

Schwerin Concaves Site

Toxics Cleanup Program

August 2008

Ecology Invites Comments on Proposed Cleanup Alternatives for Soil and Groundwater Contamination



Schwerin Concaves Site - Looking south toward Dry Creek

The Washington State Department of Ecology invites you to review and comment on the draft Focused Feasibility Study Report submitted for the Schwerin Concaves site. The report identifies and evaluates five alternatives for cleanup of contamination found in soil and groundwater. The site is located in a rural farming area east of the city of Walla Walla. Schwerin Concaves lies along the north bank of Dry Creek approximately four miles north of Highway 12 at 1106 Sapolil Road in Walla Walla County, Washington (Figure 1).

Contamination at the site is a result of chromium electroplating operations on the property. Hexavalent chromium is present in the soil and groundwater. There are also elevated levels of arsenic, cadmium, iron, lead, zinc, nitrate and sulfate in groundwater.

Groundwater in the area is used for irrigation, drinking water and recreation. Sampling of wells within a one-mile radius of the site confirmed these wells meet state standards for drinking water. Dry Creek has not been impacted by on-site operations.

You are invited to:

- > **Review** the draft Focused Feasibility Study Report.
- Send your comments to Ecology for review and consideration. *Comments will be accepted August 29 through September 29, 2008.* See the shaded box at the right for details about where to review documents and submit comments.

Comments Accepted

August 29 through September 29, 2008

Para asistencia en Español Gregorio Bohn 509/454-4174

Submit Comments and Technical Questions to

William J. Fees P.E., Site Manager WA Department of Ecology Toxics Cleanup Program 4601 North Monroe Spokane WA 99205-1295 509/329-3589 wfee461@ecy.wa.gov

Public Involvement Questions

Carol Bergin 509/329-3546 Cabe461@ecy.wa.gov

Document Review Locations

WA Department of Ecology 4601 North Monroe Spokane WA 99205-1295 Call Roger Johnson for an appointment at 509/454-7658

Walla Walla Public Library

238 East Alder Street Walla Walla WA 99362 Hours: Mon & Tues 12-8 Wed 10-8; Thurs, Fri & Sat 10-5

Ecology's Toxics Cleanup Website

http://www.ecy.wa.gov/programs/ tcp/sites/schwerin/schwerin_hp.htm

If you need this publication in an alternative format, call Carol Bergin at 509/329-3546. Persons with hearing loss, call 711 for Washington Relay Service. Persons with speech disability call 877-833-6341

Facility Site ID No. 11293827



Site Background

The Schwerin Concaves property was part of a wheat farming operation and then became a hard chromium electroplating business. Combine equipment, used in farming, contained parts called concaves. Concaves were used to separate the wheat from the chaff. These parts were brought to the electroplating facility and covered with chrome in a process called plating. The plating preserves the equipment from wear and tear.

Wastewater from the electroplating process was stored and treated in a tank just north of the plating shop (Figure 2). Releases from the tank resulted in high levels of hexavalent chromium in soil and groundwater. Chromium was documented in soil as deep as 24 feet in this area.

Chromium was also documented in soil in the area previously used to store "selfpropelled" equipment. Wastewater and wastewater treatment sludge containing chromium were placed in the self-propelled shed area and allowed to evaporate. Soil contamination at this location has been documented as deep as nine feet (Figure 2). These two locations were suspected of being the source of groundwater contamination found in the monitoring wells on-site.

Actions Taken

The contamination in both groundwater and soil exceeds state cleanup levels. Ecology removed nearly 3,000 tons of contaminated soil from the plating shop and self-propelled shed areas. This action was necessary to reduce the potential for groundwater contamination and accelerate the protection of human health and the environment. A remedial investigation was conducted at the site to determine where and how much contamination was in the soil and groundwater. Monitoring wells were installed and soil and groundwater were evaluated for arsenic, cadmium, chromium, hexavalent chromium, lead and zinc. Hexavalent chromium was confirmed in both soil and groundwater. Arsenic, cadmium, iron, lead, zinc, nitrate and sulfate were confirmed in groundwater. Groundwater was also evaluated for volatile organic compounds (VOCs). VOCs were not detected in groundwater.

A pilot study was conducted to assess groundwater treatment options. The alternatives discussed in the draft Focused Feasibility Study Report used information from the pilot study.

Cleanup Alternatives Evaluated

Five cleanup alternatives were evaluated as part of the draft Focused Feasibility Study. Each alternative was evaluated based on several factors outlined in the regulations governing cleanups in Washington state. Some of the primary factors were eliminating, reducing or controlling risks from exposure pathways; long-term effectiveness of the remedy; ease or difficulty of implementing the technology; cost; and protection of human health and the environment.

Each cleanup alternative **includes** the following:

- Decontamination and/or demolition of the former plating building.
- Placing restrictions on the site that limit access and use of the property.
- Groundwater monitoring.

In addition, each alternative includes a separate proposal as listed below:

<u>Alternative 1</u> focuses on an **aggressive treatment** of soil and groundwater along with groundwater monitoring.

<u>Alternative 2</u> focuses on a **limited treatment** of soil and groundwater along with groundwater monitoring.

<u>Alternative 3</u> focuses on **limited removal** of soil from the source area and treatment of groundwater at the source area along with groundwater monitoring.

<u>Alternative 4</u> focuses on **removal of soil at the source area** and groundwater monitoring.

<u>Alternative 5</u> focuses on **groundwater monitoring**.

The contractor who conducted the Feasibility Study recommended Alternative 2 as the preferred cleanup action.

What Happens Next?

Ecology will review and respond to all comments received during the comment period. After comments are considered Ecology may modify the draft Focused Feasibility Study Report, if necessary. Ecology will then select the cleanup alternative most appropriate for the site and prepare a draft Cleanup Action Plan (CAP). The draft CAP will be made available for public comment.



Site and Exploration Plan Schwerin Concaves Walla Walla, Washington



Figure 2