

Warden City Water Supply Wells 4 & 5



The Simplot Growers Solutions facility where pesticide contamination was found.

CONTACT & INFORMATION

Comments accepted:

July 30 through August 28, 2018

Submit comments by email or mail:

Christer Loftenius, cleanup site manager
christer.loftenius@ecy.wa.gov
4601 North Monroe Street
Spokane, WA 99205

Document review locations:

Warden Public Library
305 South Main Avenue
Warden, WA 98857
Phone: 509-349-2226
Hours: Mon. & Wed. 12:30-5:30 p.m.
Tues. & Thurs. 12:30-7 p.m.
Closed Fri. – Sun.

Ecology Eastern Regional Office
4601 North Monroe Street
Spokane, WA 99205
Phone: 509-329-3415
Hours: 8 a.m. – 5 p.m. by appointment

Website:

<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=1618>

Facility Site ID: 2802409

Site Cleanup ID: 1618

Draft contamination and cleanup options study 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 Warden City Water Supply Wells 4 & 5 (site) July 30 through August 28, 2018. The RI documents the extent and locations of ethylene dibromide (EDB) contamination in soil and groundwater at the site. The FS evaluates cleanup options.

The site is located at 1800 W. 1st Street in Warden (see map page 5). J.R. Simplot Company (Simplot), the property owner since 1971, is responsible for cleanup. They hired consultants to complete the RI/FS as required by a 2011 legal agreement with Ecology. Simplot stores agricultural products in two warehouses on the property.

Your drinking water is safe

The community's current drinking water supply is coming from wells 6, 7, and 8. These wells have been tested and do not contain the pesticide EDB.

In 1989, the City of Warden found that wells 4 and 5 contained EDB at levels exceeding safe drinking water standards. The city stopped using Well 4 and permanently closed it in 2010. Well 5 is only used for irrigation.

Site history

From 1971 to 1992, Simplot stored, blended, and transported agricultural chemicals, including EDB, at the site. After the City of Warden discovered EDB in wells 4 and 5, the surrounding area was investigated to locate the contamination source. Soil at the Simplot property was found

to contain EDB at levels that are a potential risk for groundwater contamination and consistent with EDB levels in groundwater.

Remedial investigation findings

EDB-contaminated soil and groundwater is mostly limited to Simplot's property, and evidence shows it doesn't appear to be moving.

In 2009, Ecology drilled and sampled 27 soil borings ranging in depth from 9 to 75 feet underground to identify the contaminant source and party responsible for further investigation and cleanup. Two of the borings on Simplot property tested positive for EDB, with the greatest concentration being 8.4 micrograms of EDB per kilogram of soil. In 2011 and 2012, Simplot's consultant drilled and sampled 14 more soil borings, and one had 218 micrograms of EDB per kilogram of soil.

There are 12 groundwater monitoring wells used to define the extent of groundwater contamination. Ecology installed five wells to determine the groundwater flow direction and the potential contaminant source. Simplot's consultant installed seven more wells to determine the extent of groundwater contamination. Two of the 12 monitoring wells are EDB contaminated, with the greatest concentration being 234 micrograms of EDB per liter of water. The cleanup goal is to reduce EDB groundwater concentration to 0.05 micrograms per liter.

To achieve the groundwater cleanup goal, Simplot's consultant calculated that soil concentrations would need to be reduced to 0.27 micrograms of EDB per kilogram of soil.

Cleanup options

Four options were assessed and are presented for your review and comment. Washington requires that all cleanups must protect human health and the environment, favor permanent solutions that can achieve cleanup goals in a reasonable timeframe, and consider public concerns. The estimated cost of each option is weighed against its potential benefits and ability to meet Washington's cleanup requirements.

Option 1: No action

This option would leave the site as it is now and allow the contamination to naturally reduce over time. It is included only for reference. It doesn't comply with Washington's cleanup requirements because it doesn't provide for long-term monitoring and is not a permanent solution.

Option 2: Site use restrictions and allowing EDB in soil and groundwater to reduce naturally over time

This option provides for semi-annual groundwater monitoring that would detect any EDB movement off property and track the rate of EDB reduction. Soil samples would be collected annually and tested for EDB.

An environmental covenant would be filed on the property restricting:

- The drilling of any new water wells into the contaminated groundwater
- The construction of buildings on contaminated soil

Not enough monitoring has occurred to accurately predict how long it would take for EDB to naturally reduce to safe levels. To estimate the \$475,560 cost of this cleanup option, a 10-year cleanup timeframe was assumed.

Option 3a (Simplot's preferred option): Site use restrictions, soil excavation and treatment, and allowing EDB in groundwater to reduce naturally over time

This option includes the same environmental covenant and soil and groundwater monitoring plans as in Option 2.

In addition, as much contaminated soil as was technically possible would be excavated. Then, the excavated soil would be cleaned at the site by extracting the contaminated vapors from it. Once that is done, clean soil would be backfilled into the excavated area or used as fill elsewhere. The restriction on building construction in the environmental covenant would likely not be needed after contaminated soil was excavated.

Groundwater contamination would be expected to naturally decline more quickly with this option since contaminated soil would no longer be contributing EDB. Simplot's consultant estimated it would take 3 to 5 years for EDB concentrations to reduce to 0.05 micrograms per liter.

If cleanup was completed in 3 to 5 years, Option 3a would cost approximately \$461,212. Simplot chose this as their preferred option because it will reduce the cleanup timeframe without significantly increasing cost over Option 2.

Option 3b: Site use restrictions, soil excavation and off-site disposal, and allowing EDB in groundwater to reduce naturally over time

This option is the same as Option 3a, except rather than treating contaminated soil, it would be disposed at a permitted landfill. If cleanup was completed in 3 to 5 years, Option 3b would cost approximately \$579,846.

Next steps

Ecology will hold a public meeting to discuss the RI/FS if 10 people request one. After the comment period, we will respond to the comments we received and publish our responses online and send them to the people who commented.

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.

Periodo de comentario público: Pozos de suministro de agua 4 y 5 de la ciudad de Warden. Borrador del estudio de opciones de contaminación y limpieza.

El Departamento de Ecología del Estado de Washington (Ecología) solicita su opinión sobre el borrador del reporte de la Investigación Correctiva y Estudio de Viabilidad (RI/FS por sus siglas en inglés) de los pozos de suministro de agua 4 y 5 (sitio) del 30 de julio al 28 de agosto de 2018. La RI documenta la extensión y la ubicación de la contaminación de dibromuro de etileno (EDB por sus siglas en inglés) en el suelo y aguas subterráneas en este sitio. El FS evalúa las opciones de limpieza.

El sitio está en 1800 W. 1st Street en Warden (figura 1, mapa del sitio). El propietario de la Compañía J.R. Simplot (Simplot), desde 1971, es responsable por la limpieza. Simplot almacena productos de agricultura en dos almacenes en la propiedad.

Su agua potable es segura

El suministro de agua potable de la comunidad proviene de los pozos 6, 7 y 8. Estos pozos han sido analizados y no contienen EDB.

Resultados de la investigación correctiva

El suelo y agua subterránea contaminada por EDB está principalmente limitada a la propiedad de Simplot, y no parece moverse.

Opciones de limpieza

Washington requiere que todas las limpiezas protejan la salud humana y del medio ambiente, favorezcan soluciones permanentes que puedan alcanzar metas de limpieza en un período de tiempo razonable, y consideren las preocupaciones del público. El costo estimado de cada opción es comparado con sus posibles beneficios y capacidad de cumplir con los requisitos de limpieza de Washington.

Opción 1

Esta opción permitiría que, con el tiempo, la contaminación se reduzca naturalmente. Está incluida solo por referencia. No cumple con los requisitos de limpieza de Washington.

Opción 2 (costo estimado: \$475,560)

Esta opción proporciona monitoreo semestral del agua subterránea que detectaría cualquier movimiento de EDB fuera de la propiedad y rastrearía la tasa de reducción. Las muestras de suelo serían recolectadas anualmente y analizadas para detectar EDB.

Un convenio ambiental sería presentado para la propiedad, que restringe:

- La perforación de cualquier pozo de agua nuevo en el agua subterránea contaminada
- La construcción de edificios en el suelo contaminado

Opción 3a (opción preferida de Simplot, costo Estimado: \$461,212)

Esta opción incluye todos los elementos de Opción 2.

Además, se excavaría tanto suelo contaminado como fuera técnicamente posible. Después, el suelo se limpiaría extrayendo los vapores contaminados de él. El suelo limpio se rellenaría en el área excavada o se usaría como relleno en otro lugar.

Se esperaría que la contaminación del agua subterránea disminuya naturalmente, más rápidamente con esta opción ya que el suelo contaminado ya no contribuiría EDB.

Opción 3b (costo estimado: \$579,846)

Esta opción es igual que la Opción 3a, excepto que envés de tratar el suelo contaminado, se desearía en un relleno sanitario aprobado.

Próximos pasos

Ecología revisará y responderá a los comentarios públicos que recibimos durante el período de comentario público. Publicaremos nuestras respuestas en línea y las enviaremos a las personas que comentaron.

Después, usaremos nuestra evaluación del RI/FI y el aporte público para redactar un borrador de plan de acción para la limpieza. El borrador del plan estará disponible para revisión y comentario público antes de ser finalizado.

Tendremos una reunión pública para analizar el RI/FS si 10 personas la solicitan. Si tiene preguntas, favor de comunicarse con Christer Loftenius a chris.loftenius@ecy.wa.gov o 509-329-3543 y solicite un intérprete.

Warden City Water Supply Wells 4 & 5 cleanup site

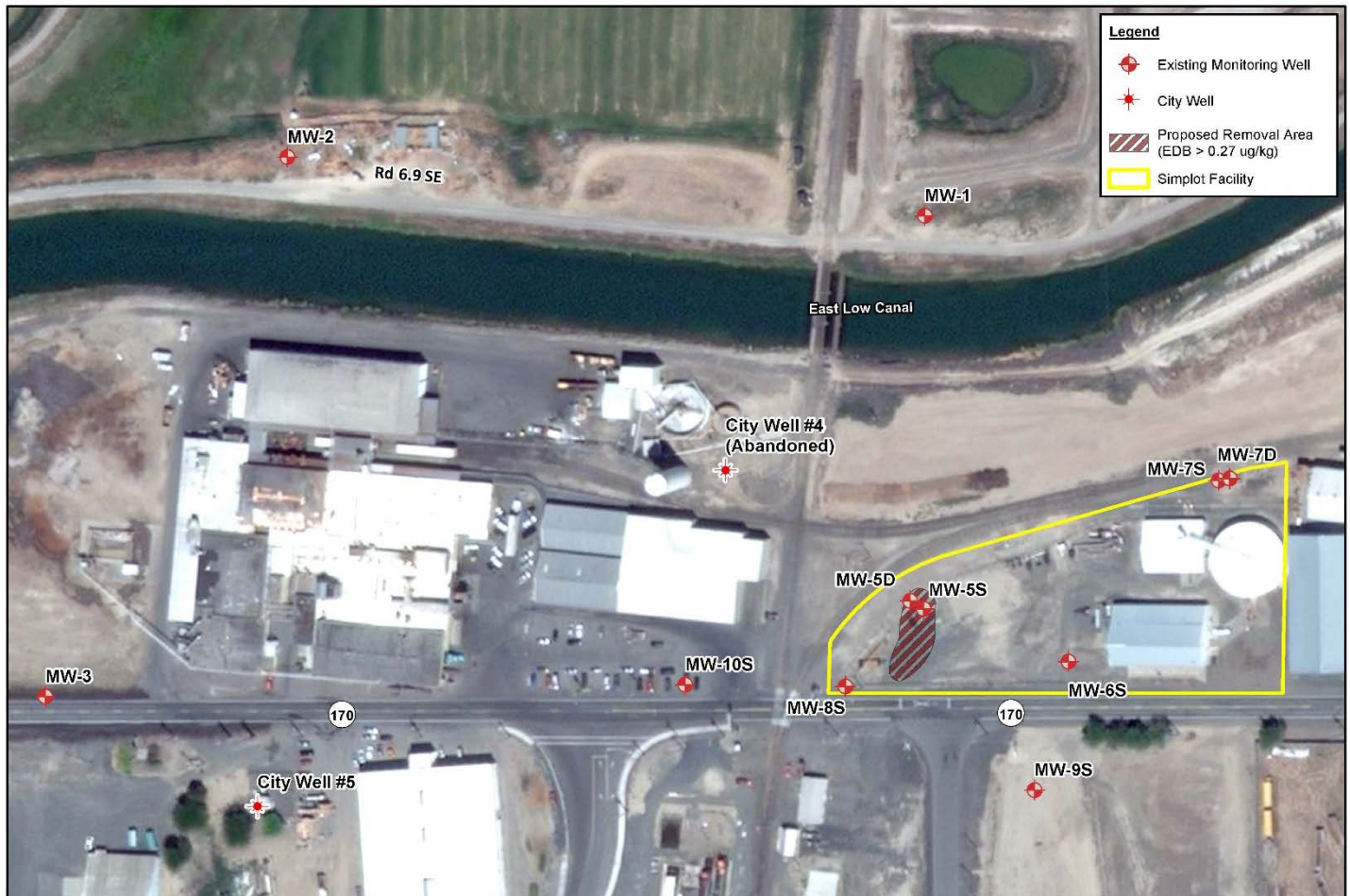


Figure 1. Monitoring Well Network and Proposed Soil Removal Area
Simplot Grower Solutions, City of Warden, WA

Imagery: 2016 ESRI World Imagery
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,
CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Other Data Sources: US Census Bureau; Washington Department of Transportation;
Washington Department of Revenue; Washington Department of Ecology (WDOE)

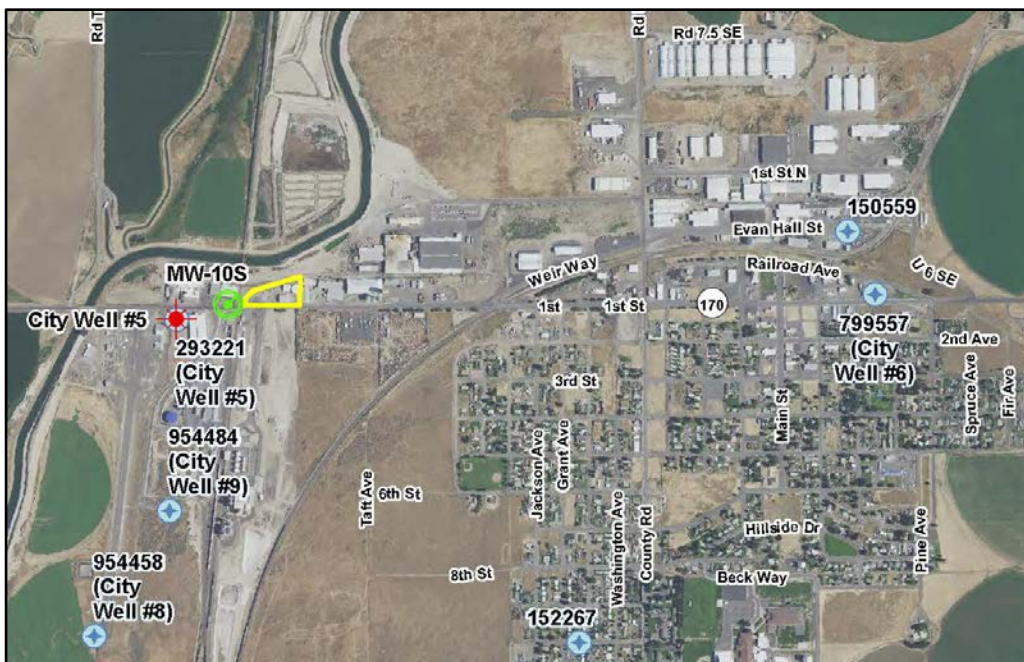
Map Date: 6/20/2016
Document: Q:\Simplot\CityofWarden\map_docs\Site_2017.mxd



Toxics Cleanup Program
4601 North Monroe Street
Spokane, WA 99205-1295

RETURN SERVICE REQUESTED

Contamination and cleanup study for Warden City Water Supply Wells 4 & 5 site available for public review



Public comments
accepted July 30 –
August 28, 2018

Información en
Español incluida

The Washington
Department of Ecology
seeks your input on
cleanup of pesticide
contamination at the
Simplot Growers
property (outlined in
yellow on map at left).

Special accommodations

To request materials in a format for the visually impaired, visit <https://ecology.wa.gov/accessibility>, call Ecology at 509-329-3546, Relay Service 711, or TTY 877-833-6341.