

Go East Corp Landfill Cleanup Site



Go East Corp Landfill

Comments accepted

March 7 to April 7, 2024

Submit comments

Online at

https://swm.ecology.commentin put.com/?id=EDsrcQhCB

Or by mail to

Alan Noell, Site Manager PO Box 330316 Shoreline, WA 98133-9716 Phone: 425-213-4803 Email: alan.noell@ecy.wa.gov

Document review locations

Mill Creek Library 15429 Bothell Everett Highway Mill Creek, WA 98012

Ecology – NW Region Office 15700 Dayton Ave. N, Shoreline, WA 98133 By appointment, call: 206-594-0016 Email: nwro_public_request@ecy.wa.gov

Site information link

Facility Site ID: 2708 Site Cleanup ID: 4294

Public comment period - March 7 to April 7, 2024

The former owners of the permitted landfill entered into an agreed order under the state's cleanup law, the Model Toxics Control Act (MTCA). The Agreed Order requires that P&GE, LLC and Century Communities of Washington, LLC:

- Perform an interim action during the permitted landfill closure activities pursuant to the Interim Action Work Plan.
- Prepare a Remedial Investigation Work Plan.
- Prepare a Remedial Investigation/Feasibility Study (RI/FS).
- Prepare a preliminary Draft Cleanup Action Plan.

Ecology hosted a public comment period for the Agreed Order and Interim Action Work Plan in May and June 2020, held an online public meeting on June 18, 2020, and provided a Responsiveness Summary Report in January 2021. Ecology updated the Public Participation Plan in February 2024.

Two documents available for review and comment

- Draft Remedial Investigation/Feasibility Study
- Draft Cleanup Action Plan

Join March 21, 2024 - Online Public Meeting

Ecology will hold an online public meeting to discuss the documents.

Upon request, we will provide accommodations and interpreters for this public meeting. To request assistance, please contact Nancy Lui at 425-393-5679 or email nlui461@ecy.wa.gov and reference Go East Corp Landfill Site.

- Register <u>https://waecy-wa-gov.zoom.us/j/83049413510</u>
- Zoom Presentation: 6:00 7:00 pm
- Questions and answers: 7:00 8:00 pm



Site history

The 40.9-acre property sits atop the Vashon advance outwash sand formation, which outcrops where steep slopes are present on the east side of the property. The Vashon advance outwash sand formation is underlain by low-permeability silt deposits referred to as the pre-Vashon lacustrine silt unit. The pre-Vashon lacustrine silt unit is estimated to be approximately 110-feet-thick beneath the property.

In 1969, a conditional use permit was issued for sand excavation. Sand was excavated from a ravine on the northern part of the property and used as construction fill for nearby construction projects.

Rekoway, Inc. purchased the property in Feb. 1972, and operated the landfill until 1980. Rekoway obtained a 10-year conditional-use permit from Snohomish County in March 1972 to excavate sand and gravel and operate a landfill by reclaiming the excavation area with solid waste. The permit authorized the disposal of "wood, mineral, and concrete solid materials, but not garbage or putrescibles." In 1974-75, Rekoway was approved to accept "cardboard, pallets, large parcel wrappings, shredded paper, and warehousing waste material."

In 1974, Rekoway accepted approximately 200 cubic yards of baghouse dust containing magnesium, phosphate, and aluminum dust into the landfill. A fire resulted from the oxidation of the buried metal dusts. Workers excavated the material, spread it on the ground, extinguished the fire, and covered the material with soil. Partially burned trees and stumps caused a landfill fire in Nov. 1976 that persisted through 1979. Snohomish County Health Department (formerly known as Snohomish Health District) suspended the landfill permit in Nov. 1977.

Go East Corporation conditionally purchased the property in 1979. They requested reinstatement of the landfill permit to allow additional filling to level the landfill area for future development. Snohomish County Health Department issued a permit to operate a wood waste landfill in Nov. 1979. The permit expired in Sept. 1982. Go East Corporation stopped accepting waste in the summer of 1983 when Snohomish County issued a stop work order. Another landfill fire began in Oct. 1983 and burned out by Jan. 1986. The landfill was covered with soil in conformance of the minimum functional standards for solid waste handling in Section 173-301 of the Washington Administrative Code (WAC). However, WAC 173-301 was repealed and superseded by WAC 173-304 in October 1985, and the landfill was not closed in accordance with the governing landfill regulations in 1986.

Site development and landfill closure

P&GE, LLC acquired the property from Go East Corporation in May 2009. P&GE prepared the Go East Landfill Closure Plan and obtained several permits to re-route a stream, mitigate wetlands, close the landfill, and redevelop the property for the current Alpine Estates community.

Snohomish County Planning and Development Services issued land disturbing activity permits; the Washington Department of Fish and Wildlife issued a hydraulic project approval to relocate the stream; the U.S. Army Corps of Engineers approved wetlands mitigation; Snohomish County Health Department issued a solid waste facility permit; and Ecology granted a Construction Stormwater General Permit.

The permitted landfill closure activities included:

• Excavation of landfill material from the peripheral areas of the landfill (i.e., the wedge area) and the placement of landfill material in the center of the landfill, which reduced the landfill area from approximately 9.6 to 6.0 acres.



Excavation of landfill material from the wedge area

- Closure of the landfill with an engineered cover that includes a 40-mil linear lowdensity polyethylene (LLDPE) geomembrane, a geocomposite drainage layer, and a soil cover.
- Construction of two stormwater detention ponds on the southeast portion of the landfill to reduce the peak stormwater runoff from the residential development. The stormwater ponds are underlain by a double liner with an interstitial leak detection layer.
- Construction of a geomembrane-lined gas ventilation trench along the landfill boundary adjacent to the residential lots to collect and ventilate methane that accumulates beneath the landfill cover.



DEPARTMENT OF

State of Washington

Installation of geocomposite drainage layer above 40-mil LLDPE geomembrane

- Preservation of the steep wooded northeast landfill slope and construction of a rock buttress at the toe of the slope to increase its structural stability. Stream 3 originates from a weir box within the rock buttress.
- P&GE prepared a Construction Quality Assurance Report on July 1, 2022, to document the construction activities necessary for landfill closure under WAC 173-350-400(8).

Additional site development activities included:

- Diversion of a small surface water stream. Stream 1 originates from urban stormwater drainage and wetlands
 near the west property boundary. Stream 1 originally extended through the ravine that contains the landfill.
 Stream 1 was diverted to the ravine south of the landfill to accommodate sand mining and landfill construction.
 As part of the current site development, Stream 1 was diverted to a lined channel near the base of the
 regraded west slope of the property. Stream 1 discharges down a steep slope through a high-density
 polyethylene (HDPE) pipe to an energy dissipation mat that adjoins Stream 2.
- A groundwater interceptor trench was constructed beneath the lined Stream 1 channel. The interceptor trench collects perched groundwater within the advanced outwash formation and diverts groundwater to Stream 2.
- The property was regraded for residential development, which included filling the wedge area with clean onsite and imported soil.
- During construction, a mudflow occurred beyond the landfill property in Sept. 2021. The mudflow originated when the construction contractor placed approximately 500 to 700 cubic yards of clean fill material on a cut of the steep slope above Stream 3, which originates from the base of the landfill. The mudflow occurred when precipitation and seepage mobilized the fill material, causing a mudflow of transitional bed soil and trees to the wetlands at the base of the landfill. Century Communities has voluntarily worked with Ecology's Shorelands and Environmental Assistance Program to purchase wetland mitigation credits and to revegetate and monitor the recovery of the wetlands at the base of the landfill.
- Century Communities of Washington, LLC, purchased the property on May 24, 2022 and developed the 96-tract Alpine Estates Community. Snohomish County Planning and Development Services approved the Alpine Estates, A Plat Community plat map on Oct. 24, 2023. Tracts 988 through 992 and 995 through 999 were granted and conveyed to the Alpine Estates Owners Association. The landfill exists on Tracts 989, 992, 997, and 999. Century Communities currently governs the Alpine Estates Owners Association.



- Alpine Estates houses are being constructed with gas barrier and ventilation systems that are designed consistent with the Methane Mitigation Standards developed by the Los Angeles Department of Building and Safety. Century Communities has contracted a landfill gas engineer to prepare Construction Confirmation Reports for the tracts, which must be approved by Snohomish County Health Department with a letter of consent by Ecology. Snohomish County Planning and Development Services then conducts an inspection.
- Century Communities plans to record an Environmental Covenant for Limited Purpose Landfill following the
 public comment period. The environmental covenant specifies general restrictions and requirements, specific
 prohibitions and requirements, and access and notification requirements for the landfill. Washington's
 administrative code WAC 173-350-400(8)(e) requires that an environmental covenant be filed following
 landfill closure. Environmental covenants are recorded to document the landfill, restrict the land use, protect
 the landfill control and monitoring systems, and define access and notification requirements for both current
 and future owners of the landfill. The specific prohibitions and requirements are reiterated in the Draft Cleanup
 Action Plan.



Landfill post-closure care

Snohomish County Health Department issues a solid waste facility permit for post-closure care of the Go East Corp Landfill in accordance with WAC 173-350. The current permittee, Century Communities, is required to maintain the integrity and effectiveness of the landfill cover and to monitor groundwater, surface water, and landfill gas.

 Century Communities contracts a landfill gas engineer to monitor methane in accordance with a Landfill Gas Monitoring and Contingency Plan. This plan addresses methane monitoring within the landfill, in soil gas probes at the landfill boundary, and contingent monitoring beneath and within the Alpine Estates houses.



• Snohomish County Health Department anticipates adopting the Cleanup Action Plan and its associated Compliance Monitoring Plan for groundwater and surface water monitoring.

Post-closure care is required until the landfill meets functional stability criteria for settlement and cover integrity, landfill gas generation, and groundwater and surface water quality.

Ecology's cleanup process

The Model Toxics Control Act¹ (MTCA) provides requirements for contaminated site cleanup and sets standards that protect human health and the environment. Ecology enacts MTCA and oversees cleanups.



Cleanup activities

The cleanup activities that preceded Agreed Order No. DE 18121 (Jan. 29, 2021) include:

- The U.S. Environmental Protection Agency prepared a Preliminary Assessment in Dec. 1984 and Site Inspection in June 1987, in accordance with the federal Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund. The Site Inspection stated that although the landfill posed no threat the public health or the environment, the health department should continue to monitor the leachate for indications of increased contaminant mobilization and migration.
- Snohomish County Health Department prepared a Site Hazard Assessment (SHA) under MTCA in May 2004. The SHA recommended that a landfill closure plan be implemented for future residential development and recommended no further action under MTCA. The Health Department issued a No Further Action (NFA) letter in June 2004, which stated that Ecology made a determination of NFA based on the SHA.
- Ecology prepared an initial investigation field report on June 13, 2019, based on available information. The report indicates that metals were detected at concentrations exceeding MTCA cleanup levels in groundwater wells and in surface water at the toe of the landfill and refers to the reported observation of partially buried drums at the site. Subsequently, Ecology rescinded the 2004 NFA letter on Sept. 9, 2019.

The cleanup activities associated with Agreed Order No. DE 18121 include:

- P&GE entered into Agreed Order No. DE 18121 with Ecology on Jan. 29, 2021. Century Communities signed on as a party to the agreement on Jan. 10, 2023. The Agreed Order includes an Interim Action Work Plan. The Interim Action Work Plan provided stringent soil cleanup levels beyond the final landfill boundary. It also provided a confirmation soil sampling plan for the wedge area and borrow source soil sampling plan for on-site soil to be used as construction fill.
- The Interim Action Completion Report documents confirmation soil sampling performed during the excavation of the wedge area along the periphery of the original landfill. The report also describes confirmation soil

¹ https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305 and https://apps.leg.wa.gov/wac/default.aspx?cite=173-340



sampling of imported fill material, the pre-construction sampling results (Appendix A), soil disposal documentation (Appendix C), asbestos-containing material documentation (Appendix D), an asbestos inspection summary of the excavated landfill material (Appendix E), and the lot exploration execution memorandum (Appendix F). The reconnaissance of the northeast slope is reported separately and included in Appendix L of the Construction Quality Assurance Report for the landfill. An interim action addendum report was prepared that confirms soils were not impacted by potentially contaminated stormwater management practices south of the landfill.

 The Remedial Investigation Work Plan describes the landfill property and history, environmental setting, previous investigations, preliminary conceptual site model, data gaps, and the remedial investigation field activities.



The RI/FS describes the regulatory background, the landfill property and history, the environmental setting, and previous and current field investigations. The historical infiltration of water through the landfill is evident by leachate impacts to groundwater beneath and beyond the landfill where elevated concentrations of metals and polycyclic aromatic hydrocarbons have been detected in groundwater and surface water. The RI/FS proposes cleanup standards for groundwater, surface water, and sediment at the site. The soil beyond the landfill and the sediment downstream of the landfill complies with the proposed cleanup standards. Elevated concentrations of manganese persist in groundwater also contains elevated concentrations of iron. Naturally occurring iron and manganese are mobilized under anaerobic conditions caused by the biodegradation of organic waste in the landfill. The Feasibility Study develops and evaluates cleanup action alternatives that can be performed after landfill closure in July 2022. The cleanup action alternatives include no additional actions, monitored natural attenuation of contamination with surface water treatment. The RI/FS recommends the monitored natural attenuation cleanup alternative.



The Cleanup Action Plan is Ecology's decision document for defining the cleanup standards and selecting the cleanup action for the site. The Draft Cleanup Action Plan selects the monitored natural attenuation cleanup alternative. Landfill materials have been removed from beyond the closed landfill boundary and the engineered landfill cover prevents the infiltration of precipitation water through the underlying waste. The diversion of Stream 1 and the groundwater interceptor trench reduce the infiltration of water and flow of groundwater beneath the landfill to its discharge point at the toe of the northeast landfill slope. The flow of naturally aerobic groundwater is anticipated to decrease the concentrations of iron and manganese to background conditions beneath the wedge area and to decrease their concentrations in groundwater and surface water downstream of the landfill. The monitoring of groundwater beneath the wedge area and surface water downstream of the landfill are required until the concentrations attenuate to below their cleanup levels.

What Happens Next?

• Ecology will finalize the RI/FS study and the Cleanup Action Plan after the public comment period ends. Ecology will review and consider all comments received and respond accordingly. Ecology will make appropriate revisions (if any) to the draft documents.



Solid Waste Management Program

Alan Noell, Site Manager P.O. Box 330316 Shoreline, WA 98133-9716

Go East Corp Landfill Cleanup Site Draft Remedial Investigation/Feasibility Study and Draft Cleanup Action Plan Public Comment Period – March 7 – April 7, 2024



El periodo de comentarios públicos será del 7 de marzo al 7 de abril de 2024

Ecología invita a comentarios sobre la Investigación Correctiva/Estudio de Viabilidad y el Borrador del Plan de Acción de Limpieza para el Relleno Sanitario de Go East Corp. El Relleno Sanitario de Go East está ubicado en 4330 108th Street SE, Everett, WA 98208.

Habrá una reunión pública virtual el 21 de marzo de 2024. De necesitar traducción o interpretación para la reunión pública, comuníquese con Nancy Lui escribiendo a <u>nlui461@ecy.wa.gov</u> o llamando al (425) 393-5679.

Accommodation Requests: To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6831 or visit <u>https://ecology.wa.gov/accessibility</u>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341