

SUPERFUND

Fact Sheet

FRONTIER HARD CHROME

Vancouver, Washington



U.S. ENVIRONMENTAL PROTECTION AGENCY

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Cleanup Work to Begin at Frontier Hard Chrome Site

The Environmental Protection Agency (EPA) is now at work at the Frontier Hard Chrome Site in Vancouver, Washington. Preparations are underway to begin cleaning up contaminated soil and groundwater at this former chrome plating operation.

EPA is moving forward with cleanup of hexavalent chromium at the site. Cleanup involves mixing a chemical reducing agent into the most contaminated area of soil and groundwater, called the "hot spot." The reducing agent will change the toxic hexavalent chromium into trivalent chromium, which is generally non-toxic. Some early "injection" testing is going on now at the site.

This winter, EPA will demolish two buildings that are located over the contaminant "hot spot." By spring, the reducing agent first will be injected into the groundwater at the edge of the "hot spot." The reducing agent will react with the soil to reduce the hexavalent chromium to trivalent chromium. Then EPA will remove the foundations of the demolished buildings, exposing more contaminated soil. More reducing agent will then be mixed into this newly exposed area. By as early as next summer, the remaining soil and groundwater throughout the "hot spot" will have been treated.

Chromium Concerns

Chromium is the substance of primary concern at this site. Chromium is present in two forms: trivalent and hexavalent. Trivalent is generally non-toxic. Hexavalent chromium can cause health problems even at low levels. The likelihood of exposure to human health and the environment over the next several years is low. However, the site presents a very real threat to groundwater, and a threat to human health and the environment in the future, if left uncontrolled.



Setting up for site cleanup.

Site Background

The Frontier Hard Chrome (FHC) site is located in southwestern Washington, in the city of Vancouver. The site is about a half mile north of the Columbia River. Chrome plating operations took place at this site between 1958 and 1982. FHC, which operated at the site from 1970 to 1982, discharged wastewaters with hexavalent chromium to an on-site dry well. Based on concerns that contaminated water could reach the Columbia River or drinking water wells, EPA added the site to the National Priorities List (NPL) in 1983. The NPL is a list of the nation's most contaminated hazardous waste sites.

When first detected, the groundwater plume exceeding State cleanup standards extended about 1600 feet southwest from the facility.

Monitoring has shown that while this area of groundwater contamination has changed in size and shape over time, the "hot spot" under the site has shown consistently high concentrations of chromium.

In the 1980's EPA evaluated remedies for cleaning up contamination, but EPA was not able to find a cost-effective remedy for soil at that time. Also, because the groundwater plume was decreasing, EPA did not move forward with groundwater cleanup. EPA removed some contaminated soil from the site in 1994, and continued monitoring and evaluating new cleanup technologies. Now that this new treatment technology is available, EPA can move forward with cleanup. Last year, after seeking public comment, EPA selected a final cleanup plan, and work is underway now.

For More Information

For general information, contact Andrea Lindsay, Community Involvement Coordinator, at (206) 553-1896 or 1-800-424-4372.

For technical information, call Sean Sheldrake, Project Manager, at (206) 553-1220 or 1-800-424-4372.

Web Site: <http://yosemite.epa.gov/r10/cleanup.nsf/sites/fhc>

To request additional services for persons with disabilities, call 1-800-424-4372.