



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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December 3, 2015

Mr. Scott Koppelman
AMLI Residential Partners, LLC
425 Pontius Avenue North, Suite 400
Seattle, WA 98109-5450

Re: No Further Action at the Following Site:

- **Site Name:** AMLI Ballard Property
- **Site Address:** 2428 NW Market Street, Seattle, WA 98107
- **Facility/Site No.:** 20189
- **VCP Project No.:** NW2910
- **Cleanup Site No.:** 12433

Dear Mr. Koppelman:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the AMLI Ballard Property facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

NO. Ecology has determined that no further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following releases:

- Diesel-range petroleum hydrocarbons (TPH-d) into the Soil.



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- Benzene into the Ground Water.

Enclosure A includes a detailed description and diagrams of the Site, as currently known to Ecology.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcels associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Phase II Environmental Site Assessment, dated January 17, 2010, prepared by Golder Associates, Inc.
2. Phase I Environmental Site Assessment, dated January 18, 2011, prepared by Golder Associates, Inc.
3. Phase I Environmental Site Assessment Jacobsen Property, dated June 23, 2011, prepared by Sound Earth Strategies, Inc.
4. Phase II Environmental Site Assessment Jacobsen Property, dated June 24, 2011, prepared by Sound Earth Strategies, Inc.
5. Cleanup Action Report AMLI Ballard Property, dated August 4, 2014, prepared by Sound Earth Strategies, Inc.

Those documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by calling the NWRO resource contact at (425) 649-7235 or via email NWRO_Public_Request@ecy.wa.gov.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **no further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A**.

Remedial actions and investigations performed from 1995 until 2014 have characterized the nature and extent of all chemicals of concern (COCs) at the Site. These investigations include:

- A 1995 underground storage tank removal and remedial action.
- Site assessments conducted during 2010 and 2011.
- Property redevelopment 2012 through 2013, which included mass excavation of the Property to depths of up to 36 feet below the existing ground surface.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

MTCA Method A unrestricted land use cleanup levels for soil and ground water were appropriately selected.

The point of compliance for soil is throughout the Site from the ground surface to a depth of 15 feet below ground surface (WAC 173-340-740[6][d])

The point of compliance for ground water is defined as the uppermost level of the saturated zone extending vertically to the lowest depth that potentially could be impacted by COCs.

Points of compliance are standard and throughout the Site for both soil and ground water.

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

The selected cleanup was excavation of all soil within the Property boundaries to a depth of approximately 32 feet bgs, therefore removing all potentially impacted soil and ground water.

4. Cleanup.

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site.

Two heating oil underground storage tanks that were located on and immediately adjacent to the Property were removed in 1995. Petroleum-contaminated soil was removed from each location, and confirmational soil samples from the excavation perimeters did not exhibit contaminant concentrations in excess of applicable cleanup levels. Subsurface investigations

were subsequently completed on the Property in 2010 and 2011. None of the on-Property soil samples exhibited concentrations of gasoline-, diesel-, or motor oil-range petroleum hydrocarbons, volatile organic compounds, lead, or arsenic in excess of MTCA Method A cleanup levels.

Following remedial activities, three soil borings were advanced to approximately 30 feet below ground surface (bgs) and completed as ground water monitoring wells MW-J1, MW-J3, and MW-J4.

A ground water sample collected from monitoring well MW-J4, located near the northeast corner of the Property, showed a benzene concentration of 27 micro-grams per liter ($\mu\text{g/L}$). The benzene in MW-J4 is most likely associated with a confirmed release from a former service station located to the north of the Property. None of the other four on-Property wells exhibited detectable concentrations of petroleum hydrocarbons in ground water. Additionally, benzene has not been found in any soil or ground water samples above laboratory detection limits since this sampling event.

Property redevelopment commenced in the fall of 2012 and included mass excavation of the Property to depths of up to 36 feet below existing ground surface. During grading, three heating oil underground storage tanks, a small oil-containing catch basin, and a damaged 55-gallon drum were discovered. All of the associated soil exhibiting signs of petroleum impacts was excavated and disposed of at an Allied Waste facility. Only one of the 26 confirmational soil samples collected from the remedial excavations exhibited concentrations of petroleum constituents above the laboratory reporting limits, and the detected concentration of petroleum hydrocarbons in the single sample was below the cleanup level. In addition, the construction excavation extended between four and 20 feet below the depth of the remedial excavation locations to achieve final design subgrade elevation.

Prior to development, ground water depths in on-Property and nearby off-Property wells ranged from approximately 12 to 20 feet bgs. However, after the basement excavation was complete, ground water seepage was only observed near the base of the deepest portion of the excavation at a depth of approximately 32 feet below the level of Northwest 56th Street to the north of the Property. Analytical test results from a grab sample within this water-bearing zone showed that concentrations of gasoline-range petroleum hydrocarbons and benzene, toluene, ethylbenzene, and total xylenes did not exceed laboratory detection limits.

During remedial activities performed during Property redevelopment, three heating oil underground storage tanks, an oil-containing catch basin, a damaged drum, and approximately 220 tons of petroleum-contaminated soil were removed from the Property. Confirmational soil sampling did not indicate the presence of residual concentrations of petroleum hydrocarbon constituents. In addition, the saturated zone encountered in well MW-J4, which formerly exhibited an elevated benzene concentration in 1995, was over excavated. Therefore, all contaminated soil and ground water were removed from the Property during the cleanup action. In addition two effluent water samples collected from a basement sump/vault that collects sidewall and footing drain water from the eastern portion

of the Property did not reveal concentrations of gasoline-range petroleum hydrocarbons and BTEX in excess of laboratory detection limits.

Listing of the Site

Based on this opinion, Ecology will remove the Site from our Confirmed and Suspected Contaminated Sites List.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Termination of Agreement

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (# NW2910).

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion or the

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termination of the Agreement, please contact me by phone at (425) 649-4446 or e-mail at dale.myers@ecy.wa.gov.

Sincerely,



Dale R. Myers
Site Manager
Toxics Cleanup Program

Enclosure: A – Description and Diagrams of the Site

cc: Charles Cacek, Sound Earth Strategies, Inc.
Sonia Fernandez, Ecology
Matthew Alexander, Ecology

Enclosure A

Description and Diagrams of the Site

Site Description

This section provides Ecology's understanding and interpretation of Site conditions, and is the basis for the opinions expressed in the body of the letter.

Site: The Site is defined as diesel-range petroleum hydrocarbons (TPH-d) in soil, and benzene in ground water. Benzene has never been detected in any soil samples, and was only detected in ground water once during a 1995 ground water monitoring event at a concentration of 27 ($\mu\text{g/L}$).

Area and Property Description: The Property is located at 2428 Northwest Market Street in Seattle, WA (Figures 2 and 3). The Property consists of six contiguous rectangular- or slightly irregular-shaped tax parcels (King County Parcel Nos. 276770-1130, 276770-1135, 276770-1136, 276770-1150, 276770-1155 and 276770-1180) that cover a combined total area of approximately 71,520 square feet (1.64 acres) of land. The Property occupies much of the city block located at the northwestern corner of Northwest Market Street and 24th Avenue Northwest. Immediately prior to redevelopment work conducted in 2012, the Property supported several buildings, including:

- A single-story, concrete building, originally constructed in 1927, with 1959-, 1963-, and 1982-vintage additions, covering a reported 7,600 square feet (2412 Northwest Market Street).
- A single-story, concrete building, constructed in 1950, covering a reported 5,000 square feet (2428 Northwest Market Street).
- A single-story, concrete building, constructed in 1950, covering a reported 6,638 square feet (2432 Northwest Market Street).
- A single-story, sheet metal-clad building constructed in 1991.

Land use in the vicinity of the Property is characterized largely as a mixture of commercial and residential developments.

Property History and Current Use: The Property was initially developed with single-family residences between 1895 and 1905, with a small "store/school works" building added to the northeastern portion of the Property by 1905. A commercial building was constructed on the northeastern portion of the Property in 1910, replacing the store/school works structure. Most of the earlier residences were demolished by 1953, with remaining residences on the western portion of the Property removed by 1970. The 1910-vintage commercial building remained and was primarily occupied by a music store and later by a television and appliance retail store. The circa 1910 building was demolished in the late 1980s and replaced a concrete-surface pay parking lot.

The original building at 2412 Northwest Market Street was constructed on the southeast portion of the Property in 1927 and was used as an automotive service garage and retail gasoline station by the late 1930s. This building was remodeled for use as a showroom and machine shop in the late 1940s for Alaska Pacific Supply Co. (wholesaler of marine engines and supplies). Jacobsen's Boats and Motors, Inc. began operating in the building by 1965. Small warehouse additions were made to the

north side of this building in 1959 and 1963. A marine engine service shop was added to the western side of the building in 1982.

A building located at 2428 Northwest Market Street was constructed in 1950 on the south-central portion of the Property and was initially occupied by a grocery store until the mid-1960s. This building was remodeled in 1966 for use as a retail liquor store which operated within the building until the early 1980s. The structure was then used as additional space by Jacobsen's Boats and Motors, Inc.

A commercial building located at 2436 Northwest Market Street was constructed in 1979 and was used as a retail liquor store until at least 2000, and was later occupied by another retailer (Archie McPhee's). A shop building for "minor vessel repair" activities was constructed on the Property in 1991, adjacent to the north side of the commercial building at 2428 Northwest Market Street. All Property buildings and pavements were demolished and removed in 2012 during the initial stages of Property redevelopment.

The current use of the Property is a multi-story residential complex.

Contaminant Source and History: The historical heating oil USTs have been determined the source of the release.

Physiographic Setting: The Property is located in the Ballard neighborhood of Seattle, in the northwest quarter of Section 11, Township 25 North, Range 3 East. The Property slopes gently toward the south with an elevation change of approximately 15 feet from north to south across the Property. The Property is located approximately 0.25 miles south of Salmon Bay along the Ship Canal. The Lake Washington Ship Canal required digging cuts between Salmon Bay and Lake Union at Fremont and between Lake Union and Lake Washington at Montlake, and building four bascule bridges at Fremont, Ballard, the University District, and Montlake.

Ecological Setting: The Property is covered by physical barriers (building and asphalt parking area) which prevent exposure to plants and wildlife. Land use in the vicinity of the Property is a mixture of commercial and residential developments.

Geology: Fill material consisting of broken asphalt, silty fine to medium sand, sand with trace silt, and fine to coarse gravel from the surface to approximately 8 feet below ground surface (bgs).

Soil in the Property vicinity is classified as Vashon glacial till. The till consists of very dense silt, sand, and surrounded by well-rounded gravel, glacially transported, and deposited under ice. Glacial till was encountered beneath the fill material. At depths of 20 to 25 feet bgs, sandy materials occur that may be the Advance outwash or sand lenses in the till.

Ground Water: Regional ground water flows towards and typically discharges to the closest major surface water body. Ground water flow measured in 11 on-Property and off-Property ground water monitoring wells is toward the south and south-southwest, toward Salmon Bay. Measured ground water depths in the off-Property wells have ranged from approximately 11 feet to 18 feet bgs. Ground water conditions below the Property are representative of "confined" conditions; subsurface assessments completed noted that the ground water levels encountered in the soil borings at the time

of drilling were 12 to 15 feet lower than those encountered in the ground water monitoring wells after well completion. In addition, significant ground water seepage was not observed in the excavation which reached a maximum depth of approximately 32 feet (elevation 26 feet above mean sea level) along the northern portion of the Property during Property redevelopment.

Water Supply: Potable water and sewer service are provided to the Property by the City of Seattle. There are no water supply wells in the Site vicinity.

Release and Extent of Soil and Ground Water Contamination: The release of TPH-d at the Site was due to a leaking 300-gallon waste oil UST and a 550-gallon heating oil UST associated with the former building located at 2412 Northwest Market Street. The waste oil UST was located adjacent to the northwest corner of the building, and the heating oil UST was located in the sidewalk immediately south of the building. These USTs were decommissioned and removed in 1995. During that interim action approximately 72 tons of impacted soil were excavated and disposed of off Property.

Site Diagrams

