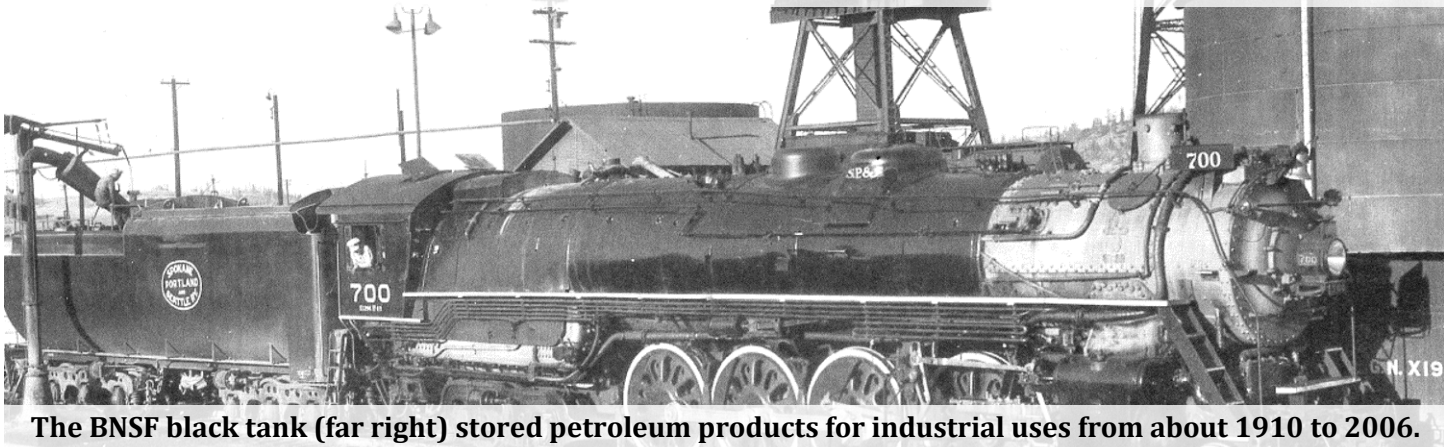


BNSF RAILWAY BLACK TANK PROPERTY



The BNSF black tank (far right) stored petroleum products for industrial uses from about 1910 to 2006.

Submit comments May 22 – June 22 to:

Jeremy Schmidt, site manager
4601 N. Monroe St.
Spokane, WA 99205

jeremy.schmidt@ecy.wa.gov

Online form: [http://
cs.ecology.commentinput.com/?
id=7BHjt](http://cs.ecology.commentinput.com/?id=7BHjt)

Questions? 509-329-3484

Request a meeting

Erika Bronson
509-329-3546
erika.bronson@ecy.wa.gov

We will hold a public meeting if
10 people request one.

Review the report

[https://fortress.wa.gov/ecy/
gsp/Sitepage.aspx?csid=3243](https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=3243)

Hillyard Public Library
4005 N. Cook St.
Spokane, WA 99207
509-444-5380

Ecology Eastern Regional Office
4601 N. Monroe St.
Spokane, WA 99205
Please call 509-329-3415 for an
appointment.

Ecology invites public input on the draft Remedial Investigation and Feasibility Study

The Washington State Department of Ecology (Ecology) seeks your input on the draft Remedial Investigation and Feasibility Study (RI/FS) for the BNSF Railway Black Tank Property (site) May 22 through June 22, 2017. The RI documents the extent and locations of petroleum contamination in soil and groundwater at the site. The FS evaluates cleanup options.

The site covers roughly 18 acres in Spokane's Hillyard neighborhood at 3202 East Wellesley Avenue (Figure 1, site map). The property is owned by BNSF Railway, which is responsible for cleanup along with Marathon Oil Company because it leased and operated facilities at the site. The companies are collectively called the potentially liable persons (PLPs), and they hired contractors to complete the RI/FS as required by a 2012 legal agreement with Ecology.

The site is within the proposed path of the North Spokane Corridor (NSC) freeway. The Washington State Department of Transportation (WSDOT) is building the NSC to connect US Highway 395 to Interstate 90.

Ecology, the PLPs, and WSDOT are committed to working together to protect people and the environment, and incorporate public input about site cleanup and the NSC freeway's location in Hillyard.

Site history and contamination issues

The site housed a 50-foot-diameter, above-ground black tank (Figure 2) that stored petroleum products, primarily the thick, heavy oil known as bunker C for fueling trains. Later, the black tank stored asphalt and other petroleum-based mixtures that were used by BNSF's tenants. Residual petroleum products were stored until 2006 when BNSF removed the tank and 10,270 tons of contaminated soil.

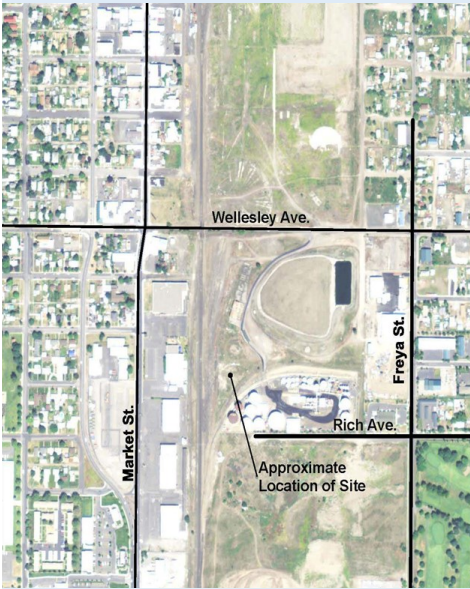


Figure 1. The BNSF Railway Black Tank Property is in Spokane's Hillyard neighborhood and near the proposed path of the North Spokane Corridor freeway.

Facility Site ID: 98615712

Cleanup Site ID: 3243

Special accommodations

To request Americans with Disabilities Act accommodation for disabilities, or printed materials in a format for the visually impaired, call Ecology at 360-407-7170, or visit www.ecy.wa.gov/accessibility.html. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Language assistance

Para asistencia en Español:
(360) 407-6097
preguntas@ecy.wa.gov

한국어에서 지원에 대 한:
(425) 649-7166

Liên hệ bằng tiếng Việt, xin liên lạc:
(360) 407-6948

若需中文翻譯: (360) 407-6956

The site also had an above-ground red tank that was used to store and transfer diesel. The diesel was used to thin bunker C so it could be pumped into trains.

Today, there are five areas of soil contamination ranging from the surface to 15 feet underground. From 15 feet underground to the water table, a 9,150-square-foot area of soil is contaminated. This is the pathway through which the petroleum traveled from the surface to groundwater. As a result, an approximate 7-acre plume of petroleum rests on groundwater about 170 feet underground.

Your drinking water is safe

The site is directly over the Hillyard Trough portion of the Spokane-Valley Rathdrum-Prairie Aquifer. The aquifer provides drinking water to nearly 500,000 residents in the Spokane area.

Because the contamination is a heavy oil, it is staying on top of groundwater with very little mixing occurring. Many groundwater monitoring wells are at the site, and we are confident that drinking water is not affected by the contamination at this time. Monitoring will continue until the cleanup process is complete.

Cleanup options

In the FS, the PLPs evaluated capping or excavating and disposing the contaminated surface soil offsite.

For the deep plume of petroleum on groundwater, the PLPs evaluated the following five options. All these cleanup options can be co-located with the NSC freeway.

Option A: Biodegradation

This is the process of allowing petroleum to reduce over time as naturally occurring micro-organisms feed on it.

Washington law doesn't allow natural biodegradation as a stand-alone cleanup method for sites with petroleum contamination on groundwater, so this option was included for reference only.

Option B: Bioventing/biosparging (PLPs' preferred cleanup alternative)

Air is forced underground through wells to speed up natural biodegradation, as described in Option A. Micro-organism activity is limited by the amount of oxygen available, so bioventing will increase their activity and the rate of petroleum degradation as they consume it.

The PLPs estimate that this option would take up to 14 years to clean up the site and cost \$5.5 million.

WHY CLEANUP MATTERS

Accidental spills of dangerous materials and past business practices have contaminated land and water throughout the state. The Washington State Department of Ecology Toxics Cleanup Program works to remedy these situations, which range from cleaning up contamination from leaking underground storage tanks, to large, complex projects requiring engineered solutions.

How sites are cleaned up

Ecology cleans up contaminated sites under the Model Toxics Control Act (MTCA), a citizen's initiative passed in 1988. The persons responsible for the pollution pay for the cleanup.

MTCA also established a tax on hazardous chemicals, such as petroleum products, pesticides, and other chemicals. When polluters are unable to pay, this tax funds cleanup.

Learn more about the cleanup process

<https://fortress.wa.gov/ecy/publications/publications/ftc94129.pdf>

Learn more about the BNSF Railway Black Tank Property in our frequently asked questions document

<https://fortress.wa.gov/ecy/gsp/DocViewer.ashx?did=58152>

Option C: Bioventing/biosparging and manual petroleum removal

In addition to Option B, as petroleum pools in wells, it is manually brought to the surface, or bailed, and separated from water.

The PLPs estimate that this option would take 13 years to clean up the site and cost \$9 million.

Option D: Bioventing/biosparging and steam-enhanced extraction

In addition to bioventing and biosparging, steam is injected underground through wells to heat up the thick petroleum, so it can be pumped to the surface through extraction wells and processed to separate petroleum and water.

The PLPs estimate that this option would take 10 years to clean up the site and cost \$19.5 million.

Option E: Smoldering combustion

Wells containing electrical ignitors are installed along with wells that circulate air underground. The ignitors initiate the combustion of petroleum, and the air flow sustains combustion.

The PLPs estimate that this option would take 7 years to clean up the site and cost \$25 million.

While Ecology doesn't fully support some of the conclusions in the RI/FS, it meets Washington's cleanup law and provides the information we need to develop a draft cleanup action plan with your input.

Next steps

Ecology will review and respond to the comments we receive during the public review period. We will 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.

Figure 2. The BNSF black tank around 1999. The tank stored petroleum products until 2006 when it was emptied and removed.



Toxics Cleanup Program, Eastern Region
4601 North Monroe Street
Spokane, WA 99205

Ecology seeks input on BNSF Black Tank Property cleanup



Public comment period for draft Remedial Investigation and Feasibility Study

*Submit comments by mail, email, or online (info page 1)
May 22 – June 22, 2017*

The Washington State Department of Ecology seeks your input on the draft Remedial Investigation and Feasibility Study for the BNSF Railway Black Tank Property located at 3202 E. Wellesley Ave. in Spokane, Washington. The investigation documents the extent and locations of petroleum contamination in soil and groundwater at the site. The study evaluates cleanup options.

Please contact us with your questions and comments. We will hold a public meeting if 10 people request one.

Photo left. A petroleum-contaminated soil sample taken from the BNSF Black Tank Property during the remedial investigation.