

Options for Cleaning Up Colville Post & Poles



Comments accepted:

November 29 – December 30, 2021

Submit comments:

Online at https://tcp.ecology.commentin put.com/?id=3bk4Q Or by mail or email to: Jeremy Schmidt, site manager 4601 North Monroe Street Spokane, WA 99205 Jeremy.Schmidt@ecy.wa.gov

Review documents online:

https://fortress.wa.gov/ecy/ gsp/Sitepage.aspx?csid=46

Due to coronavirus, in-person document reviews are not currently available. Please contact Erika Beresovoy at erika.beresovoy@ecy.wa.gov or 509-385-2290 if you need printed documents.

Facility Site ID: 765 Site Cleanup ID: 46

Site address: 396 Highway 395 North, Colville, Stevens County

Draft contamination and cleanup options report available for public review and comment

The Washington State Department of Ecology (Ecology) seeks your input on the draft Remedial Investigation and Feasibility Study (RI/FS) Report for the Colville Post & Poles cleanup site (site). The RI documents the extent and locations of pentachlorophenol (PCP), diesel, and dioxin contamination in soil and groundwater at the site. The FS evaluates cleanup options.

The nearly 23-acre site is within 200 feet of the Colville River, which flows into Lake Roosevelt, a reservoir created by the Grand Coulee Dam on the Columbia River.

Site history

Colville Post & Poles, Inc., used the site to treat wood, primarily fence posts and rails, for about 60 years from the 1940s to 2005. Throughout the wood-treating period, PCP and diesel leaked from piping and drip pads. In 1989, a 10,000-gallon, above-ground storage tank leaked PCP to the ground.

In 2000, the Confederated Tribes of the Colville Reservation petitioned the U.S. Environmental Protection Agency (EPA) to assess contamination at the site. Colville Post & Poles, Inc., closed down in 2005 when the owners couldn't afford upgrades required to meet environmental standards.

To address immediate threats to people and the environment, the EPA took action in 2005 and 2006. They investigated the site, demolished treatment and storage buildings, installed groundwater monitoring wells, and excavated and safely disposed of some contaminated soil, debris, and drummed wastes.



The Eastern Washington Clean Sites Initiative funds this cleanup because the former site owners/operators are unable pay for it. The funding cleans up abandoned sites to create healthier communities. The money comes from the state's voter-approved tax on hazardous substances.

When funding became available in 2015, Ecology took steps toward completing site cleanup. We removed debris in and around surface water and concrete footings in the area where wood was treated, temporarily stockpiled debris as necessary, and did an initial assessment of soil and groundwater contamination. Five groundwater samples contained PCP and diesel at levels requiring cleanup.

Ecology completed the RI/FS to find out how much contamination remains and evaluate final cleanup options.

Investigations findings

The RI found that PCP and dioxin are spread across shallow soil throughout the site. The greatest impacts are observed in the former process area, along with several spots in the south stockpile area and a drainage channel.

A PCP-contaminated groundwater plume extends from the former process area to the western property line. The PCP plume's western margin is not completely defined, as it likely extends off-site. Diesel- and dioxin-contaminated groundwater is only present in the former process area.

Groundwater seeping into the Colville River is not affecting river water quality.

Cleanup options

Three cleanup options, called "alternatives" in the FS, were developed for soil, and four cleanup options were developed for groundwater.

Soil cleanup options

All soil cleanup options include disposing of the debris piles at a facility permitted to accept the waste. Contamination in the wetland areas would also be capped with 12 inches of clean soil because excavating the wetlands would be too disruptive to this sensitive habitat. Excavated areas would be replanted in all cleanup options, too.

- 1. Soil washing, estimated cost = \$21,985,231. Contaminated soil would be excavated and compiled at an on-site treatment area. A solvent that captures contaminants would be used to wash the soil. The washed soil would be sampled to verify the process was effective. The solvent would be treated and recycled, and the removed contaminants would be disposed off-site. Washed soil would be mixed with beneficial amendments and returned to the excavated areas. However, Ecology was concerned that soil washing wouldn't meet cleanup standards. After the draft RI/FS was completed, the effectiveness of this method was pilot-tested. That test showed that soil washing could not clean up the soil, so Ecology decided it is not a viable option.
- **2.** Excavation and off-site disposal, estimated cost = \$26,820,847. Contaminated soil would be excavated and disposed at the chemical waste facility in Arlington, Oregon.
- **3. On-site treatment, estimated cost = \$25,266,986.** Contaminated soil would be excavated and compiled at an on-site treatment area. Contaminants in the soil would be destroyed with thermal treatment by using heating electrodes and vapor recovery. Treated soil would be sampled to verify the process was effective, mixed with beneficial amendments, and returned to the excavated areas.

Groundwater cleanup options

All groundwater cleanup options include a monitoring program that would continue until groundwater quality met standards set to protect people and the environment.

1. Monitoring contamination as it decreases naturally, estimated cost = \$360,000. This option doesn't protect people or the environment, so we will not choose it.



- 2. Pump and treat, estimated cost = \$1,310,006. Groundwater would be pumped to the surface and treated with activated carbon. The treated water would then be pumped back underground or into the Colville River so the water table would not be depleted.
- **3. Bioremediation, estimated cost = \$2,095,700.** Chemicals that stimulate microbes that consume PCP would be injected underground. Injections would be repeated until groundwater met standards.
- **4. Permeable reactive barrier, estimated cost = \$1,486,973.** A trench would be dug and the excavated soil mixed with zero-valent iron. This would be placed back into the trench to create the barrier. Contaminants in the groundwater react with the iron, which filters out the contaminants, cleaning the groundwater and leaving behind dissolved iron. Eventually the barrier would be excavated and disposed off-site.

Next steps

Ecology will hold an online public meeting to discuss the RI/FS if 10 or more people request it. After the comment period, we will respond to the comments we received, publish our responses online, and send them to the people who commented (if contact information was provided).

Then, we will use our assessment of the RI/FS and public input to draft a cleanup action plan. The draft plan will be available for public review and comment before becoming final.



Colville Post and Poles Conceptual Site Model

Figure 1. Model showing how the site became contaminated.



Toxics Cleanup Program 4601 North Monroe Street Spokane, WA 99205



Colville Post & Poles Cleanup

Public comment period

November 29 – December 30, 2021

The Washington State Department of Ecology seeks your input on the draft Remedial Investigation and Feasibility Study (RI/FS) Report for Colville Post & Poles (site). The RI documents the extent and locations of pentachlorophenol, diesel, and dioxin contamination in soil and groundwater at the site. The FS evaluates cleanup options.

Review documents: https://fortress.wa.gov/ecy/ gsp/Sitepage.aspx?csid=46

Submit comments: https://tcp.ecology.commentinput.com/?id=3bk4Q

Facility Site ID: 765 Site Cleanup ID: 46 Site address: 396 Highway 395 North, Colville

Accommodation Requests: To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 509-329-3546 or visit https://ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.