First Periodic Review
318 State Ave NE Olympia

318 State Ave NE, Olympia, Thurston County
Facility Site ID: 3024394, Cleanup Site ID: 2010

Toxics Cleanup Program, Southwest Region

Washington State Department of Ecology
Lacey, Washington

November 2024

Document Information

This document is available on the Department of Ecology's 318 State Ave NE Olympia cleanup site search page.[1]

Related Information

- Facility Site ID: 3024394
- Cleanup Site ID: 2010

Contact Information

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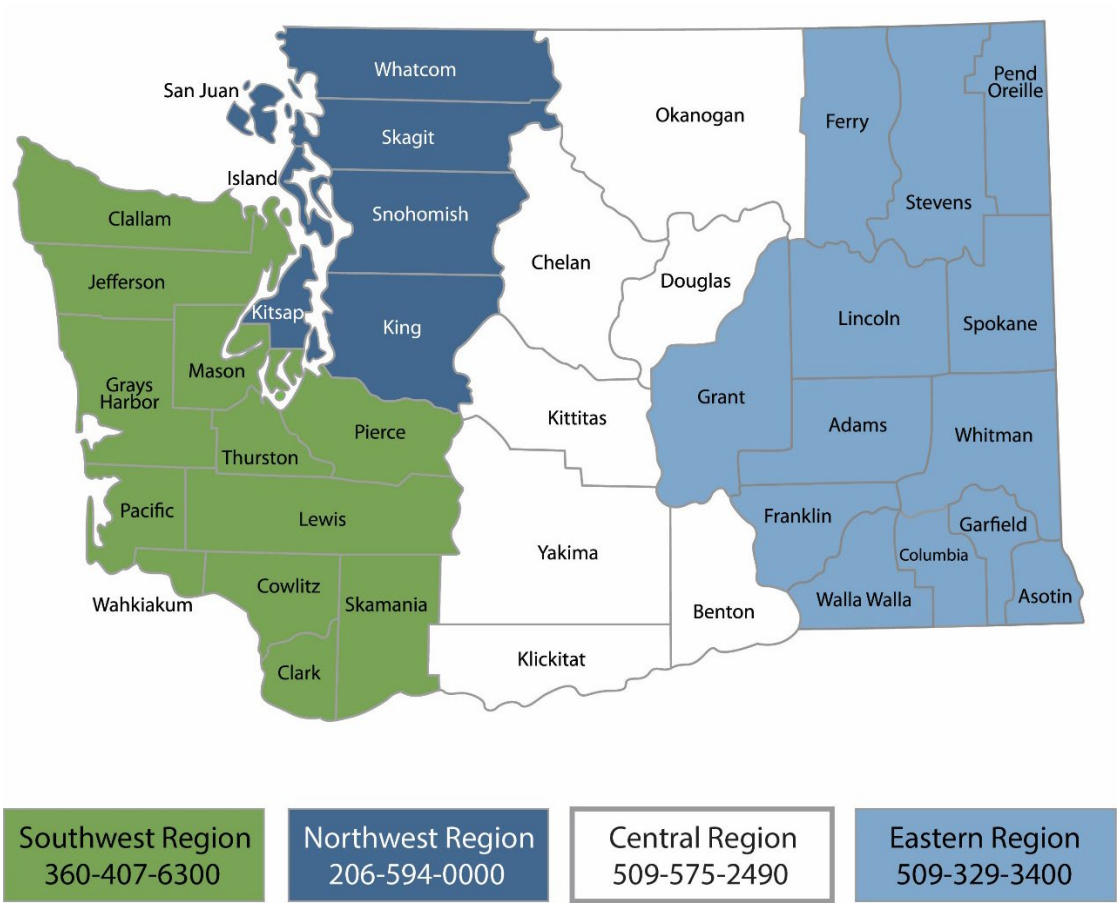
[1] https://apps.ecology.wa.gov/cleanupsearch/site/2010
[2] https://ecology.wa.gov/About-us/Who-we-are/Our-Programs/Toxics-Cleanup
[3] https://ecology.wa.gov/About-us/Accountability-transparency/Our-website/Accessibility

Department of Ecology's Regional Offices

Map of Counties Served



Southwest Region 360-407-6300	Northwest Region 206-594-0000	Central Region 509-575-2490	Eastern Region 509-329-3400

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
Headquarters	Across Washington	PO Box 46700 Olympia, WA 98504	360-407-6000

Table of Contents

Introduction

The Washington State Department of Ecology (Ecology) reviewed post-cleanup site conditions and monitoring data to ensure human health and the environment are being protected at the 318 State Ave NE Olympia cleanup site (Site). Site cleanup was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC). This is the first periodic review conducted for this Site.

Cleanup activities at this Site were completed under Voluntary Cleanup Program (VCP) project VCP SW1013. Residual concentrations of metals, volatile organic compounds (VOCs), chlorinated solvents into the soil and groundwater, and polycyclic aromatic hydrocarbons (PAHs) into the soil only, that exceeded MTCA cleanup levels remain on the property. The MTCA cleanup levels for soil and groundwater are established under WAC 173-340-740[4] and WAC 173-340-720,[5] respectively. The Site cleanup under SW1013 is ongoing.

Ecology determined institutional controls in the form of an environmental covenant would be required as part of the cleanup action for the Site. WAC 173-340-420(2)[6] requires Ecology to conduct a periodic review of certain sites every five years. For this Site, a periodic review is required because institutional and engineered controls remain in place at the Property (and Site). A property-specific no further action was issued on February 23, 2016. Ecology received some required documentation, as described in the environmental covenant, upon request from the property owner in February 2018.

When evaluating whether human health and the environment are being protected, Ecology must consider the following factors (WAC 173-340-420(4)):

a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the site

b) New scientific information for individual hazardous substances or mixtures present at the site

c) New applicable state and federal laws for hazardous substances present at the site

d) Current and projected site and resource uses

e) The availability and practicability of more permanent remedies

f) The availability of improved analytical techniques to evaluate compliance with cleanup levels

[4] https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-740
[5] https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-720
[6] https://app.leg.wa.gov/wac/default.aspx?cite=173-340-420

Ecology publishes a notice of all periodic reviews in the *Site Register* and provides an opportunity for public comment.

Summary of Site Conditions

A detailed Site description and history, site investigations summary, and cleanup actions summary are found in the various documents associated with CSID 2010. A brief summary of each is presented here.

Site description and history

The 318 State Ave NE Olympia facility (Site) is located at 318 State Ave NE, Olympia, Washington. The Site has been used since the 1890s and has been developed for several uses, including use as a foundry and machine shop, automotive repair facility, and material testing laboratory. By 1923, the Washington State Department of Transportation (WSDOT) owned the Site and in 1936, fire destroyed some of the buildings, which were subsequently rebuilt and expanded into the WSDOT testing laboratory. A part of the Site, the Property comprises Thurston County parcels 78503200500.

Parcel 78503200500 was owned by the City of Olympia until being purchased by the Low Income Housing Institute based in Seattle, Washington, under Olympia Development LLC. The Billy Frank Jr Place affordable housing complex currently occupies the entire footprint of parcel 78503200500, which includes the building, a patio and playground area, and garden and landscaping area. The City of Olympia continues to own parcel 78503200401, which was historically used as a parking lot. Currently, in order to maintain property security, the former gravel parking lot is now fenced an unoccupied, but still a bare gravel surface.

A vicinity map is in Attachment A, and a Site plan is in Attachment B.

Site investigations

Between 2006 and 2008, GeoEngineers conducted a Site characterization of the Property. Numerous soil borings were advanced on the Site and 16 monitoring wells (MW-01 through MW-16) were installed. Some of these monitoring wells were later decommissioned in order to build the apartment complex. Soil samples were collected from all borings and monitoring wells. Exceedances of MTCA Method A soil cleanup levels (CULs) for unrestricted land use were found for metals, polycyclic aromatic hydrocarbons (PAHs), including carcinogenic PAHs (cPAHs), and volatile organic compounds (VOCs).

Cleanup actions

By October 2009, the Property characterization had been completed and GeoEngineers conducted a Remedial Cleanup Action on the Property. Excavation and removal of soil from

Contaminated Soil Zone 1 (CSZ 1) removed much of the chlorinated solvents, metals, PAHs, and other VOCs. During the excavation, a previously unknown underground storage tank (UST) was found and removed. Laboratory analytical results from confirmation soil samples indicated the metals, chlorinated solvents, PAHs, and VOCs had been removed from the soil. In a smaller pit (CSZ 2) soil was excavated to remove benzene and lead contamination from that area. Laboratory analytical results on confirmation soil samples indicated the benzene and lead had been removed from the soil. Sampling data are contained in various Site reports, and relevant Site and Property cleanup figures are included in Attachment B.

Ecology concurred that cleanup standards were met at the Property, and issued a property-specific no further action (NFA) determination by opinion letter on February 23, 2016. As part of the property-specific NFA, institutional and engineered controls had to be maintained and monitoring (cap monitoring and long term groundwater monitoring), as memorialized under the environmental covenant recorded with Thurston County on February 18, 2016.

The long term compliance monitoring for the environmental covenant was limited to PCE, TCE, cis-1,2,-DCE, trans 1,2-DCE (combined, 1,1-DCE), and vinyl chloride for groundwater and air. The air monitoring was an initial set of monitoring after the final construction of the building to confirm that the passive sub-slab vapor mitigation system was functioning.

Groundwater monitoring

Groundwater monitoring continues at the Property and Site. For the Property cleanup, a long term monitoring requirement included monitoring at monitoring well MW-19 for PCE and its degradation products. Monitoring at MW-19 has continued based on long term groundwater monitoring compliance plan for the cleanup. However, recently, upon fencing off the former gravel parking lot for security purposes, MW-19 could not be located. MW-19 was finally re-located by geophysical and exploratory excavation means in November 2023. Monitoring well MW-19 was then re-developed and sampled on November 9, 2023 in accordance with the long-term groundwater compliance monitoring plan. PCE and its degradation products were not detected, except for vinyl chloride at a concentration of 0.68 micrograms per Liter. Though in excess of the MTCA Method A cleanup level, the concentration of vinyl chloride in groundwater for the November 2023 sampling event is over 50% less than the concentration from the June 20, 2019 sampling event. Based on the groundwater sampling results, the cleanup remedy for the Property remains protective.

Cleanup standards

Cleanup standards include cleanup levels, the location where these cleanup levels must be met (point of compliance), and any other regulatory requirements that apply to the Site. WAC 173-340-704[7] states MTCA Method A may be used to establish cleanup levels at sites that have few hazardous substances, are undergoing a routine cleanup action, and where numerical

[7] https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-704

standards are available for all indicator hazardous substances in the media for which the Method A cleanup level is being used. Method B may be used at any site and is the most common method for setting cleanup levels when sites are contaminated with substances not listed under Method A. Method C cleanup levels may be used to set soil and air cleanup levels at industrial sites, but those do not apply at this Site.

MTCA Method A cleanup levels for unrestricted land use were determined to be appropriate for contaminants at this Site. The cleanup actions conducted at the Site were determined to be routine, few hazardous substances were found at the Site, and numerical standards were available in the MTCA Method A table for each hazardous substance.

The point of compliance is the area where the cleanup levels must be attained. For soil cleanup levels based on the protection of groundwater, as they are for this Site, the point of compliance is established as soils throughout the Site (standard point of compliance).

The Site has a conditional point of compliance for groundwater, which was established as close as feasible to the property boundary at monitoring well MW-19.

Environmental/Restrictive Covenant

Ecology determined that institutional controls would be required as part of the cleanup action to document the remaining contamination, protect the cleanup action, and protect human health and the environment. On February 18, 2016, institutional controls in the form of an environmental covenant[8] were recorded for the Site.

The environmental covenant recorded for the Site imposes the following limitations:

1. Vapor controls, in the form of a vapor barrier and sub-slab depressurization system.
2. No use of groundwater beneath the Site for purposes other than dewatering during construction or remediation.
3. Continued compliance groundwater monitoring at point of compliance monitoring well MW-19.

Periodic Review

Effectiveness of completed cleanup actions

During the Site visit Ecology conducted on October 23, 2023, representatives from Ecology, Robinson-Noble, and the Low Income Housing Institute met and observed current conditions

[8] https://apps.ecology.wa.gov/cleanupsearch/document/53705

during a walk through. The Property is currently operating as an apartment complex and vacant lot. The remainder of the Site is being used a parking lot. A photo log is in Attachment C.

Direct contact

The cleanup actions were intended to eliminate exposure to contaminated soil, groundwater, and soil gas/vapor at the Site. Exposure pathways to contaminated soils by ingestion and direct contact were reduced by capping with the building and installing a sub-slab depressurization passive vapor mitigation system. The building and the vapor mitigation system appear to be in satisfactory condition, and no repair, maintenance, or contingency actions are required at this time.

Protection of groundwater

Soils with metals, volatile organic compounds (VOCs), chlorinated solvents into the soil and groundwater, and polycyclic aromatic hydrocarbons (PAHs) at concentrations exceeding MTCA cleanup levels remain at the Site; however, the contaminated soil source material on the Property has been removed. The Site cleanup is ongoing, with in situ chemical oxidation of remaining solvent concentrations in Site soil and groundwater occurring in 2018.

Protection of Air/Vapor

Vapor intrusion is mitigated by the ongoing sub-slab depressurization passive system in place for the building. The system appeared to be in good condition and operating as expected during the Site visit on October 23, 2023.

Ecology recommends sealing the minor cracks observed in the concrete of the first floor, as seen in the lobby of the Billy Frank Jr. place building, during the site visit on October 23, 2023. This is a proactive measure, and not considered a violation of the environmental covenant.

Institutional controls

Institutional controls in the form of an environmental covenant were implemented at the Site in 2016. The environmental covenant remains active and discoverable through the Thurston County Assessor's office. Ecology found no evidence a new instrument has been recorded that limits the effectiveness or applicability of the environmental covenant. This environmental covenant prohibits activities that will result in the release of contaminants contained as part of the cleanup action and prohibits any use of the property that is inconsistent with the environmental covenant, unless approved by Ecology in advance. This environmental covenant ensures the long-term integrity of the cleanup action will be protected.

New scientific information for individual hazardous substances or mixtures present at the Site

The 2016 Property-specific no further action opinion presented some cleanup levels protective of surface water. However, the Site cleanup has implemented the MTCA Method A cleanup levels for PCE and its degradation products, which are more stringent than the surface water

cleanup levels. Given the drinking water resources in downtown Olympia, Ecology concurs with these more stringent cleanup levels. Remaining contaminant concentrations at the Property, as part of the Site, also have to be evaluated per current Sitewide cleanup levels.

PCE and its degradation products were sampled in indoor and outdoor air in 2017. This was after construction of the building was finished. No indoor air concentrations exceeded Site cleanup levels for air, and the indoor air concentration was less than the outdoor air (background) concentrations, which suggests that the remedy remains protective.

Cleanup levels for cis-1,2-DCE and trans-1,2-DCE are more stringent in 2023 than they were in 2016. A cleanup level has been established for cis-1,2-DCE in groundwater. However, current concentrations of cis-1,2-DCE and trans-1,2-DCE sampled in groundwater are in compliance with the cleanup levels at both MW-19 and in the remaining Site monitoring wells.

Based on the cleanup levels proposed for the Site, concentrations of Site hazardous substances at the Property and MW-19 are less than the MTCA cleanup levels, except for vinyl chloride. Chemical injections were completed in 2018 to reduce those concentrations. Additional chemical injections may be implemented to further reduce concentrations. In the meantime, current protective measures for the Property appear to be sufficient, and no changes are recommended. Long term monitoring should continue once every 18 months per the compliance monitoring plan. The passive vapor mitigation system should also be maintained and function to continue to protect building residents.

New applicable state and federal laws for hazardous substances present at the Site

The MTCA Method cleanup levels for groundwater and groundwater protective of vapor intrusion are being used instead of protective of surface water.

Current and projected Property Site and resource uses

The Property is used for residential purposes as multi-family housing. The rest of the Site is a parking lot. There have been no changes in current or projected future Site or resource uses. The current Site use is not likely to have a negative impact on the protectiveness of the cleanup action.

Availability and practicability of more permanent remedies

The remedy implemented included containing hazardous substances, and it continues to be protective of human health and the environment. While more permanent remedies may be available, they are still not practicable at this Site. PCE and its degradation products (especially vinyl chloride) are being treated in Site groundwater as a whole.

Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the cleanup action were capable of detection below the selected MTCA cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

Conclusions

- The cleanup actions completed at the Site appear to be protective of human health and the environment.
- Soil cleanup levels have not been met at the Site; however, the cleanup action is determined to comply with cleanup standards under WAC 173-340-740(6), since the long-term integrity of the containment system is ensured and the requirements for containment technologies have been met.
- Groundwater compliance monitoring shows that PCE and its degradation products are still less than Site cleanup levels, except for vinyl chloride in groundwater at MW-19. Site cleanup is ongoing, and remedial in situ chemical injections are decreasing the concentrations of vinyl chloride, which have been trending down in Site groundwater.
- The environmental covenant for the property is in place and is effective in protecting human health and the environment from exposure to hazardous substances and the integrity of the cleanup action.
- Site cleanup is ongoing.

Based on this periodic review, Ecology has determined the requirements of the Covenant are being followed. No additional cleanup actions are required by the property owner at this time. The property owner is responsible for continuing to inspect the Site to ensure the integrity of the cleanup action is maintained, including maintaining operating vapor intrusion mitigation system, and monitoring Property surfaces as the cap.

Next review

Ecology will schedule the next review for the Property five years from the date of this periodic review. If additional Site cleanup actions or institutional controls are required, the next periodic review will be scheduled five years after those activities are completed.

Site Contaminant Cleanup Levels

Table 1. Cleanup levels for soil and groundwater contaminants subject to this periodic review.

Contaminant	Soil cleanup level (mg/kg)	Surface Water cleanup level (µg/L)	Current Soil cleanup level (mg/kg)	Current Groundwater cleanup level (µg/L)	Current Air cleanup level (µg/m^3)
PCE	0.05	8.85	0.05	5	10
TCE	0.03	7	0.03	5	0.33
Cis-1,2-DCE	160	Not established	16	16	NE
Trans-1,2-DCE	1,600	4,000	160	160	27.4
Vinyl Chloride	67	1.6	0.67	0.2	0.28
Benzene	0.03	Not established	0.03	5	0.32
Toluene	7	Not established	7	1,000	2,300

µg/L = micrograms per liter
mg/kg = milligrams per kilogram
µg/m3 = micrograms per cubic meter

References

Eurofins, Analytical Report, prepared for Robinson-Noble, November 29, 2023.

Ecology, Site visit, October 23, 2023.

Ecology, Periodic Review Process Early Notification Letter, August 14, 2023.

Robinson-Noble, Post chemical injection Groundwater Monitoring Report, July 31, 2020.

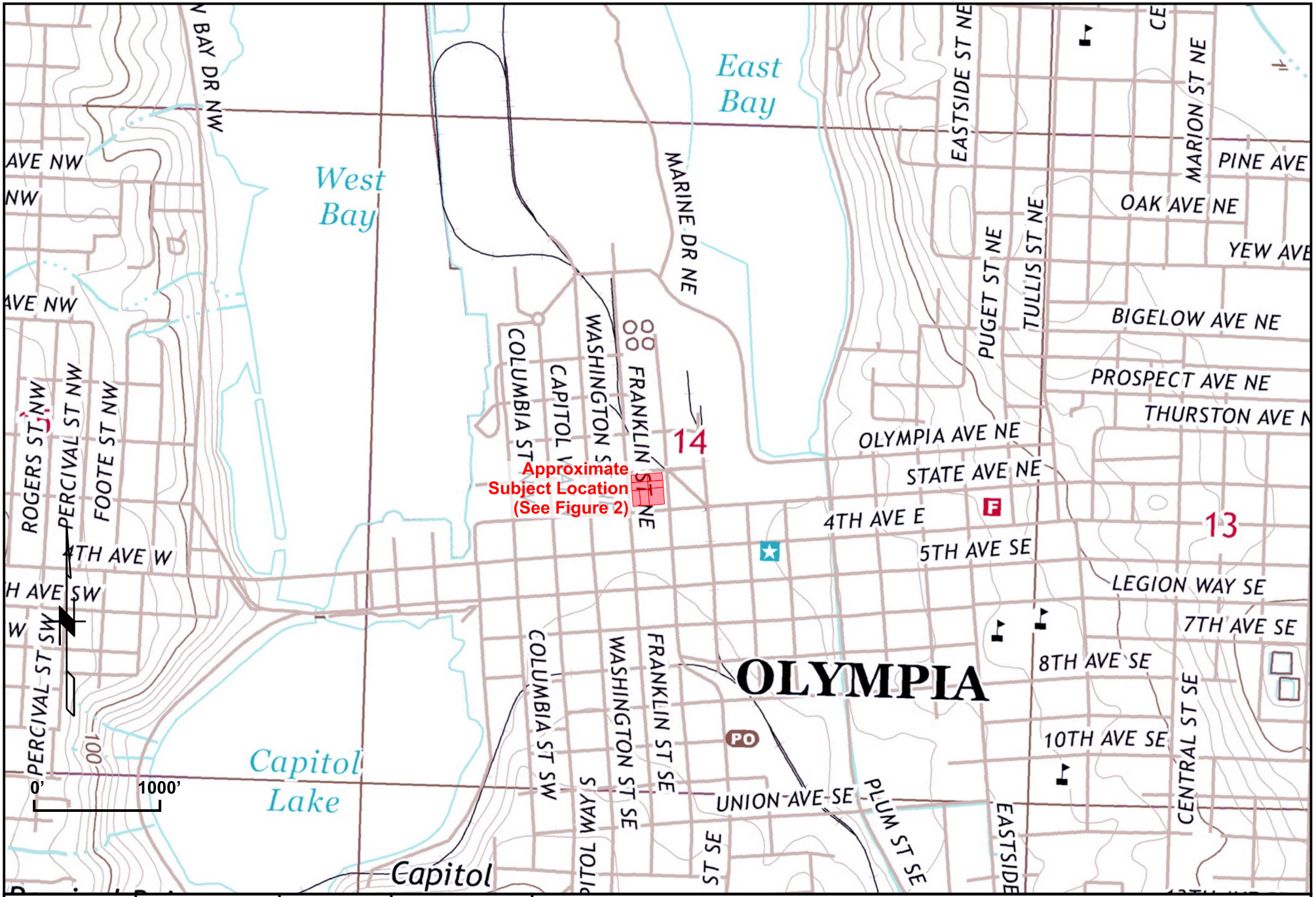
Ecology, Environmental Covenant recorded with Thurston County, February 18, 2016.

Ecology, "No Further Action Determination", February 23, 2016.

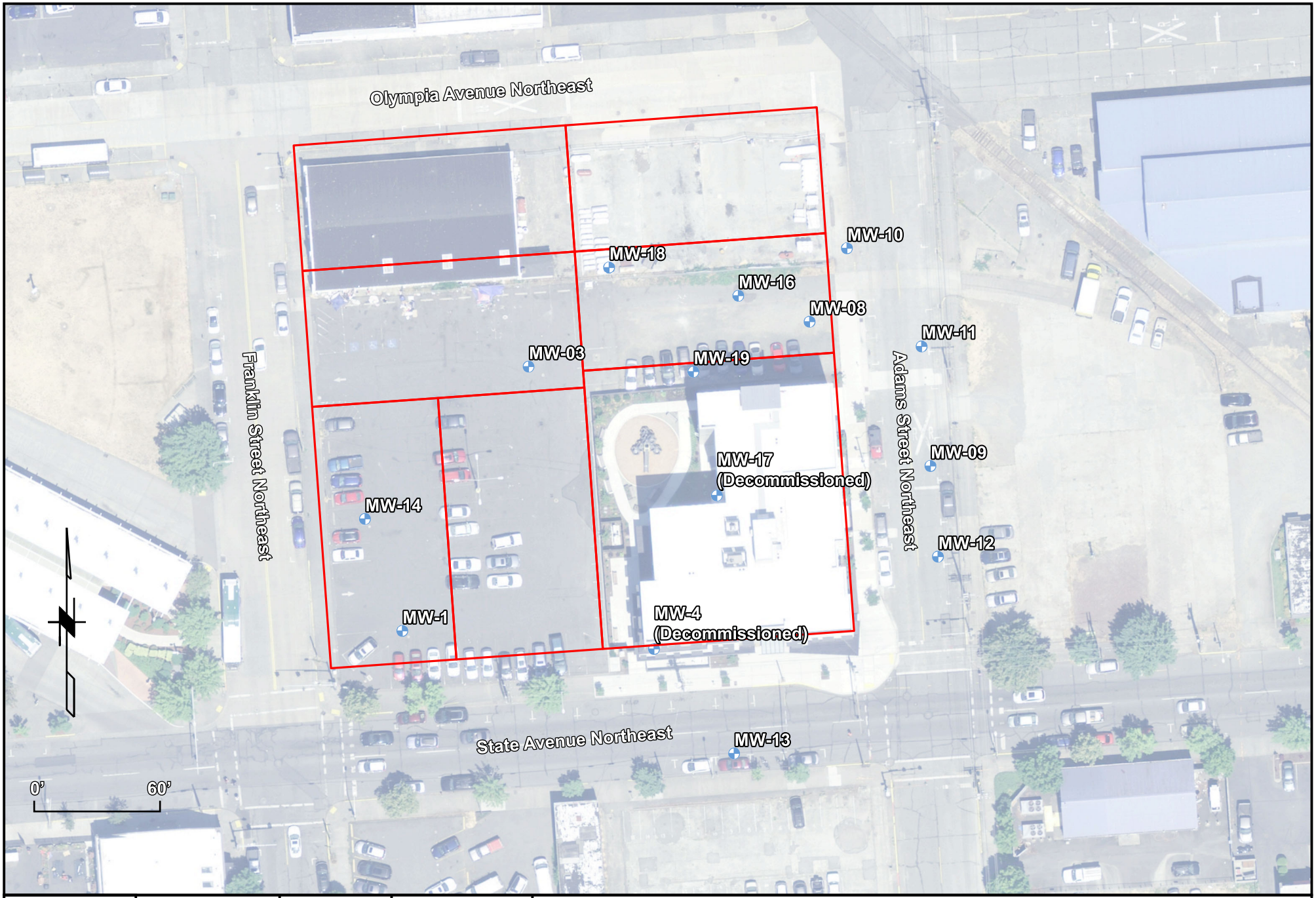
GeoEngineers, Groundwater Compliance Monitoring Data Summary Report – July 2017, October 19, 2017.

G-Logics, Indoor Air Sampling, March 30, 2017.

Attachment A. Vicinity Map



ROBINSON NOBLE	Note: Basemap taken from USGS Tumwater Quadrangle	PM: JFH June 2020 1682-024A	Thurston County T 18 N/R 02 W - 14 Scale 1” = 1000’	Figure 1 Vicinity Map City of Olympia: 318 State Street RA and Monitoring



ROBINSON NOBLE	Note: Image from Thurston County GIS 2018 Aerials	PM: JFH June 2020 1682-024A	Thurston County T 18 N/R 02 W - 14 Scale 1" = 60'	Figure 2 **Aerial Map of Site** City of Olympia: 318 State Street RA and Monitoring

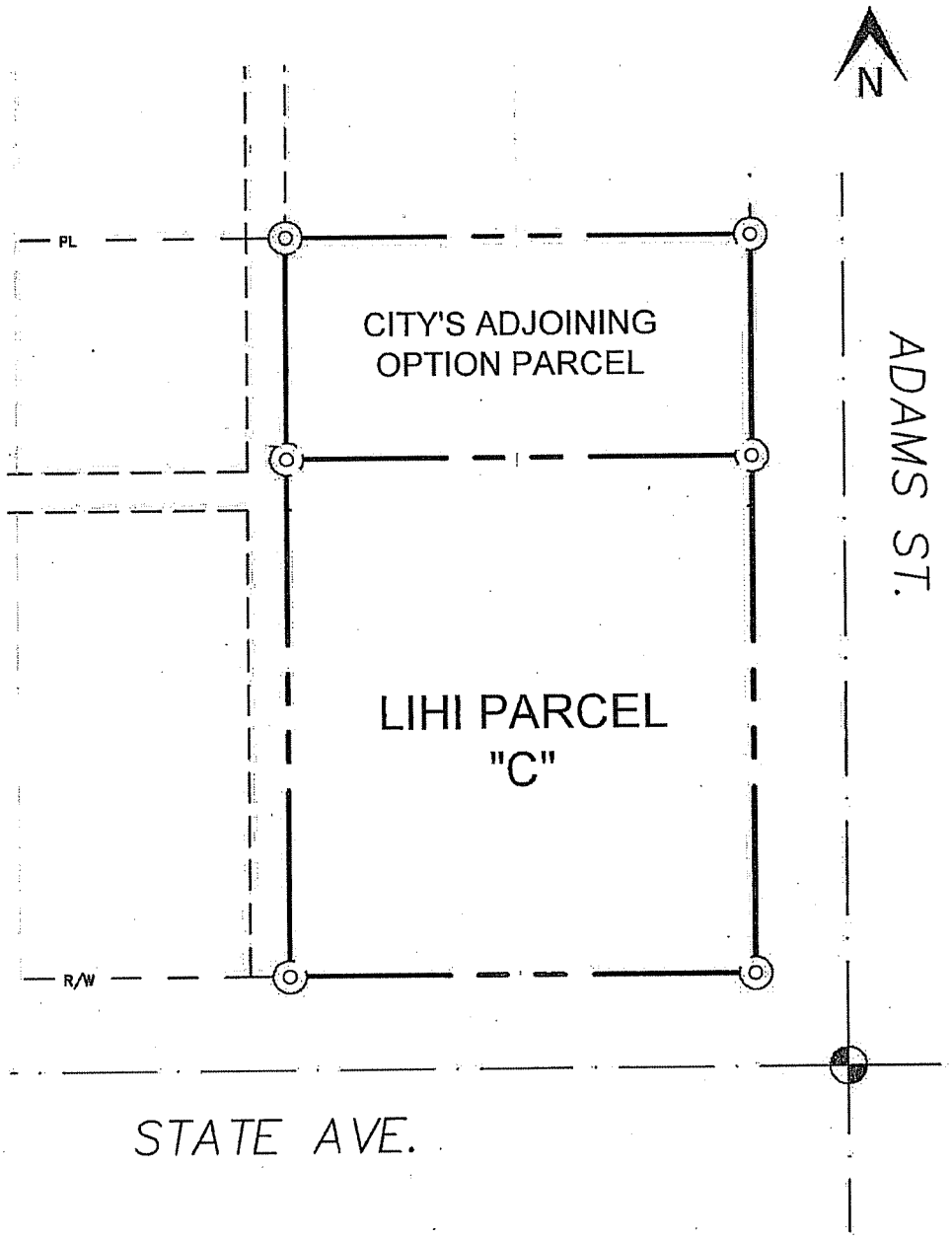
Attachment B. Site Plan

ROBINSON NOBLE	Note: Image from Thurston County GIS 2018 Aerials	PM: JFH June 2020 1682-024A	Thurston County T 18 N/R 02 W - 14 Scale 1" = 60'	Figure 2 **Aerial Map of Site** City of Olympia: 318 State Street RA and Monitoring

Exhibit B

PROPERTY MAP

The Property subject to the Environmental Covenant is Parcel C on Record of Survey-Boundary Line Adjustment No. 15-0050-0L, City of Olympia, filed June 17, 2015 under Auditors File Number 4450222.



Attachment C. Photo Log

Photo Log

Facility name: 318 State Ave NE Olympia
CSID: 2010
Date: 10/23/23

Photographer: Tim Mullin
Lead Inspector: Tim Mullin
Camera Type/Model: iPhone 11

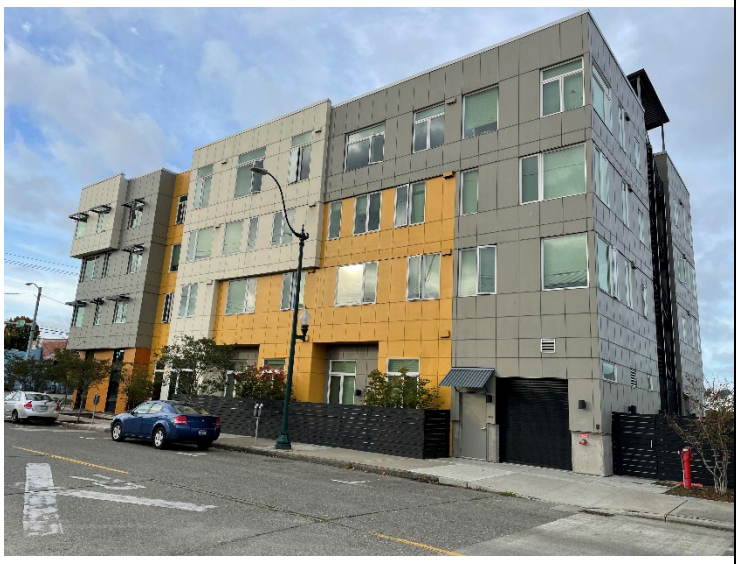
Photograph	Description
	Billy Frank Jr. Place building, looking southwest.
	Monitoring well MW-19 location in foreground, in gravel parking lot. MW-19 was later recovered before November 9, 2023 sampling event. View is from atop Billy Frank Jr. Place building.

Photo Log

Facility name: 318 State Ave NE Olympia
CSID: 2010
Date: 10/23/23

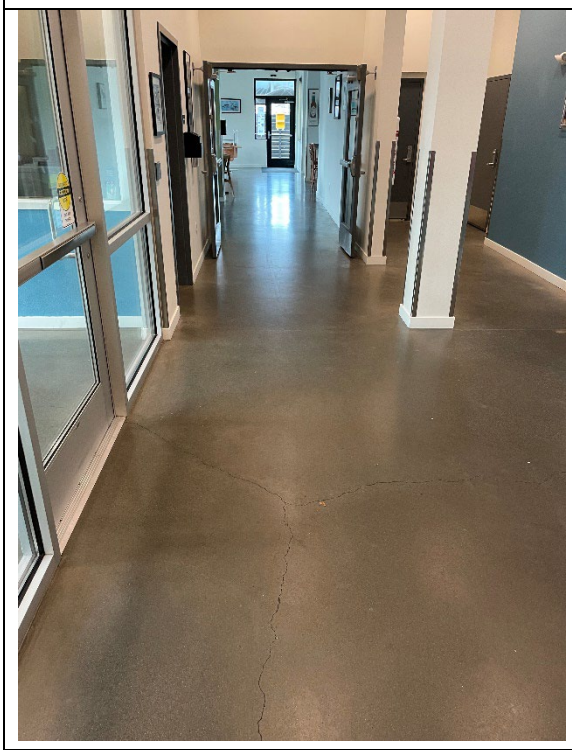
Photographer: Tim Mullin
Lead Inspector: Tim Mullin
Camera Type/Model: iPhone 11

Photograph	Description
	Playground and typical ground cover at Billy Frank Jr. Place.
	Sub-slab depressurization vapor mitigation system rooftop exhaust.

Photo Log

Facility name: 318 State Ave NE Olympia
CSID: 2010
Date: 10/23/23

Photographer: Tim Mullin
Lead Inspector: Tim Mullin
Camera Type/Model: iPhone 11

Photograph	Description
	Looking west at parking lot that is part of the 318 State Ave NE Olympia cleanup site. Olympia Transit Center is beyond. View is from atop Billy Frank Jr. Place building.
	Typical concrete floor on first level of Billy Frank Jr. Place. There are reportedly no subsurface floors.

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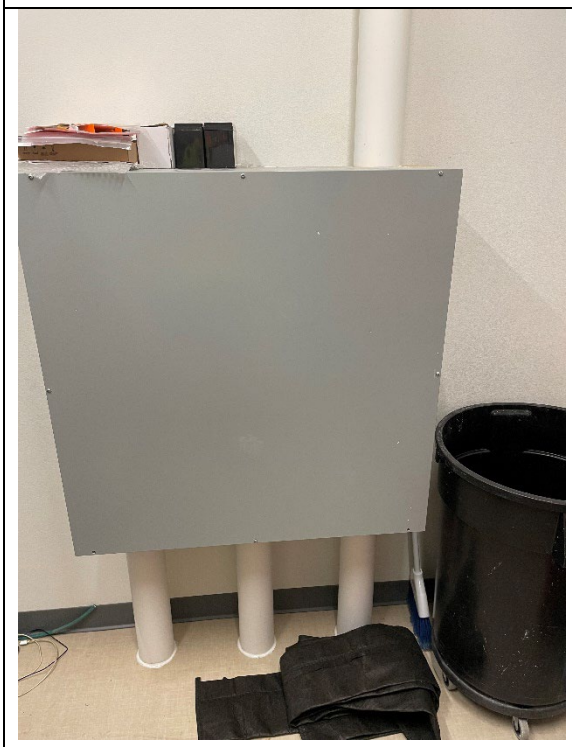
Photograph	Description
	Sub-slab depressurization vapor mitigation system cover box in telecom closet on second floor.
	Sub-slab depressurization vapor mitigation system, inside control box. Valves are in “open” position.