Grain Handling Facility at Freeman Cleanup

Comments accepted:
January 4 – February 2, 2021

Submit comments:
Online at:
http://tcp.ecology.commentinput.com/?id=ArEx2

Or by mail or email to:
Sandra Treccani, Site Manager
4601 North Monroe Street
Spokane, WA 99205
sandra.treccani@ecy.wa.gov

Document review locations:
https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=12540

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: 77319379
Site Cleanup ID: 12540

Public invited to comment on draft contamination and cleanup options report

The Washington State Department of Ecology (Ecology) seeks your input on the draft Remedial Investigation and Feasibility Study (RI/FS) for the Grain Handling Facility at Freeman site January 4 through February 2, 2021. The RI explains the extent and locations of carbon tetrachloride and related contaminants in soil and groundwater at the site. The FS evaluates cleanup options.

Site history

The grain handling facility (see area map page 4) is seasonally active and includes 11 steel grain silos/bins, one steel grain elevator, and an underground receiving pit. Rockford Grain Growers (RGG) constructed the facility around 1955 and later went out of business.

Cenex Harvest States (now rebranded as CHS) purchased RGG and its assets in 1993, including the facility at Freeman, and is the current owner/operator. Union Pacific Railroad Company (UP) owns the underlying property and operates a railway line that traverses the property and roughly parallels State Highway 27. CHS and UP are responsible for paying for the investigation and cleanup of contamination coming from the grain handling facility.

Investigation findings and ensuring safe drinking water

The grain handling facility released carbon tetrachloride into soil, which leached into groundwater. Carbon tetrachloride is a manufactured chemical that does not break down quickly in the environment. It was widely used as an agricultural pesticide and fumigant to kill insects and rodents in grain storage facilities.

Groundwater and soil samples were collected from 2014 through 2019 from more than 50 locations, including soil borings, wells used to monitor the site, and water supply wells (Figure 1, page 3). Carbon tetrachloride has been found in several domestic water supply wells

near the site, including the Freeman School District Well (Figure 1, Domestic Well No. 10) located 1,200 feet downgradient from the grain handling facility. CHS and UP have offered to regularly test drinking water from local residents' wells and have provided treatment systems to people whose testing indicates their wells are contaminated. Several residents accepted this offer for treatment systems and regular testing. The Freeman School District installed a treatment system in 2013, and the water is regularly monitored and safe for drinking.

Nearby surface water bodies (Little Cottonwood Creek) do not appear to be affected by contaminated groundwater.

Update on the interim cleanup action

After CHS and UP requested an additional year to continue investigating the extent of contamination, Ecology asked them to complete an interim cleanup action to address ongoing risks. We held a public comment period for that proposal February 12 through March 13, 2020.

Following that, CHS and UP began installing the interim action system, which includes installing test wells and infrastructure on the grain handling property to pump out contaminated groundwater from within the plume. The contaminated water will be treated on the grain handling facility property using activated carbon. The clean, treated water will be returned back underground using four new wells upgradient of the contaminated groundwater plume. If all the tests go as expected, the interim cleanup system should be operational by March 2021.

Cleanup options

Two options, or alternatives, are presented in the FS. Both are designed to address contaminated groundwater and drinking water supplies.

For both cleanup options, CHS and UP propose institutional controls to restrict groundwater use, which may be applied through local ordinances such as easements, well-drilling prohibitions, building permit restrictions, land use zoning restrictions, and/or the use of state registries of contaminated sites. Safeguards would be implemented for construction workers who could potentially be exposed to contaminants.

Both options also include routine groundwater sampling to assess cleanup progress and ongoing maintenance of the drinking water treatment systems for the Freeman School District and residences. In addition, any existing drinking water wells found to be contaminated would be provided treatment systems.

Option 1: Groundwater barrier and drinking water treatment

The barrier would be made of zero-valent iron and activated carbon injected underground on the downgradient edge of the grain handling facility through a series of closely spaced soil borings. Carbon slows the contamination's movement, and the zero-valent iron helps break down contaminants into less toxic materials.

The estimated cleanup timeframe for this plan is 32 years at a cost of $12.6 million.

Option 2: Groundwater recirculation and drinking water treatment (preferred alternative)

This option would follow the same process as the interim cleanup action and incorporate potential system improvements discovered during the interim action.

The estimated cleanup timeframe for this plan is 17 years at a cost of $12.7 million.

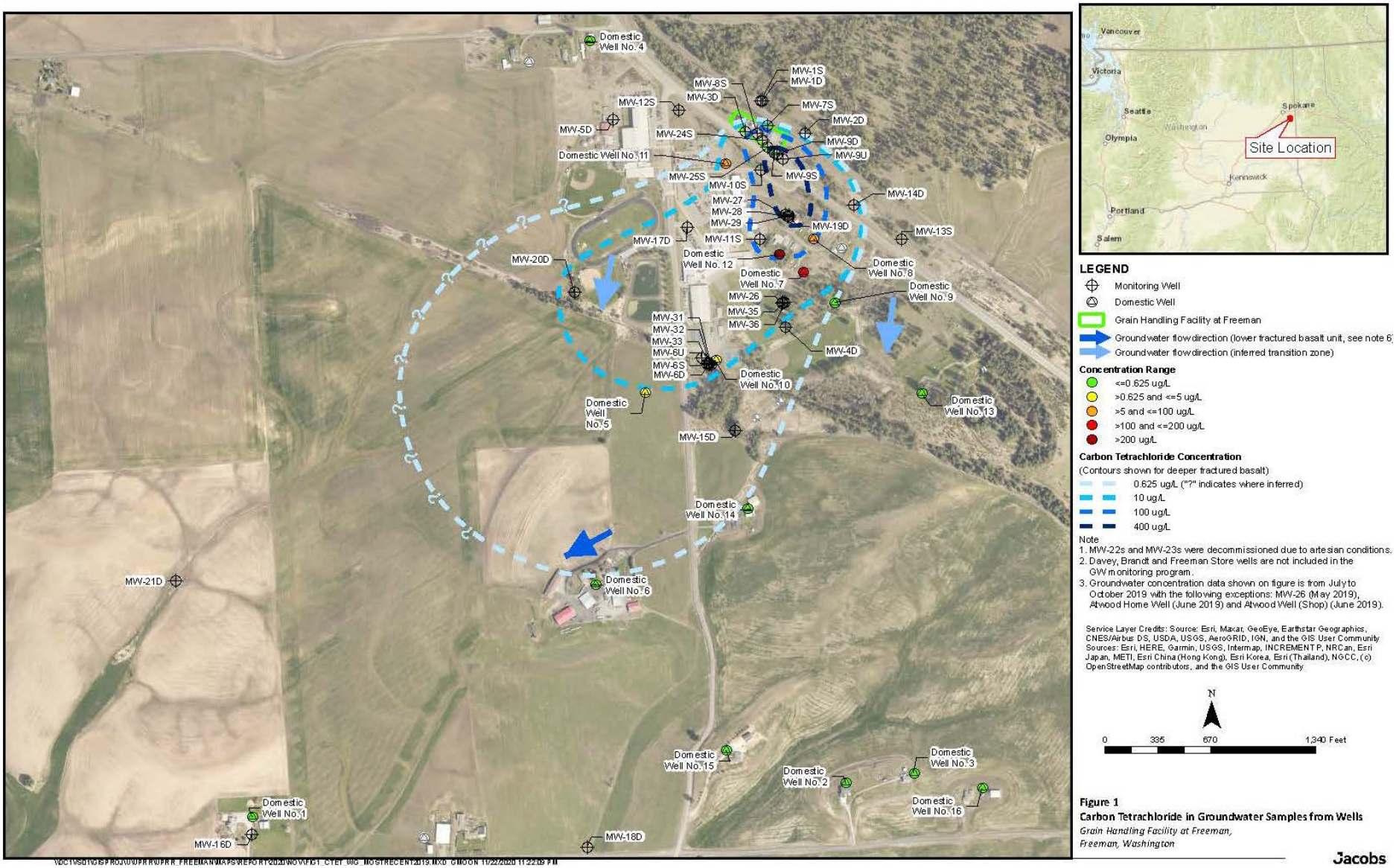
This system breaks down the contaminant mass coming from beneath the grain handling facility in less time than a groundwater barrier. CHS and UP selected this as their preferred option because of the shorter cleanup timeframe and the proven success of this cleanup process at other sites.

Next steps

Ecology will respond to all the comments we receive by February 2, 2021, and publish our responses. We will hold an online public meeting if 10 people request it.

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 final cleanup begins.

Figure 1. Grain Handling Facility at Freeman site map



DEPARTMENT OF ECOLOGY
State of Washington

Toxics Cleanup Program
4601 North Monroe Street
Spokane, WA 99205

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Accommodation Requests: To request Americans with Disabilities Act (ADA) accommodation, or printed materials in a format for the visually impaired, contact the Ecology ADA Coordinator at 360-407-6831 or ecyadacoordinator@ecy.wa.gov, 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.