

Ecology to Discuss Draft Cleanup Action Plan, SEPA Checklist and DNS at Public Meeting

The Washington State Department of Ecology and Kaiser Aluminum and Chemical Corporation (now DCO Management) invite you to review and comment on documents that will guide cleanup at the Heglar Kronquist site. The site is 10 miles northeast of downtown Spokane in a rural area and covers nearly four acres. It is located near the intersection of Heglar and Kronquist Roads near Mead, Spokane County, Washington.



Looking in a westerly direction at the site

The Draft Cleanup Action Plan provides details about the selected cleanup action and how cleanup will be conducted. The State Environmental Policy Act Checklist (SEPA) considers potential environmental impacts prior to beginning the cleanup. The Determination of Non-Significance indicates the proposed actions will not have a probable significant adverse impact on the environment. **A public meeting will be held September 26, 2012 to discuss these documents and get public feedback.**

You are invited to:

- **Attend the public meeting at 7:00 p.m., September 26, 2012** at the Mt. Spokane High School Atrium, 6015 East Mt. Spokane Park Drive, Mead, Washington.
- **Review** the Draft Cleanup Action Plan (DCAP), State Environmental Policy Act Checklist (SEPA), and Determination of Non-Significance at the locations listed in the box on the right.
- **Send** your comments to the site manager Teresita Bala at Ecology from **September 19 through October 18, 2012**. The box at the right has her contact information.

The box on the right provides details about where to review documents and send comments.

Comments Accepted

September 19 through October 18, 2012

Public Meeting

7:00 p.m. September 26, 2012
Mt. Spokane High School - Atrium
6015 East Mt. Spokane Park Drive
Mead, Washington

For ADA accommodations or documents in an alternate format call Carol Bergin 509/329-3546, 711 (relay service), or 877-833-6341 (TTY).

Para asistencia en Español

Richelle Perez 360/407-7528

Если вам нужна помощь на русском, звоните

Larissa Braaten 509/710-7552

Site Manager Teresita Bala

WA Department of Ecology
4601 N. Monroe St.
Spokane WA 99205-1295
509/329-3543 or tbal461@ecy.wa.gov

Public Involvement Carol Bergin

See Ecology Address Above
509/329-3546 or cabe461@ecy.wa.gov

Document Review Locations

WA Department of Ecology
Kari Johnson, Public Disclosure
See Ecology Address Above
Call for an appointment 509/329-3415

North Spokane Public Library

Hawthorne Branch
44 E. Hawthorne Rd., Spokane WA 99218

Ecology's Toxics Cleanup Website

<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=1135>

Facility Site ID No. 645

Cleanup Site ID No. 1135

Site Background

The site was used as a gravel pit until it was closed in 1969. Gemini Management, Inc. then began operating the site as a disposal area. From 1969 until 1974, Gemini Management, Inc. transported aluminum black dross from the Trentwood plant in the Spokane Valley to the disposal site.

Black dross is a potential source for groundwater and air contamination. It is a by-product from processing aluminum materials. Black dross is present in the landfill as deep as 50 feet.

According to Kaiser's data, the black dross was composed of 39% sodium chloride, 35% aluminum oxide, 19% potassium chloride, 4% free aluminum, 2% cryolite, and 1% carbides and nitrides. Nearly 55,000 cubic yards of black dross were disposed of at the site. This amount could be compared to a football field filled with black dross that was 10 feet deep.

Disposal of dross was stopped in 1974 because high levels of chloride were found in a shallow water supply well and a spring down gradient of the site. Air sampling conducted at the site in 1979 showed elevated levels of several organic compounds. Ammonia was also detected at levels higher than current state standards.

A Remedial Investigation and Feasibility Study were completed at the site, and reports of the findings were put out for public comment in 2012.

In 1984 a protective cover called a cap was put over the landfill to prevent dross constituents from leaching into groundwater. Results of the Remedial Investigation showed some leaching is still taking place. The investigation also showed chloride and nitrate concentrations in shallow groundwater and the drainage ditch surface water did not meet state standards.

The Feasibility Study Report evaluated cleanup alternatives for the contaminants at the site. These alternatives are also listed in the Draft Cleanup Action Plan.

Draft Cleanup Action Plan

Ecology wrote a Draft Cleanup Action Plan (DCAP) based on information obtained from the Remedial Investigation and Feasibility Study reports completed by DCO Management's consultant in 2012. Ecology evaluated each cleanup alternative outlined in the Feasibility Study and selected the best cleanup plan for the site. This selection is based on criteria outlined in the state regulations known as the Model Toxics Control Act (MTCA) and on other applicable regulations and laws.

The public now has an opportunity to review and comment on the cleanup alternative Ecology has selected. Ecology may modify the DCAP based on public comment, if appropriate.

Selected Cleanup Actions

Several cleanup actions were considered in the Feasibility Study. The following two alternatives were evaluated in depth:

Alternative 1: Removal of waste, off-site disposal, dispersion/dilution, and compliance monitoring.

The cap that currently exists at the site would be removed along with approximately 55,000 cubic yards of black dross. The pit would be over-excavated to ensure all landfill waste was removed.

The waste would be shipped to a permitted, secure landfill. Removal and shipment would take approximately 2 years. The cost would be nearly \$129 per ton because the waste would have to be treated before being sent to the permitted landfill. The total estimated cost for removal and disposal would be \$20,089,284.00 which includes a 25 percent contingency for unanticipated issues.

Groundwater would be allowed to naturally correct itself over about 2-5 years through dispersion and dilution.

Alternative 2: Enhance the existing cap, institutional controls, dispersion/dilution, and compliance monitoring.

The existing landfill cover, called a cap, and drainages would be improved and additional layers would be added to the cap.

The vent system would be repaired if it could be accomplished without damage to the existing cap. Ten pine trees would be removed along the southern boundary of the landfill to prevent future root system damage to the landfill. This alternative would cost approximately \$1,887,167.00 which includes a 25 percent contingency for unanticipated issues.

The cap would be filled with soil from the soil pile on the eastern end of the landfill, clean fill from offsite, and regraded. Surface water would be rerouted by regrading and relocating the ditches and swales at the site.

A geosynthetic liner would be placed over the graded area and then a drainage layer would be placed on top of the liner. The multi-layer liner would be covered with 18 inches of top soil and natural grasses planted on top. These added layers are expected to reduce infiltration through the cap by approximately 90-99 percent.

The geosynthetic liner would extend 5-10 feet beyond the current dross fill boundary on the north, east and south edges of the landfill. On the west edge the liner and drain system would extend 50-75 feet beyond the dross fill boundary.

Institutional controls would be placed on the property to protect the improvements. These controls include fencing, signage, restrictions on how the land may be used, maintenance and monitoring. A restrictive covenant would be placed on the property describing the land use restrictions. Surface and groundwater monitoring would be conducted until water quality standards are met.

Ecology determined both Alternatives 1 and 2 would protect humans and the environment. However, state regulations (MTCA) provide that if two or more alternatives are equal in benefits, the

department shall select the less costly alternative provided that all minimum requirements for cleanup actions are met.

Ecology selected Alternative 2. This includes additional protection after the cleanup through use of periodic reviews to evaluate the success of the remedies. It also includes financial assurance from DCO Management to address potential cleanup improvements if necessary. This alternative meets all of the required criteria and is the most cost effective. Details of the evaluation of Alternatives 1 and 2 are found in the DCAP document.

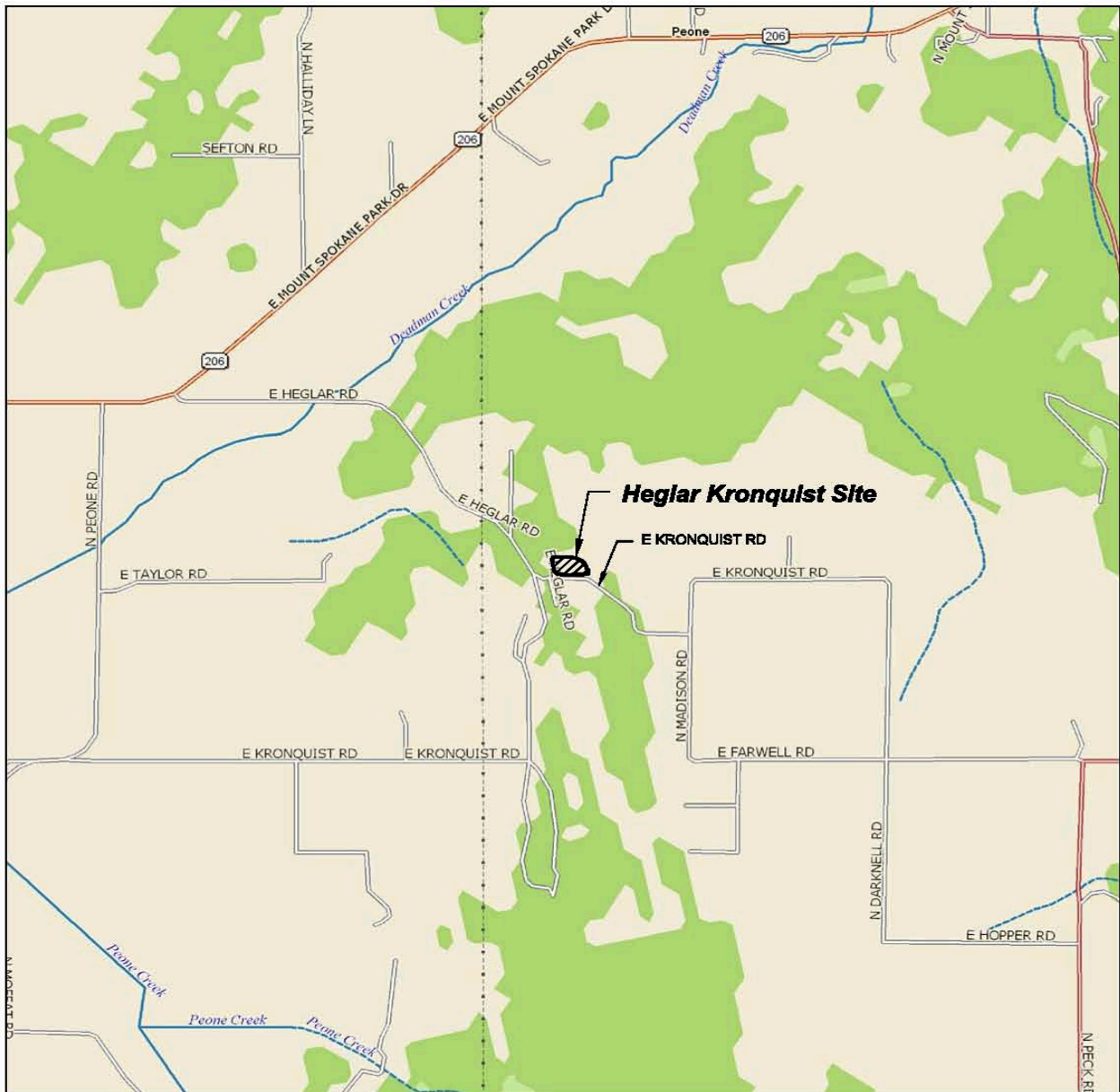
State Environmental Policy Act (SEPA)

The State Environmental Policy Act, known as SEPA, requires government agencies to consider potential environmental impacts of a project before beginning the cleanup. A Determination of Non-Significance indicates the proposed actions will not have a probable significant adverse impact on the environment.

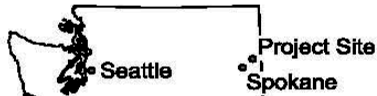
- After review of the environmental checklist and other site-specific information, Ecology determined the actions to address contaminants in soil and groundwater will not have a probable significant adverse impact on the environment.
- The cleanup action will benefit the environment by reducing contaminants in groundwater and reducing possible exposure pathways for humans and wildlife.
- Therefore, Ecology has issued a Determination of Non-Significance (DNS) for the cleanup action.

What Happens Next?

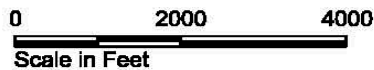
Ecology will respond to comments **submitted by October 18, 2012**. A Responsiveness Summary will be sent to all commenters and placed in the document review locations listed in the box on page 1. Ecology will make modifications to the DCAP based on public comment if appropriate. If no changes are made, the DCAP will become final, and the cleanup will move forward.



Source: Base map prepared from DeLorme Topo 7.0, 2007.



WASHINGTON



Heglar Kronquist Site Mead, Washington	
Vicinity Map	
12/08	
Exhibit	
A	

EAL 12/1/2008 1752400-003.dwg

Figure 1
Site Location

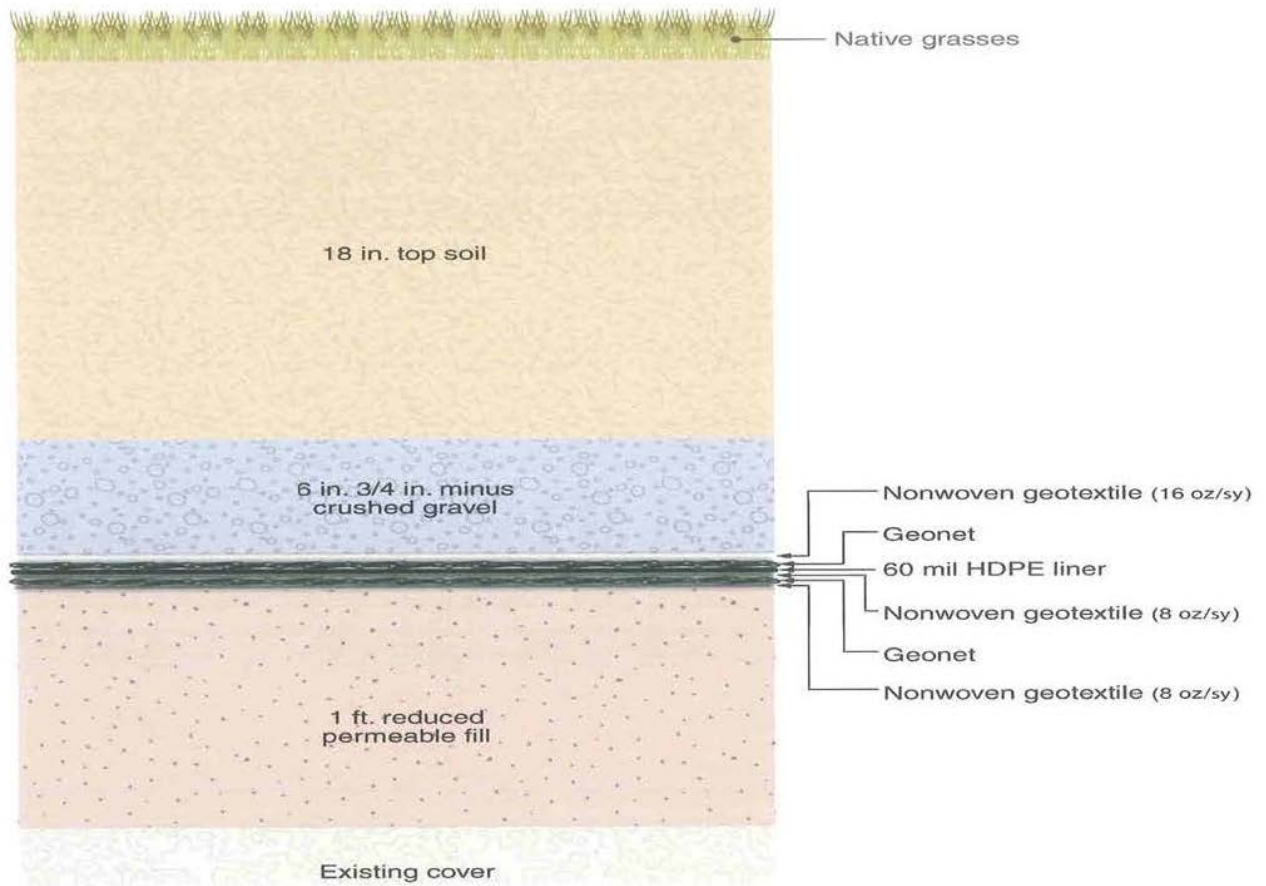


Figure 12. Cross Section of Proposed Cap Design
 Heglar Kronquist Landfill
 Mead, Washington

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Figure 2 Proposed Cap for Alternative 2