

SUPERFUND

Fact Sheet

PM NORTHWEST SITE FIDALGO ISLAND, WASHINGTON



U.S. ENVIRONMENTAL PROTECTION AGENCY

November 2002

Petroleum Waste Cleanup Complete

Work is wrapping up this month to remove petroleum refinery waste chemicals and contaminated soil around the four former waste disposal areas at the PM Northwest Site. The site is on private property within the Swinomish Indian Reservation, on Fidalgo Island. Shell Oil Company and ChevronTexaco (formerly Texaco, Inc.), two of the potentially responsible parties (PRPs) for the site, completed this cleanup under the oversight of the Swinomish Indian Tribal Community (the Tribe) and the U. S. Environmental Protection Agency (EPA).

Four disposal ponds containing petroleum refinery wastes previously existed on the PM Northwest site. Drinking water wells and wetlands are within one-half mile of where these ponds were located. Tests done before the cleanup found 55-gallon drums, five-gallon containers, and other small containers buried in the disposal ponds.

Polycyclic aromatic hydrocarbons (PAHs), benzene, and carbon tetrachloride were discovered in the drums, and some drums had leaked. These contaminants posed a risk to groundwater, the ecosystem, and the nearby wetlands. (For more information on PAHs, see the last page of this fact sheet).

Wednesday, December 4:

You are Invited to Site Presentation and Blessing of the Land!

In appreciation of those who have worked to clean up the PM Northwest Site, the Tribe will hold a presentation and blessing of the land on the site at 11:00 a.m. on December 4, 2002. All are invited to attend. Please call the Swinomish Indian Tribal Community at (360) 466-7280 with questions.



Site after backfill complete, covered with clean soil.

What Did this Cleanup Accomplish?

The cleanup was conducted to protect both the environment and human health. A particular concern was the potential for contaminants at the site to affect groundwater. Shell and ChevronTexaco completed the following work:

- removed a total of 54,000 tons of contaminated materials: 38,000 tons in summer 2001, and 16,000 tons in summer 2002.
- disposed of the buried drums (mentioned on the previous page), waste sludge, and contaminated soil from the bottoms and sidewalls of the four former waste disposal areas at a permitted off-site disposal facility.
- backfilled the area with clean soil after the contaminated material was removed.

Removing this material has eliminated the potential source of contamination to groundwater. Early next month, after brush and debris is removed, the PM Northwest Site will be hydro-seeded to reduce soil erosion.



Workers remove buried drums, September 2001



Continuing to excavate the pit, summer 2002

Earthworm Testing Ensures Soil Safety

For the PM Northwest Site, the PRPs, EPA, and the Tribe determined that up to 1,400 milligrams of total petroleum hydrocarbons (TPH) per kilogram of soil ("mg/Kg") could be left on the site without harming soil-dwelling organisms, like earthworms. Following the soil removal, toxicity testing was done to verify that soils remaining in place do not pose a threat to these organisms. Tests used earthworms, a sensitive species, as a gauge of toxicity for all organisms.

Groundwater Monitoring Evaluates Cleanup

Groundwater monitoring is being done to ensure groundwater has not been impacted. Groundwater samples were collected in June 2002 and September 2002 and analyzed for total petroleum hydrocarbons, volatile organic compounds, and semi-volatile organic compounds. Laboratory results from the tests did not detect any of these compounds above laboratory detection limits. This means these contaminants do not appear to have migrated to groundwater, and do not pose a risk to human health or the environment.



Taking groundwater samples, summer 2002

If the groundwater monitoring continues to show that the cleanup was effective in removing risks to animals, the environment, and people, no further action will be required. Groundwater monitoring is scheduled again in March 2003. EPA will continue to keep the community informed of test results.

THE SWINOMISH TRIBE PLAYED A CRITICAL ROLE

The Tribe is a federally recognized Indian tribe with all associated treaty rights and governmental authorities. As a natural resource trustee, with sovereign rights to protect, conserve and restore the total environment impacted by the site, the Tribe worked for a decade to get the site cleaned up, and was closely involved in the investigations and cleanup. The Tribe provided daily oversight of field work, working closely with a consultant, EPA, and the PRPs to ensure that the work plan was followed.

Site Background

The PM Northwest site is on private property within the Swinomish Indian Reservation. It covers seven acres in a heavily wooded, remote area on Fidalgo Island near La Conner, Washington. Sensitive wetlands are within one-half mile, and the site lies over an important sole source drinking water aquifer for the entire Swinomish Reservation. EPA estimates that less than 20 people live within one-half mile of the site.

In 1957, Plant Maintenance, Inc. purchased the property. PM Northwest, Inc. acquired title to the property in 1961, after the dissolution of Plant Maintenance, Inc. Up until 1970, PM Northwest contracted with Texaco and Shell to dispose of petroleum refinery wastes. These included spent catalysts, effluent plant sludges, spent caustics, slop oil emulsion solids, separator sludge, and other materials.

Responding to EPA information requests, Shell and Texaco provided information that waste materials generated by their Anacortes petroleum refineries were taken to the site for disposal. The wastes were placed in the four disposal pits (large excavations in the ground) and several trenches (also referred to as "disposal areas"). By 1970, after the disposal activities had stopped, PM Northwest covered the disposal areas with soils from the site. Since then, the property has naturally revegetated.

In 1998 and 1999, EPA completed an "Integrated Site Assessment" at the site to assess

risks and determine whether a cleanup was needed. A draft study was issued when the work was completed. EPA installed monitoring wells near the disposal areas, and sampled soil, groundwater, surface water, and sediment from the nearby wetlands and bluff. Soil, sludge, and drum contents from the disposal areas were also tested. Results from these tests demonstrated the need for the current cleanup.

In October 2000, Shell and Texaco signed an EPA Administrative Order on Consent which was agreed upon and signed by the Tribe. Under this order, Shell and Texaco agreed to clean up the site. EPA approved the work plan for site cleanup in June 2001.

About Polycyclic Aromatic Hydrocarbons (PAHs)

Some PAHs have been found to cause cancer, cell mutations, and harm fetuses. To avoid exposure to PAHs, materials with harmful levels of these PAH contaminants have been removed from the site. For more information about PAHs, please see the fact sheet on the Agency for Toxic Substances and Disease Registry's website: <http://www.atsdr.cdc.gov/tfacts69.html>.

A copy of this document is included in the site's administrative record.



Waste oil oozing from drum at the site is now removed, and no longer poses a threat.

For more information

If you have questions, please contact one of the following people:

EPA

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(206) 553-0247
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EPA's toll free number: 1-800-424-4372

Swinomish Indian Tribal Community

Jeff Hegedus, Environmental Engineer
(360) 466-7280
E-Mail: jhegedus@swinomish.nsn.us

The Administrative Record, which contains documents used in making cleanup decisions for this site, is available for review at:

U.S. Environmental Protection Agency
Seventh Floor Records Center
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-4494

and

Swinomish Indian Tribal Community
Office of Planning and Community Development
ATTN: Summer Charles
11430 Moorage Way
P.O. Box 817
LaConner, WA 98257
(360) 466-7280

Online Information

See the EPA Region 10 web page at: <http://yosemite.epa.gov/r10/cleanup.nsf/sites/pmnrw>

For people with disabilities: please call Debra Sherbina at 206-553-0247 (toll-free 1-800-424-4372) if you have any special requests for reasonable accommodations. For TTY users: please call the Federal Relay Service at 1-800-877-8339 and give the operator Debra Sherbina's phone number.