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Environmental Protection
Agency

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Idaho
Oregon
Washington

Office of Environmental Cleanup

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Making Environmental Progress, Improving Local Communities

Accomplishments of the EPA Region 10 Superfund Program

Bottom left cover photo contributed by Dan Rone.

A Snapshot of Region 10 Accomplishments

The Superfund Program in EPA Region 10 continues its strong record of addressing serious contamination problems throughout the Northwest and Alaska. I am proud of the progress we are achieving at our largest and most challenging sites, including Bunker Hill, the Lower Duwamish Waterway, Commencement Bay, and Portland Harbor. At the same time, we have completed rapid cleanup actions at many smaller sites and are preparing for final cleanup at others. I am pleased to offer this report summarizing our Superfund Program's major work to protect human health and the environment in Region 10.

Here is a brief summary of notable accomplishments in 2003:

Actions Completed in Fiscal Year 2003

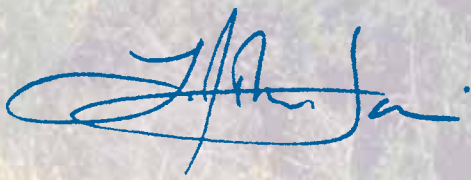
- **100 site assessments**
- **19 cleanup decision documents** *(Records of Decision and Action Memos)*
- **5 cleanup negotiations**
- **6 remedial designs**
- **13 remedial actions**
- **2 construction completions**
- **27 five-year reviews**
- **7 cost recovery actions totaling almost $24 million**
- **5,300-plus responses to spill notification calls**
- **31 emergency response actions**
- **14 time-critical removals**

At most sites, EPA Region 10 became involved due to a request from a local, state, or federal agency, or a federally recognized Indian tribe. This year we also received seven citizen petitions requesting investigation of sites where hazardous waste contamination might be present. Through our Removal Program, we received over 5,300 notifications to our 24-hour duty officer, and responded to 31 emergencies and spills that posed an imminent threat to people or the environment.

Since the inception of the Superfund Program in 1980, EPA Region 10 has removed a total of 1,731 sites from the Region 10 Superfund inventory. About 500 sites remain in the inventory to be studied. Of the sites studied to date, Region 10 has listed 95 on the National Priorities List (NPL). Final cleanup construction has been completed at 60 of these sites, and it is under way at another 23 sites. In our Region, 25 sites have been deleted from the NPL.

This year the Superfund budget was under intense public scrutiny. While our overall Superfund budget in Region10 has held steady for the past few years, we continue to experience significant demand for Superfund Program services. I'm pleased that this year EPA was able to provide $12 million in new funding for McCormick and Baxter and $10 million for the Coeur d'Alene Basin. To stretch cleanup dollars and to ensure that responsible parties shoulder their cleanup obligations, Region 10 maintains a strong Superfund enforcement program dedicated to fast and effective cleanup.

Region 10 is strongly committed to attaining cleanup progress at all important sites. I attribute the lion's share of our success to the strong relationships we have built with our state, federal, tribal, and community partners. Working together, we have used cleanup dollars effectively to deliver tangible results.



L. John Iani, Regional Administrator
EPA Region 10

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Action Plan for Cleaning Up Formerly Used Defense Sites

More Than 600 Sites Across Alaska

In a landmark bargain for progress, EPA Region 10, the U.S. Army Corps, and the Alaska Department of Environmental Conservation crafted and signed the first Statewide Management Action Plan for prioritizing cleanups at the 625 Formerly Used Defense Sites (FUDS) across Alaska. Implementing the action plan will produce several tangible results: the agencies will be much more strategic and productive in their cleanup approach; sites posing the highest risks to communities will be addressed more quickly; and due to greater efficiencies, taxpayer dollars will be saved.

Staff from EPA, the Army Corps, and the Alaska Department of Environmental Conservation discuss prioritizing cleanups at FUD sites.

Work in 2003 included forecasting future work and costs, and setting long-range goals by ranking sites based on relative risk, site location, stage of work, community involvement, and other factors. The agencies considered tribal needs when developing site priorities, and plan to invite further tribal involvement in the coming year. Site closeout, assessment, or cleanup is now planned at about 75 sites in 2004.

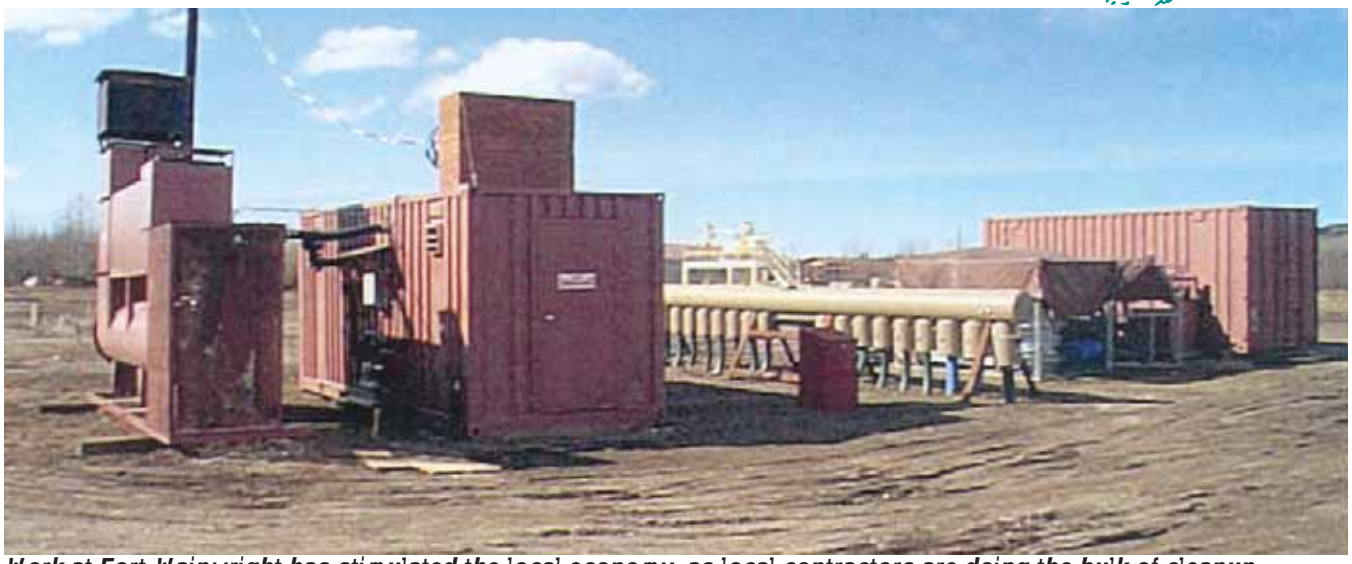
47,000 Acres Ready for New Business

Adak Naval Air Station, Adak Island, Alaska

Working in coordination with EPA, the U.S. Navy completed a Finding of Suitability to Transfer for 47,000 acres on Adak Island. As a result, the Aleut Corporation can now encourage new business on Adak, and sell or lease commercial land, buildings, and housing. Making property transfer possible is an important achievement, as commerce on Adak is well-positioned to grow. The island is situated in one of the world's richest fishing regions and has an ice-free, deep-water port.

Completing the first phase of unexploded ordinance cleanup was an important step in making the Adak property transfer possible. The Navy removed 351 intact military munitions from WWII, including grenades, mortars, and projectiles. It also removed 3,300 metal fragments from training areas, including partially intact munitions that did not completely explode after being fired. The first cleanup phase addressed all of downtown Adak and all the real estate scheduled for transfer. EPA's collaboration with the Navy, the Aleut Tribes, the State, local business, and the community has been critical to expediting the cleanup and making the island safer for everyone.

Adak's ice-free, deep-water port invites commercial growth.



Work at Fort Wainwright has stimulated the local economy, as local contractors are doing the bulk of cleanup.

Cleanup Helps Stimulate Local Economy

Fort Wainwright Superfund Site, Fairbanks, Alaska

At Fort Wainwright, EPA, the U.S. Army, and the Alaska Department of Environmental Conservation are using aggressive technologies to clean up groundwater and soil contaminated with solvents and petroleum. Air sparging and soil-vapor extraction pump air into the ground, cleaning up the site in a fraction of the time that natural processes would take. Preliminary studies show that in four to five years, the Army will have met most cleanup goals and the site will be ready for long-term monitoring. Progress at Fort Wainwright can be attributed to the teamwork of the Army, State, and EPA working together under a Federal Facility Compliance Agreement to make sound technical decisions.

The Army has stimulated the economy by hiring local contractors to do the bulk of the cleanup. To date, the Army has spent almost $121 million on cleanup, and plans to spend another $33 million. Local residents and businesses are pleased with the progress made by EPA and the Army at Fort Wainwright. A recent report by Alaska Community Action on Toxics commended the cleanup approach.

Safe and Ready for Reuse

Arctic Surplus Superfund Site, Fairbanks, Alaska

At one time, the Arctic Surplus Site was contaminated with 22,000 pounds of asbestos, 1,700 drums of toxic liquids, and soils laden with lead and polychlorinated biphenyls (PCBs). A private company used the site as a salvage yard, storing military equipment, asbestos insulation, and various oils. It caused extensive PCB and lead contamination by cracking batteries and burning transformers to recover metals.

This past summer, the U.S. Defense Logistics Agency (DLA) finished cleaning up contaminated soils. EPA and DLA worked together to accelerate the last cleanup phase from three years to one. Today, the site is safe and clean, and ready for industrial redevelopment.

To make the site available for a wide variety of future activities, EPA approved a redesigned cap for the on-site hazardous waste containment area. Due to EPA's modifications, the property owner can now use this area for parking, storage, and other business needs.

Today the Arctic Surplus Site is safe, clean, and ready for industrial redevelopment.

$10 Million Cleanup Planned

Coeur d'Alene River Basin, Idaho
Congressional District 1

Many homes are having contaminated topsoil replaced with safer materials.

Cleanup of Bunker Hill Operable Unit 3 (the Basin) has been a top priority for EPA since the cleanup plan was finalized in 2002. This past year, planning began for cleanups at two Lower Basin recreation areas, as approved under the Basin Commission's first one-year work plan. The Basin Commission is a team of representatives from the states of Idaho and Washington, three counties in the Basin, the Coeur d'Alene Tribe, and federal agencies. The Commission's objective is to establish clean and low-maintenance recreation sites for public use.

In 2004, EPA will spend $10 million to begin cleanup at about 200 residential and community properties, as well as the two Lower Basin recreation areas. The cleanup includes operation of a critical waste repository. EPA and the State of Idaho continue to place the highest priority on properties occupied by children and pregnant women.

Thus far, EPA and the State of Idaho have removed contaminated soil from more than 100 residential yards, seven schools and day care centers, and six recreational areas. EPA has also provided water treatment, municipal hook-up, or bottled water to about 30 families. The Basin Commission recently approved a 5-year plan that will guide future cleanup.

Approaching the Finish Line

Bunker Hill Box, Kellogg, Idaho
Congressional District 1

In the 21-square-mile area called the Bunker Hill Box, EPA and the Upstream Mining Group have cleaned up more than 2,000 residential and community areas since 1994. In 2003, EPA and the State of Idaho cleaned up another 200 residential properties, with about 300 contaminated properties still remaining. At the current pace, EPA expects all residential cleanup to be done by 2005.

In 2003, 70 local workers were hired to support residential cleanup. Most materials and services were purchased locally. By using local manpower and materials, jobs are being created and the local economy is getting a boost.

The Kellogg community benefits in other ways too. Major cleanups were completed this year at Kellogg Middle School and Teeter's Field, a city-owned ballfield used for baseball and football. The cleanup at the middle school replaced underground sprinkler systems and cleaned up a greenhouse, an existing flood control dike, and track and field areas.

In non-populated areas of the Box, work is nearly complete. Revegetation efforts have been extremely effective. New plants and animals are flourishing in areas that have been devoid of life for decades.

EPA employees discuss cleanup in the Coeur d'Alene Basin.

New Recreation and Business in the Silver Valley

Union Pacific Railroad, Kellogg and Coeur d'Alene, Idaho
Congressional District 1

Local businesses and residents in and around Kellogg and Coeur d'Alene enjoy the new 72-mile recreational trail.

EPA has helped transform a contaminated railway into a 72-mile trail for hiking and biking. The cleanup is complete, and a grand opening will take place in the spring of 2004. The $40 million project was funded by Union Pacific Railroad. While the trail is not officially open, people are already putting it to good use. Local businesses in the nine communities in and around Kellogg and Coeur d'Alene are seeing the benefits. The trail was a catalyst for improved summer revenues, attracting tourists and bikers from around the region.

EPA has worked closely with the State of Idaho and the Coeur d'Alene Tribe on this project. In addition to cleaning up contaminated sites along the railway, the project has involved building or repairing 30 bridges and constructing solar-powered, composting toilets.

Protecting the Selkirk Mountain Ecosystem

Continental Mine, Boundary County, Idaho
Congressional District 1

EPA has completed a 5-month cleanup of the Continental Mine, which sits on both public and private land near the Canadian border in northwest Idaho. The mine is in the pristine Selkirk Mountain ecosystem, home to many rare species, including bald eagles, Canadian lynxes, grey wolves, grizzly bears, caribou, sturgeon, and bull trout. As a result of the cleanup, 138,000 cubic yards of material contaminated with mine wastes have been consolidated on site under a protective barrier. The barrier is minimizing the release of lead and arsenic into Blue Joe Creek. To protect fisheries, state and federal agencies will monitor water quality for several years.

EPA consulted formally with the Kootenai Tribe and the Canadian government to complete a rapid cleanup of Continental Mine.

During the $2.7 million cleanup, EPA worked in close coordination with the Forest Service, Fish and Wildlife Service, Idaho Department of Environmental Quality, and private property owners. EPA also consulted formally with the Kootenai Tribe and the Canadian government. State and federal agencies have expressed satisfaction with EPA's fast and effective approach.

Rapid Site Investigation Yields Important Data

Franke's Laundromat, Caldwell, Idaho
Congressional District 1

The results of a rapid investigation at Franke's Laundromat are helping EPA and others determine next steps.

In Spring 2003, EPA negotiated a legal agreement with the property owner of Franke's Laundromat to do a rapid site investigation. EPA got involved due to dangerous levels of perchloroethylene (PCE) in soil and groundwater at the site. Since PCE is highly toxic and a probable carcinogen, EPA is concerned about off-site migration and the threat to down-gradient drinking water and the air inside nearby businesses.

The property owner, working under an EPA Administrative Consent Order, conducted a rapid investigation to learn the full extent of contamination. Preliminary results show that PCE remains in groundwater at concentrations 10,000 times the level determined to pose a risk to human health. Furthermore, the data showed that PCE has migrated to the lower sand aquifer beneath the site and nearby property. EPA is currently evaluating cleanup options that may include removing and disposing of highly contaminated soils, using soil-vapor extraction to address volatile contaminants, and constructing a chemically reactive barrier wall to stop off-site migration.

Removing Mine Tailings to Protect Rivers

Harmony Mine, Baker, Idaho
Congressional District 2

When a catastrophic fire destroyed vegetation upstream of the Harmony Mine in Baker, Idaho, the U.S. Forest Service asked EPA to help remove a large tailings pile at risk of washing downstream in the event of heavy rainfall. The Forest Service was concerned that the 10,000-cubic-yard pile, which was straddling a tributary to Withington Creek, would erode and contaminate downstream rivers with dangerous amounts of copper.

In just two months, EPA and the U.S. Forest Service co-led a $500,000 cleanup to remove the tailings, place them in a secure repository, and cap them. The agencies built a 1.3 mile road so that large construction equipment could get to the site. They also reconstructed the stream channel to be stable and seeded disturbed areas.

A fast cleanup at the Harmony Mine protects downstream waters from copper contamination.

Making a Neighborhood Safe

North Ridge Estates Site, Klamath Falls, Oregon
Congressional District 2

EPA takes fast action to remove asbestos from the North Ridge Estates neighborhood.

In summer 2003, EPA took action to remove asbestos contamination from 22 residences in the North Ridge Estates neighborhood near Klamath Falls. The Oregon Department of Environmental Quality asked EPA to get involved when it learned that asbestos-laden debris throughout the subdivision could threaten the health of residents. EPA's work included removing more than 14,000 pounds of asbestos-containing materials from residential properties, and sampling air and soil to see if people were at risk.

More than two dozen homes at North Ridge Estates were built during the last decade on plots where military barracks once stood. The asbestos contamination originated from siding, roofing, and steam pipes from about 80 buildings constructed in the 1940's. Many of the buildings were demolished in place, leaving a dangerous asbestos problem for future residents.

Unified Command Tackles Train Derailment

Union Pacific Railroad Derailment, The Dalles, Oregon
Congressional District 2

In January 2003, when 53 train cars were derailed just outside The Dalles and adjacent to Interstate 84, EPA took swift action. Within the hour, EPA arrived at the site to find five derailed cars containing hazardous materials, including phenol, anhydrous ammonia, arsenic acid, and vinyl chloride. EPA also responded to 14 cars containing oils, four of which were breached and leaking within about 100 yards of the Columbia River.

EPA, tribal representatives, the State, Wasco County, and Union Pacific quickly formed a Unified Command to address the situation. Working together, the Command safely removed four cars containing hazardous materials and pumped the contents of the fifth car into a tanker for removal. With EPA oversight, Union Pacific also cleaned up the soils contaminated with oil.

The derailment occurred in a culturally significant area within the Columbia Gorge National Scenic Area. The Yakima, Warm Springs, and Umatilla Indian tribes have cultural and historic connections to the area. During the cleanup, the Unified Command made sure that culturally and historically significant items weren't disturbed. At the tribes' request, EPA also made sure that soils removed from the site were returned after they were treated.

EPA responds at a train derailment where freight cars containing oils and hazardous materials jumped the track.

A Contaminated Site is Added to the National Priorities List

Harbor Oil Superfund Site, Portland, Oregon
Congressional District 3

Toxic contamination threatens Force Lake.

In September 2003, EPA added the Harbor Oil site to the National Priorities List, making it Oregon's newest Superfund site. The site is located near the Expo Center in northeast Portland. The Oregon Department of Environmental Quality referred the site to EPA when it was unable to reach a cleanup agreement with the owner. In deciding to list the site, EPA considered input from the community, tribes, and state and local agencies.

EPA intends to use its enforcement authorities to negotiate with the potentially responsible party to clean up the site. The Agency also set aside funds to start the Remedial Investigation/Feasibility Study to fully characterize the site and evaluate cleanup alternatives. The Harbor Oil site is contaminated with several hazardous substances, including volatile and semi-volatile organic compounds, metals, pesticides, and polychlorinated biphenyls (PCBs). Contaminants from the site could be migrating into Force Lake and adjacent wetlands.

Contamination at Harbor Oil was caused in 1974 by a major waste oil spill from on-site storage tanks that killed fish in Force Lake. A severe fire in 1979 caused waste oils and other contaminants to flow across the site and into adjacent wetlands and Force Lake.

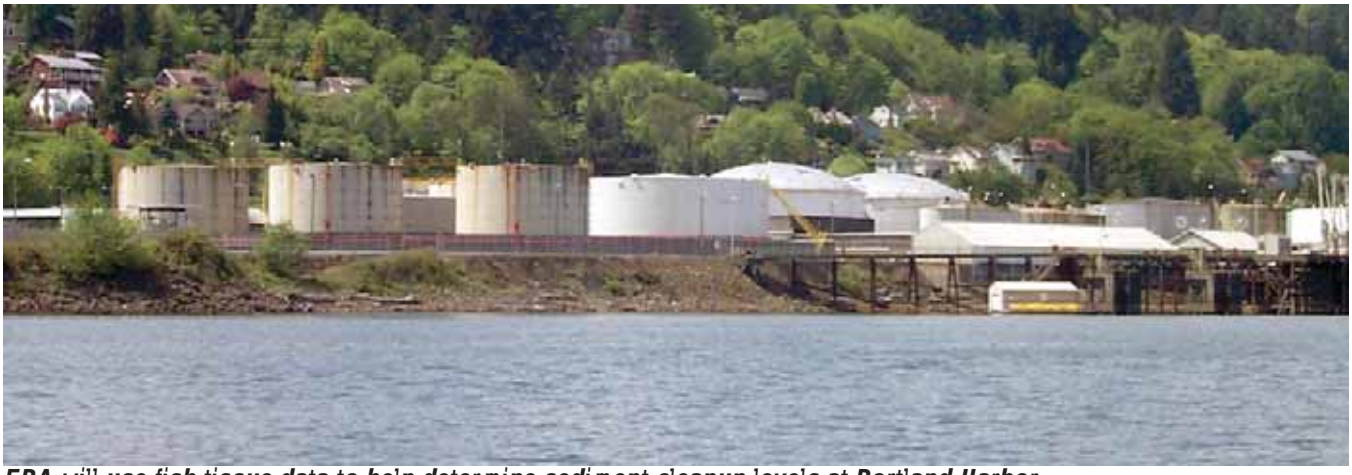
Reaching Important Milestones

Portland Harbor Superfund Site, Portland, Oregon
Congressional District 3

An important milestone was reached at Portland Harbor when the Lower Willamette Group, the potentially responsible parties performing the investigation, provided EPA with data from more than 1,800 fish. EPA will use the data to help determine sediment cleanup levels, as well as to learn to what extent mercury, pesticides, and PCBs may be bio-accumulating in the food chain. The Oregon Department of Health Services will use the data to update fish consumption advisories for the Willamette River.

Another milestone was reached in October 2003 when EPA and the Port of Portland agreed to start the first early action to clean up sediment at the Port's Marine Terminal 4. The cleanup of Terminal 4 will reduce risks to human health and the environment prior to the completion of the larger Portland Harbor investigation. It will also allow continued operation of Terminal 4.

Progress at Portland Harbor stems from close teamwork on many fronts. EPA and the Oregon Department of Environmental Quality are cooperating with citizens, tribes, and public agencies to ensure that the investigation incorporates a wide range of concerns. Six tribes and several federal and state agencies work in partnership with EPA to resolve technical issues regarding work plans and collection of sediment samples.



EPA will use fish tissue data to help determine sediment cleanup levels at Portland Harbor.

Celebrating Progress

McCormick & Baxter Superfund Site, Portland, Oregon
Congressional District 3

In May 2003, EPA hosted a boat tour to celebrate the construction of a sub-surface barrier wall at the McCormick and Baxter Creosoting Company site in Portland. The barrier wall will prevent toxic substances from leaching into the Willamette River. The site is contaminated with heavy metals, polycyclic aromatic hydrocarbons, and pentachlorophenol, due to almost 50 years of wood treating at the property.

To date, EPA has removed 33,000 tons of contaminated soil from the site and recovered 1,900 gallons of creosote from groundwater. The final phases of cleanup will include cleanup of contaminated sediments adjacent to the property, and an upland soil cap. EPA is providing $12 million for this work to continue, and another $4 million will be provided next year. When the cleanup is completed, the City of Portland plans to redevelop the site as a recreational park.

Hazardous Waste Threat Quickly Stabilized

Columbia American Plating Site, Portland, Oregon
Congressional District 3

In May 2003, at the request of the Oregon Department of Environmental Quality, EPA responded to a hazardous waste emergency at the Columbia American Plating site in the Northwest Industrial Area of Portland. The City of Portland's Fire Marshall closed the site because it was imminently dangerous and a fire hazard. About 1,500 hazardous waste containers were lined up at the site, and numerous chemical spills discolored the ground.

EPA took fast action to secure and stabilize the site by controlling water accumulation and covering open containers filled with cyanide and hydrofluoric acid. The Agency has pumped storm water into above-ground tanks. It also removed and properly disposed of approximately 70,000 gallons of hazardous waste liquids. The Fire Marshall's office expressed satisfaction with EPA's quick response. The site no longer poses a threat to neighbors and workers, and EPA is helping to put the site back into productive use.

The sub-surface barrier wall at McCormick and Baxter will prevent toxic substances from seeping into the Willamette River.

Getting the Job Done

Reynolds Metals Site, Troutdale, Oregon
Congressional District 3

Reynolds Metals Company is working under EPA oversight to clean up contamination caused by more than 50 years of aluminum production at the former Alcoa smelter. This past summer, the company began removing contamination, up to four-feet thick, from the bottom of the 14-acre Company Lake using an innovative approach that involves de-watering the lake. Reynolds is also removing soil from two on-site landfills that are heavily contaminated with fluoride, polyaromatic hydrocarbons, PCBs, and cyanide. This work will help keep hazardous substances from moving into groundwater beneath the site, which is bordered by the Columbia and Sandy Rivers.

Final Phase of Cleanup Construction Under Way

Northwest Pipe and Casing Superfund Site, Clackamas, Oregon
Congressional District 5

EPA began the final phase of cleanup construction at the Northwest Pipe and Casing Superfund site in Clackamas, where almost 30 years of pipe manufacturing and coating operations contaminated the site with oils, solvents, and coal tars. The estimated total cost of cleanup is $10.4 million. The cleanup is important because surface water from the site flows into the Willamette River where people fish, and wetlands and endangered species are found. When cleanup is done, the site will be available for industrial redevelopment. The cleanup will also restore and maintain the upper aquifer at the site as a potential source of drinking water.

Tasks planned in the final cleanup phase include installing 15 groundwater circulation wells, constructing a clean soil cap, and restoring a wetland. The circulation wells will remove volatile organic compounds and prevent contamination from spreading off site. The soil cap will be spread two feet deep over an area larger than 12 football fields. It will protect future occupants from exposure to coal-tar compounds and PCBs. The wetland will provide habitat for endangered species.

The Willamette River is an aesthetic and recreational highlight for Oregon.

Innovative Cleanup Saves Millions of Dollars at Toxic Chrome Site

Frontier Hard Chrome, Vancouver, Washington
Congressional District 3

EPA has completed cleanup of hexavalent chromium at the Frontier Hard Chrome Superfund site in Vancouver. Years of improper chrome disposal had contaminated groundwater and threatened the Columbia River. Today, the property is fenced and ready for light industrial or commercial reuse. By using innovative cleanup technologies, EPA spent $3.5 million, rather than the projected $30 million it could have spent using traditional methods.

Prior to cleanup, soils at Frontier Hard Chrome were stained with contamination.

EPA cleaned up the site by injecting a sulfur-based chemical reactant into the ground. The reactant converted cancer-causing hexavalent chromium at the most contaminated hot spot into an inert form of trivalent chromium. Workers also created an underground reactive barrier by injecting an iron-based chemical into the ground outside the hot spot. This barrier will neutralize hexavalent chromium for years to come. EPA will monitor the site for the next several years to make sure chromium-tainted groundwater eventually reaches drinking water standards.

Third Nuclear Reactor Cocooned

Hanford Superfund Site, Richland, WA
Congressional District 4

The Department of Energy finished cocooning a third nuclear reactor at the 586-square-mile Hanford Nuclear Reservation, which is the most contaminated nuclear waste site in the United States and the site of the world's largest environmental cleanup. Cocooning involves tearing the reactor down to the 3-foot concrete shield wall, and putting a safe, secure structure of galvanized steel on top of it.

This year the Department of Energy cocooned a third nuclear reactor.

EPA and the Department of Energy made headway in dealing with more than 12,000 drums filled with soils and sludges contaminated with radioactive and chemical wastes. By applying regulatory flexibility, EPA developed plans to have these wastes safely treated and disposed of at a hazardous waste disposal facility. As a result, the drums will no longer remain in storage where they could deteriorate and cause further contamination.

In the coming year, construction will continue on Hanford's tank-waste vitrification plant, which will be used to treat high-level wastes now stored in 167 extremely large underground tanks. The vitrification process turns wastes into glass. Current plans call for disposing of treated wastes at Yucca Mountain in Nevada.

People can watch the cleanup of Pacific Sound Resources from the public-access park and viewing tower at the site.

Clean Sediment Cap to Cover 58 Acres in Elliott Bay

Pacific Sound Resources Superfund Site, West Seattle, Washington
Congressional District 7

At the Pacific Sound Resources Superfund site on the south shore of Elliott Bay, EPA is overseeing cleanup of sediments contaminated with creosote, pentachlorophenol (PCP), and metals, the result of years of wood-treating operations. EPA expects the cleanup to be done in three to five years. Tasks include removing about 700 wood pilings and related structures that make up several old piers. About 10,000 cubic yards of contaminated sediments will be dredged near the shore to maintain the water depth needed for barge loading. In addition, a clean sediment cap will be placed over approximately 58 acres of contaminated sediments in the bay.

Work at Pacific Sound Resources is scheduled around the migration of juvenile salmon. The gently sloped cap will provide a habitat preferred by salmon. Plans also include adding logs and plants, such as beach grass and willows, along the shore to improve habitat for native animals. About five feet of clean fill will be placed near the shore to enable people to, once again, harvest shellfish from this area of the bay.

Major Sediment Cleanups to be Done in 2004 and 2006

Harbor Island Superfund Site, Elliott Bay, Seattle
Congressional District 7

EPA is overseeing the cleanup of contaminated sediments at the Harbor Island Superfund site on Elliott Bay in Seattle. Areas adjacent to two shipbuilding operations are contaminated with heavy metals, PCBs, and other contaminants. Lockheed Martin Corporation has begun cleanup next to its former shipyard on the island. Todd Pacific Shipyards is installing a new water-pollution control system at its shipyard, and will start dredging contaminated sediments next to the shipyard. Work at Lockheed will be done by spring 2004. Work at Todd will be completed two years later.

EPA signed two legal agreements this past year that make these major cleanups possible. Cleanup plans include removing four-plus acres of piers, removing about 8,000 creosoted piles, dredging more than 300,000 cubic yards of contaminated sediments, capping more than four acres of contaminated sediments, and improving habitat for salmon.

Cleanup at the Harbor Island Superfund site includes removing about 8,000 creosoted piles.

Early Cleanups on the Way

Lower Duwamish Waterway Site, Seattle, Washington
Congressional District 7

At the Lower Duwamish Waterway, jointly managed by EPA and the Washington State Department of Ecology, one early sediment cleanup is under way, and three others are being planned. The areas selected for early work are those with the highest PCB levels and those where chemical concentrations exceed state standards that protect clams, worms, and other mud-dwelling animals. Protecting such animals preserves important links in the food chain, and protects fisheries for the Muckleshoot and Suquamish Indian tribes.

Top Left: In May 2003, chinook salmon were collected from the Lower Duwamish Waterway and tested for contamination.
Lower Right: Government agencies tour the Duwamish area with the Community Coalition for Environmental Justice.

EPA and Ecology meet often with the Duwamish River Cleanup Coalition, a Community Advisory Group that represents the interests of the community. Many residents in the Lower Duwamish area have low incomes and are Hispanic, Asian, South Pacific Islander, or Russian-speaking immigrants. To engage a diverse public, EPA and Ecology developed community involvement plans for building trust and participation by community members. The plans reach out to high-risk and under-represented minority communities. They include a Hispanic supplement and a draft Asian-Pacific Islander supplement. EPA publishes fact sheets for the site in Spanish, as well as English.

Settlement Provides $100 Million for Cleanup

Asarco Superfund Site, Ruston and North Tacoma, Washington
Congressional District 9

About 100 properties contaminated by the former Asarco smelter will be cleaned up in 2004.

With EPA assistance, the Justice Department reached an agreement with Asarco to fund an independent environmental trust to be used for the next seven years to pay for cleanup of sites around the country where Asarco is liable. Initial funding of the trust is more than $100 million. The trust fund is a major achievement because Asarco had been struggling financially due to low copper prices. Further complicating the settlement is the fact that Asarco is now fully owned by Grupo Mexico, a Mexican corporation.

In Region 10, trust monies will be used to clean up the Asarco smelter and Town of Ruston. Contaminants of concern include lead, arsenic, copper, and zinc. About 100 properties will be cleaned up in 2004, and significant progress will be made on the smelter cleanup.

End of Cleanup in Sight

Commencement Bay Nearshore/Tideflats, Tacoma, Washington
Congressional Districts 6 and 9

The Commencement Bay Nearshore/Tideflats Superfund mega-site has entered the final stages of cleanup, with all sediment cleanup work to be finished in the next three years. To date, more than 60 sources of contamination have been controlled and more than 20 areas have been cleaned up. The Bay is recovering from being one of the nation's most polluted water bodies. Contamination at the site was caused by 100 years of chemical manufacturing, refineries, aluminum smelting, boat building, log yards, concrete production, and other industrial activities. By cleaning up this industrial contamination, EPA is creating a cleaner environment for marine organisms and people.

Responsible parties, including businesses, the Port of Tacoma, and the City of Tacoma, will pay for 85 percent of the $300 million cleanup. Work under way includes removing enough sediment to fill 2½ Tacoma Domes. The sediment will be shipped off site for disposal, or safely disposed as fill in nearshore areas, which will become newly created Port and industrial facilities. Dozens of acres of fish habitat are being rejuvenated, and sunken log rafts that blocked fish passage to nearby rivers have been removed.

Along the Thea Foss Waterway, which is part of the site, cleanup has gone hand-in-hand with redevelopment. Cornerstones of the revitalization effort include The Museum of Glass, Thea's Landings condominiums, and increased public access. The Foss Waterway Development Authority estimates that cleanup has facilitated $200 million in investment along the waterway.

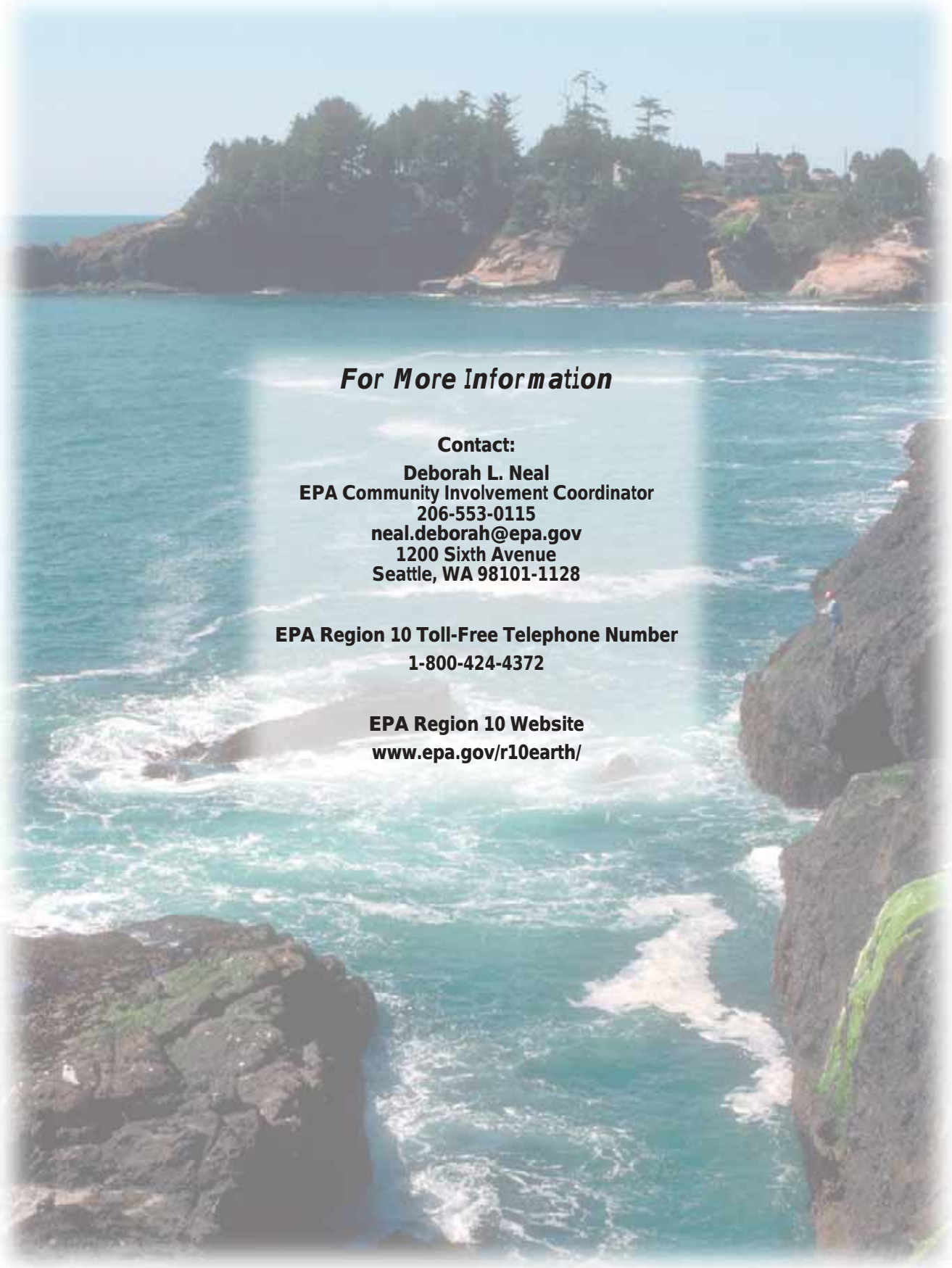
Emergency Toxic Vapor Release

Axel Maersk Ship Response, Tacoma, Washington
Congressional District 9

In July 2003, EPA responded to an emergency on the Axel Maersk cargo ship, docked at the Port of Tacoma. The U.S. Coast Guard asked EPA to help when a toxic vapor release of unknown origin sickened seven longshoremen and one crew member as they prepared to unload cargo containers. The personnel went to local hospitals, complaining of nausea, vomiting, and chest pains.

When EPA staff arrived on board, they helped to find, isolate, and contain the source of the hazard. EPA also monitored the air to protect Port employees and the surrounding community. EPA and the Coast Guard determined that one of the containers on the ship released vapors due to high internal pressure. EPA helped move the container to a quarantined area on the dock for re-certification. Due to the fast response by all parties, the Axel Maersk was able to resume business and leave Tacoma three days after the incident.

EPA monitors vapors on the Axel Maersk cargo ship to protect Port of Tacoma employees and the surrounding community.



For More Information

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