
	Old Olympia Municipal Dump	Olympia	4	Awaiting RA	
	Pattison Lake EDB	Lacey	2*	Construction Complete	
	Puget Sound Power & Light	Olympia	5	Independent RA	
	Rhodes Chemical Company	Rochester	3	Awaiting RA	
	Rhodes Chemical Company-Barn	Rochester	3	Awaiting RA	
	Texaco Bulk Plant, Tumwater	Tumwater	3	Independent RA	
	Unocal (Hulco)	Olympia	4	Awaiting RA	
	Weyerhaeuser Co.-Box Plant	Olympia	4	Awaiting RA	
	Wolph's Second Hand Store	Olympia	2	Awaiting RA	
	Wood Fabricators	Yelm	4	Awaiting RA	