

Clean Earth/Burlington Georgetown East of 4th Draft Permit Available for Review and Comment



Exterior view of one of the buildings at the site.

Comments Accepted

Jan. 17th–March 11th, 2022

Submit Comments

<https://bit.ly/EastOf4thComments>

By mail:

Erin Hobbs, Site Manager
 Department of Ecology
 PO Box 330316
 Shoreline, WA 98133
 425-515-5996
erin.hobbs@ecy.wa.gov

Site Information

ecology.wa.gov/BurlingtonEast4th
 Facility Site ID: 47779679
 Site Cleanup ID: 2622

Need Help?

Contact Janelle Anderson,
 Community Outreach Specialist
 425-301-6454
janelle.anderson@ecy.wa.gov

COVID-19 response

We aren't hosting in-person public meetings. In-person document review is available by appointment. If you need a hard copy document or have questions, contact Janelle Anderson at 425-301-6454 or janelle.anderson@ecy.wa.gov.

Translations: Español | ខ្មែរ | Tiếng Việt | 中文

- Lea nuestra hoja informativa sobre Clean Earth/Burlington Georgetown East of 4th en español: <https://bit.ly/EastOf4thSpanish>.
- សូមអានតារាងព័ត៌មានក្រុមហ៊ុន Clean Earth/Burlington Georgetown East of 4th: <https://bit.ly/EastOf4thKhmer>.
- Đọc thông tin của chúng tôi về Clean Earth/Burlington Georgetown East of 4th bằng tiếng Việt: <https://bit.ly/EastOf4th-Vietnamese>.
- 請閱覽中文版Clean Earth/Burlington Georgetown第四街東站點情況說明: <https://bit.ly/EastOf4thChinese>.

We Want to Hear From You!

We're overseeing contamination cleanup at the Clean Earth/Burlington facility, located at 734 S. Lucile St., Seattle WA 98108. We invite you to review and comment on a draft Permit and draft Public Participation Plan. When the public comment period ends, we'll consider all comments and may change the documents based on them. After considering all comments, the documents will become final.

Draft Permit (Permit Lite): A Permit Lite is a "Dangerous Waste Corrective Action Permit" that allows cleanup at the site to continue.

Draft Public Participation Plan (PPP): The draft PPP encourages community involvement in cleanup decisions.

Public Meeting

At this time, there are no public meetings scheduled for this comment period. We will hold a public meeting if ten (10) or more people request one. To request a meeting, please call 425-301-6454 or email janelle.anderson@ecy.wa.gov.

Documents for Public Comment

Visit ecology.wa.gov/BurlingtonEast4th to view these documents.

- **Draft Permit**¹
- **[Draft Public Participation Plan](#)**² (PPP) Site Background

Burlington Environmental, LLC and PSC (Phillips Services Corporation) Environmental Services, LLC are wholly owned subsidiaries of Clean Earth Environmental Solutions, Inc. (Clean Earth). We refer to Clean Earth/Burlington throughout this document because the company uses the name Clean Earth in public, but the facility is permitted as Burlington Environmental, LLC.

Clean Earth/Burlington is a nationwide hazardous waste treatment, storage, and disposal company. Hazardous waste spills and leaks at the Georgetown location resulted in soil and groundwater contamination.

Before Clean Earth/Burlington owned this property, parts of it were unpaved and used to stain wood shakes and shingles. Twenty-four underground storage tanks (USTs) were installed on site between 1958 and 1965. They were removed in 1987.

- In 1991, the U.S. Environmental Protection Agency (EPA) issued a dangerous waste management permit to Clean Earth/Burlington Georgetown. The permit allowed the company to receive, store, and treat hazardous wastes at this facility. The permit required that soil and groundwater contamination be investigated and addressed.
- In 2002, EPA gave Ecology responsibility for this cleanup.
- In 2003, Clean Earth/Burlington closed this facility and removed all the buildings. Over 50 monitoring wells were installed to track contamination levels. Interim cleanup actions were done to protect people from harmful gases (vapors) that were escaping from the contaminated soil and groundwater. An **interim action** is a response taken to contain, stabilize, or recover a release of a hazardous substance in order to minimize threats to public health or safety while other response actions are being planned.
- In 2004, Clean Earth/Burlington purchased the White Satin Sugar building (pictured on this fact sheet's cover) and built an underground barrier wall.
- In 2010, we issued an Agreed Order that required Clean Earth/Burlington to clean and contain the contaminated soils and groundwater. Groundwater contamination caused by the facility goes farther west than 4th Ave. S., but the cleanup actions in this Agreed Order are mainly for contamination east of 4th Ave. A separate Agreed Order that involves three other businesses deals with contamination west of 4th Ave. S.
- In 2011, we approved Clean Earth/Burlington's *Engineering Design Report* and the company began additional cleanup actions that are described in the **Cleanup Process** section on page 4.
- In 2012, Clean Earth/Burlington excavated and disposed 5,000 tons of PCB-contaminated soil from the Union Pacific Railroad property. They improved biological breakdown of contamination by putting vegetable oil in the bottom of the excavation before it was backfilled. Then they covered the area with concrete to prevent exposure to any remaining soil contamination.

¹ Available for download at <https://apps.ecology.wa.gov/gsp/DocViewer.ashx?did=107676>.

² <https://apps.ecology.wa.gov/publications/SummaryPages/2204004.html>

- In 2015, Clean Earth/Burlington began a supplemental treatment for groundwater contamination inside the barrier wall: **in-situ bioremediation**. This treatment helps bacteria already in the groundwater break down the toxic chemicals. This was done twice a year for 5 years and ended in May 2020.
- In 2015, we amended the Agreed Order to include new cleanup actions to address a chemical called 1,4-dioxane (a chemical that may cause cancer) in groundwater. Between 2016–2018, Clean Earth/Burlington tested different chemicals to treat 1,4-dioxane. In 2020, Clean Earth/Burlington injected chemical treatments in three locations to decrease levels of 1,4-dioxane in groundwater. They're currently monitoring results.

Clean Earth/Burlington also used and contaminated part of the Union Pacific Railroad's Argo Yard, just northeast of the site. They have cleaned up much of the contaminated soil in that area, but some contamination remains.

In 2019, Ecology approved property use restrictions to protect human health and the environment. Restrictions include not drinking groundwater and not building homes on the property. Property use restrictions are accomplished using institutional controls.

Institutional controls are administrative and legal ways to minimize human exposure to contamination and/or protect the remedy. On this site, institutional controls will:

- Restrict groundwater use.
- Restrict and regulate subsurface work.
- Require vapor intrusion mitigations for any buildings inside the barrier wall.
- Require continued operation of the groundwater treatment system.
- Require maintenance of the barrier wall, surface cover, and monitoring wells.

Clean Earth/Burlington must maintain financial resources to implement the cleanup action, monitor its performance, and provide for long-term operation, maintenance, and repair.

Contamination

Soil is contaminated on the Clean Earth/Burlington and Union Pacific Railroad properties. As detailed in the Remedial Investigation (RI), remaining contaminants include:

- Gasoline and related petroleum products.
- Chlorinated solvents, trichlorethylene (TCE), and vinyl chloride (VC)—chemicals that may cause cancer.
- Polycyclic aromatic hydrocarbons (PAHs)—cancer-causing chemicals.
- Polychlorinated biphenyls (PCB)—man-made cancer-causing chemicals.

Groundwater outside of the Clean Earth/Burlington barrier wall is currently contaminated with:

- Gasoline and related petroleum products.
- Chlorinated solvents, TCE, and VC—chemicals that may cause cancer.
- 1,4-dioxane—a chemical that mixes well with water and can harm the eyes, skin, lungs, liver, and kidneys. It may cause cancer and is used in industry as a solvent.

Groundwater inside the barrier wall has higher levels of contaminants.

The Cleanup Process

Clean Earth/Burlington must follow Washington's cleanup process (see Figure 1 below). We are in the cleanup phase.

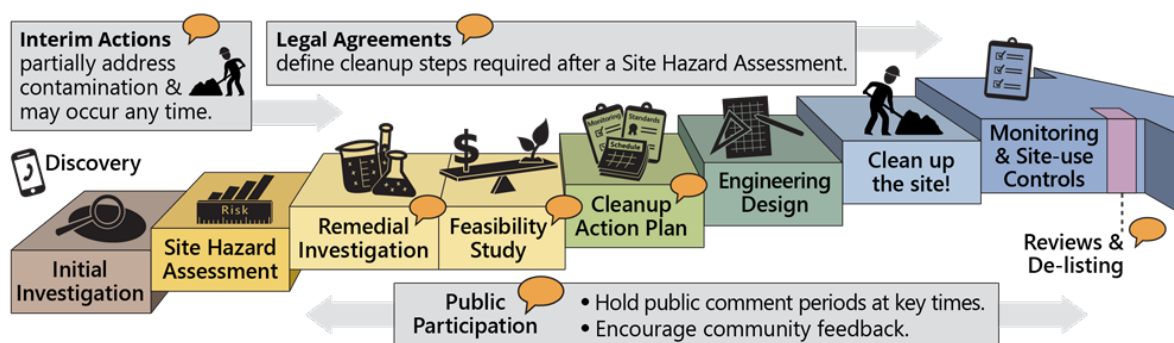


Figure 1: Washington's cleanup process. [Read a plain text version.](https://apps.ecology.wa.gov/publications/parts/1909166part2.pdf)³

Even after the cleanup is complete, this area is expected to continue its industrial use.

This site includes property owned by Union Pacific Railroad to the east, Stone-Drew/Ashe & Jones to the south, former Aronson property to the north, and 4th Ave. to the west.

Area inside the barrier wall

- In 1994, Clean Earth/Burlington removed and treated volatile contaminants from soils above the water table using water table-lowering and soil vapor extraction (SVE). The water table is the depth where soil is soaked with water. They did a second phase of SVE from 2012–2014.
- Between 2003–2004, Clean Earth/Burlington installed the underground barrier wall. It surrounds most of the permitted facility and keeps contaminated groundwater within the enclosed area. They pump and treat groundwater, and take care to keep groundwater inside the wall.
- In 2012, Clean Earth/Burlington dug up and removed 200 cubic yards of PCB-contaminated soils from the property. They paved the area to prevent contact with remaining contaminated soil.
- In 2015, Clean Earth/Burlington began a supplemental treatment for groundwater contamination inside the barrier wall: **in-situ bioremediation**. This treatment helps bacteria already in the groundwater break down the toxic chemicals. This was done twice a year for 5 years.

Area outside the barrier wall

- In 2003, Clean Earth/Burlington provided 30 homes in the Georgetown neighborhood with vapor reduction systems to protect indoor air from contamination. Some of these systems are still running where subsurface contamination is high enough to pose a vapor intrusion threat.
- In 2012, Clean Earth/Burlington excavated and disposed 5,000 tons of PCB-contaminated soil from the Union Pacific Railroad property. They improved biological breakdown of contamination by putting vegetable oil in the bottom of the excavation before it was backfilled. Then they covered the area with concrete to prevent exposure to any remaining soil contamination.

³ <https://apps.ecology.wa.gov/publications/parts/1909166part2.pdf>

- Between 2012–2014, Clean Earth/Burlington used soil vapor extraction (SVE) to remove volatile organic contamination from soil on the Union Pacific Railroad property.
- Between 2016–2018, Clean Earth/Burlington tested different chemicals to treat 1,4-dioxane. In 2020, Clean Earth/Burlington injected chemical treatments in three locations to decrease levels of 1,4-dioxane in groundwater. They're currently monitoring results.
- Clean Earth/Burlington will use a combination of administrative controls, institutional controls, and public communications in the area outside the barrier wall to limit exposure to contamination.
- Clean Earth/Burlington will regularly sample a large network of monitoring wells to check groundwater quality inside and outside the barrier wall. The monitoring program tracks the groundwater contamination over time and measures the performance of the final remedies. It's used to see if the cleanup is working or needs to be changed.

The Feasibility Study (FS) included a detailed screening and evaluation of numerous remediation technologies. We determined that the screening allowed specific cleanup alternatives to be evaluated against one another. The alternatives were evaluated separately for the areas inside and outside the barrier wall.

Cleanup Plans

Under the permit going out for public comment in 2022, Clean Earth/Burlington will continue with the requirements of the formal cleanup action plan for the East of 4th area for both soil and groundwater. In addition, Clean Earth/Burlington will finalize the investigation of the West of 4th site and develop a Cleanup Action Plan to cleanup the groundwater along with other potentially liable parties under a separate Agreed Order.

Document Review Locations

In response to Washington state's coronavirus response, in-person document review is available by appointment only. You may review documents at this location by appointment:

Washington State Department of Ecology
Northwest Regional Office
15700 Dayton Ave N. Shoreline, WA
Reception (24-hour) 206-594-0000

To schedule an appointment, please contact:

Susanne Winter
susanne.winter@ecy.wa.gov
NWRO Regional Business Administrator

You can also review documents on our website: ecology.wa.gov/BurlingtonEast4th.

Questions about accessing information?

Contact Janelle Anderson:
425-301-6454
janelle.anderson@ecy.wa.gov

To submit your comments, questions, or concerns about any of these documents, visit Ecology's eComments page: <https://bit.ly/EastOf4thComments>.

To submit a comment in any language, please use the **Submit Comments** link above or email your comment to Janelle Anderson at janelle.anderson@ecy.wa.gov.

What Happens Next?

Once the public comment period ends, we'll review and consider all comments. The documents may change based on your comments. When new documents about the site are developed, we'll notify you about additional public comment periods.



Department of Ecology
Northwest Regional Office
15700 Dayton Ave N
Shoreline, Washington, 98133

Join the Discussion!



Figure 2: Clean Earth/Burlington Georgetown Site Location

Clean Earth/Burlington Draft Documents

Ecology seeks public comment on a draft Permit and draft Public Participation Plan for the Clean Earth/Burlington site in Seattle, Washington.

Public comment period

Jan. 17th–March 11th, 2022

Public meeting and hearing

No public meetings are scheduled at this time. To request a public meeting, please call 425-301-6454 or email janelle.anderson@ecy.wa.gov.

Submit a comment:

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or email Janelle Anderson at

janelle.anderson@ecy.wa.gov.

ADA Accessibility: To request an ADA accommodation, contact Ecology by phone at 360-407-6700, email hwtrpubs@ecy.wa.gov, or visit ecology.wa.gov/accessibility. For Relay Service or TTY call 711 or 877-833-6341.