



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000  
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

October 10, 2014

Mr. Steve Lazoff  
Endolyne Gardens, LLC  
2143 North Northlake Way, #C-1  
Seattle, WA 98103

**Re: Opinion Pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the Following Hazardous Waste Site:**

- **Name:** 45th Avenue SW Apartments
- **Address:** 9212 45th Avenue SW, Seattle, WA
- **Facility/Site No.:** 71883959
- **VCP No.:** NW2809
- **Cleanup Site ID No.:** 10264

Dear Mr. Lazoff:

Thank you for submitting documents regarding your proposed remedial action for the **45th Avenue SW Apartments** facility (Site) for review by the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP). Ecology appreciates your initiative in pursuing this administrative option for cleaning up hazardous waste sites under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

This letter constitutes an advisory opinion regarding a review of submitted documents/reports pursuant to requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release(s) at the Site:

- Total gasoline-range petroleum hydrocarbons (TPHg), total oil-range petroleum hydrocarbons (TPHo) and benzene, toluene, ethylbenzene, and xylenes (BTEX) in Soil.

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The state does not have the authority to settle with any person potentially liable under MTCA except in



Mr. Steve Lazoff  
October 10, 2014  
Page 2

accordance with RCW 70.105D.040(4). The opinion is advisory only and not binding on Ecology.

Ecology's Toxics Cleanup Program has reviewed the following information regarding your proposed remedial action(s):

1. GeoTech Consultants (GeoTech), *Removal of Underground Storage Tanks, 14-Unit Apartment Building, 9212 45th Avenue SW, Permit No. 645073, Seattle, WA*, September 5, 1989.
2. GeoTech, *Closure Report: Underground Storage Tanks, 14-Unit Apartment Building, 9212-45th Avenue Southwest, Seattle, WA*, December 5, 1989.
3. Terracon, *Phase I Environmental Site Assessment Report, Endolyne Garden, 9212 and 9214 45th Avenue Southwest, King County Parcel No. 234670-0000, Seattle, King County, WA*, December 9, 2013.
4. Ecology, *Opinion Letter, 45th Ave SW Apartments, 9212 45th Avenue SW, Seattle, WA, Facility/Site No. 71883959, VCP No. NW2809, Cleanup Site ID No. 10264*, March 11, 2014.
5. Farallon Consulting, L.L.C., *Scope of Work Limited Soil Investigation, Endolyne Garden Apartments, 9212 45th Avenue Southwest, Seattle, WA*, July 21, 2014.

The reports listed above will be kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Appointments can be made by calling the NWRO resource contact at (425) 649-7235 or sending an email to [nwro\\_public\\_request@ecy.wa.gov](mailto:nwro_public_request@ecy.wa.gov).

The Site is defined by the extent of contamination caused by the following releases:

- TPHg, TPHo and BTEX in Soil

The Site is on King County Tax Parcel 2346700000 which is comprised of 0.22 acres of land at 9212 45th Avenue SW in Seattle, WA (Property). The Property is located east of 24th Avenue SW and north of SW Wildwood Place. The Property is currently in use as 14 apartment units and a restaurant. The Property was historically used as a gas station and for automotive repair from prior to 1940 to approximately 1989. Six underground storage tanks (USTs) were removed from various portions of the Property in 1989. Two of the USTs were reportedly used to store oil, and four were used to store leaded gasoline. The dispensation of the rest of the former Property structures is unknown. TPHo and BTEX were detected in soil samples collected during the tank removal activities.

Based on a review of supporting documentation listed above, pursuant to **requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release(s) at the Site, Ecology has determined:**

- The additional proposed sampling and data collection will provide valuable information for further characterization of the Site, and to assist in development of a conceptual site model for the Site.
- A Seattle Department of Construction and Land Use letter dated June 21, 1989, indicates “The nearby ravine will also be cleared of waste and debris from former uses on the site.” Therefore, ravine area on and north and east of the Property should be inspected for signs of remaining debris that could have resulted from the former operations at the Site. Shallow soil samples should also be collected in the ravine area on and north and east of the Property to determine if the ravine was impacted by the former uses of the Property.
- At a minimum, borings B-2, B-6, and B-9 should be advanced to refusal or until ground water is encountered to provide data regarding the depth and quality of ground water at the Property. Where ground water is encountered, it should be analyzed for TPHg, TPHo, and TPHd, with appropriate follow-up analysis according to Table 830-1 of the MTCA regulation and following the requirements of Table 7.2, page 95, in the *Guidance for the Remediation of Petroleum Contaminated Sites* published by Ecology as Publication No. 10-09-057, September 2011.
- Boring B-4 or B-5 should be moved to the east side of the former tank location. This area appears to be within the garage and should therefore be accessible like proposed borings B-3 and B-6.
- The depth of the soil samples collected at each boring should be determined by field screening and the likely total depth of each tank. Because of the varying sizes of the tanks, the total depth of each tank and thus the sample depth may vary at each boring location.
- In 1995, the Leaking Underground Storage Tank (LUST) database status for this Site changed to “reported cleaned up (RCU)”. At that time, the RCU status was used for sites where a consultant or property owner indicated to Ecology that a cleanup was completed, but Ecology did not verify the adequacy of the cleanup. A Site remains in Ecology’s databases as an active site until a No Further Action (NFA) determination is made. In 2011, after Ecology reviewed this Site to determine whether additional investigation or documentation was needed, the status of this Site was changed to “cleanup started”. Therefore, this Site has never been removed from Ecology’s LUST database.

- Upon completion of the proposed activities, a Remedial Investigation (RI) report that summarizes all data from current and previous investigations and discusses the nature and extent of contamination in all media must be provided. The RI must provide:
  - Summaries of the former Site uses that could have resulted in releases, including history and locations of tanks and service areas in text and on figures.
  - Plan-view graphics and cross-sections showing the extent of Site contamination relative to current and former Site features, parcel boundaries, Site geology, subsurface utilities, and points of compliance.
  - A complete description and interpretation of geologic and hydrogeologic conditions for and in the vicinity of the Site.
  - All boring logs discussed with the RI evaluation and appended to the RI.
  - A Terrestrial Ecological Evaluation (TEE) per WAC 173-340-7490 to determine if cleanup levels that are protective of terrestrial species are applicable to the Site. A TEE form can be found at <http://www.ecy.wa.gov/programs/tcp/vcp/vcp2008/vcpForms.html>.
  - Summary tables presenting all compounds that have been detected in each media throughout the history of the Site, and the proposed cleanup level for each compound.

An annotated outline of an RI Report is presented in **Enclosure A** to provide an understanding of Ecology's expectations for conducting and documenting the RI.

**This opinion does not represent a determination by Ecology that a proposed remedial action will be sufficient to characterize and address the specified contamination at the Site or that no further remedial action will be required at the Site upon completion of the proposed remedial action.** To obtain either of these opinions, you must submit appropriate documentation to Ecology and request such an opinion under the VCP. **This letter also does not provide an opinion regarding the sufficiency of any other remedial action proposed for or conducted at the Site.**

Please note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

Mr. Steve Lazoff  
October 10, 2014  
Page 5

The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Site meet those requirements.

If you have any questions regarding this opinion, please contact me at (425) 649-7257 or by email at [masa461@ecy.wa.gov](mailto:masa461@ecy.wa.gov).

Sincerely,



Maureen Sanchez  
Site Manager  
Toxics Cleanup Program

Enclosure (1): A: Remedial Investigation Outline

cc: Thaddeus Cline, Farallon Consulting, Inc.  
Sonia Fernandez, VCP Coordinator, Ecology

**Enclosure A**

**Remedial Investigation Outline**

**DEPARTMENT OF ECOLOGY  
NORTHWEST REGIONAL OFFICE  
REMEDIAL INVESTIGATION OUTLINE  
MTCA VCP SITES**

*The following annotated outline is a suggested schematic for elements to be included in a Remedial Investigation report. It is not intended to replace MTCA's specific requirements as presented in 173-340-350(7) WAC.*

*The main purpose of the outline is to facilitate the preparation of a document that is clear, comprehensive, and to the point. A secondary, but important, purpose is to make document preparation and review more efficient.*

**INTRODUCTION** *(Concise, bulleted if possible)*

- **Site name, VCP number, Name, address, and phone number of project consultant, Current owner/operator**
- **Purpose of document** *(very brief restatement of what an RI is for, reference the WAC)*

**SITE IDENTIFICATION AND LOCATION** *(Focus on defining the site in the context of its location)*

- **Site discovery and regulatory status** *(describe how the site was identified and where it is in the MTCA process)*
- **Site and property location/definition** *(define actual MTCA site location relative to property or study area)*
- **Neighborhood setting**

Figure – Vicinity Map *(preferably with topography)*

Figure – Property/Site Map *(preferably with topography)*

Appendix – Legal description of property, present owner and operator, chronological listing of past owners and operators

**ENVIRONMENTAL INVESTIGATION/INTERIM ACTION SUMMARY** *(Concise summary presentation of the investigations that have been done at the site, along with prior remedial actions. Focused mostly on figures and tables. Details of and methods used in former investigations and remediation in appendices)*

- **Constituents of Concern** *(brief discussion about which specific compounds were chosen for analysis and why)*
- **Soil**
- **Surface water**
- **Ground water**
- **Sediment**
- **Air/soil vapor**

- **Natural resources/wildlife**
- **Cultural history/archeology**
- **Interim actions** (*brief intro to prior remediation activities*)

Figure – Soil investigation data points (*show potential source areas*)  
 Figure – Surface water/groundwater investigation data points (*show potential source areas*)  
 Figure – Air investigation data points (*show potential source areas*)  
 Figure – Prior remediation activities

Table – Exploration Summary  
 Table – Analytical Schedule per media (*include analytical methods and reporting limits, as possible*)

Appendix – Previous Investigations (*detailed discussion goes here*)  
 Appendix - Exploration and sampling methodology (*may combine with Previous Investigations*)  
 Appendix – Boring / Well logs  
 Appendix - Prior Interim Actions

**PROPERTY DEVELOPMENT AND HISTORY** (*This section focuses on the built environment, both current and historical, and presents the sources of contamination and release mechanisms.*)

- **Past site uses and facilities**
- **Current site use and facilities**
- **Proposed or potential future site uses**
- **Zoning** (*if appropriate*)
- **Transportation/roads**
- **Utilities, water supply**
- **Potential sources of site contamination**
- **Potential sources of contamination from neighboring properties** (*discuss nearby sources if known*)

Figure – Historical site features (*may be combined with Figure 2*)  
 Figure – Potential contaminant sources  
 Figure – Utilities (*may be combined with Figure 2*)

Table – Potential Contaminants

**NATURAL CONDITIONS**

- **Physiographic setting/topography**
- **Geology** (*focus on interpretation*)
  - Regional Setting (*brief*)

- Property Geologic Conditions (*synthesis, not a copy of boring logs, provide cross sections*)
- Physical Properties (*unlikely to need this section, but in some cases may be useful to present data on soil adsorptive capacity, organic content, strength, etc.*)

Figure – Plan view of geologic unit distribution (*if helpful*)  
 Figure - Cross section A-A' (*show borings, wells, screened intervals, water levels*)  
 Figure – Cross section B-B' (*if necessary*)

- **Surface Water** (*brief description of the surface water system*)

- Property drainage
- Area surface water/floodplain issues
- Regulatory classifications, if any (*e.g. surface water classification*)

Figure – Surface water Conditions (*only if information not already in a prior figure*)

- **Ground Water** (*focus on interpretation, show on cross sections*)

- Occurrence (*aquifers, water levels, confinement, geometry, continuity, physical properties*)
- Movement (*directions, gradient if important, seasonal fluctuations, tidal influence*)
- Discharge
- Recharge (*if significant for site*)
- Regulatory classifications, if any (*e.g. sole source aquifer*)

Figure – Cross section with ground water information (*if not already included above*)  
 Figure – Water table/potentiometric surface maps (*for various seasons or tidal conditions, show surface water*)  
 Appendix – Ground water elevation data (*a table*)

- **Natural Resources and Ecological Receptors** (*preparatory to a Terrestrial Ecological Evaluation*)

- Greenbelts and other natural habitat
- Wildlife
- Other Information required to conduct evaluations under WAC 173-340 - 7491, -7492, or if necessary -7493

Figure – showing natural areas, as appropriate

**CONTAMINANT OCCURRENCE AND MOVEMENT** *(Very little text, mostly figures and tables, main point is to provide easy-to-understand figures showing the depth and breadth of contamination.)*

- **Waste Material** *(sludges, fluids, stockpiles)*
- **Soil**
- **Surface Water**
- **Ground Water**
- **Sediment**
- **Air/Soil Vapor**

Figures – Cross sections showing soil contamination with depth  
Figures – Plan views showing soil contamination across site *(relative to releases if known)*  
Figures – Cross section showing ground water contamination with depth *(if appropriate)*  
Figures – Plan views showing ground water contamination in each aquifer *(relative to soil contamination and P-head map)*  
Figures – XY plots of specific contaminants with time *(as appropriate)*  
Figures – Others as appropriate to show the distribution of surface water, ground water, or air data

Tables – All of the analytical data against final cleanup levels *(exceedances highlighted, no need to develop screening levels)*  
Tables – Summary of exceedances *(if helpful)*

Appendix – QA report  
Appendix – Analytical lab reports

**CONCEPTUAL MODEL** *(Putting the whole story together, graphic illustrations are best.)*

- **Contaminant release/fate and transport/potential or actual receptors**
- **Data gaps** *(is anything missing)*

**CLEANUP STANDARDS** *(Developing appropriate cleanup standards based on receptors and pathways.)*

- **Soil**
  - Reasonable maximum exposure
  - Cleanup levels protective of direct contact, ground water, inhalation, terrestrial species, surface water, sediment
  - Points of compliance
  - Regulatory classifications *(classification of soil as dangerous or solid waste)*

- **Ground Water**
  - Highest beneficial use/reasonable maximum exposure
  - Cleanup levels protective of potable use, inhalation, surface water, sediment
  - Points of compliance
  
- **Other Media as appropriate**
  - Cleanup levels protective of ....
  - Points of compliance

Table – Cleanup Levels *(all potentially applicable values with final selected cleanup level noted)*

**AREAS REQUIRING CLEANUP** *(The final story detailing where the contamination exceeds an applicable cleanup standard, brief text, mostly tables, figures.)*

- **Constituents of Concern** *(a brief summary of compounds that exceed cleanup levels or “indicator hazardous substances” under MTCA. For most service station sites, the COCs should be the same)*
- **Soil – vertical and lateral**
- **Ground water – vertical and lateral**
- **Sediment**
- **Surface Water**
- **Soil Vapor/air**

Figures – Plan view and vertical sections of areas requiring cleanup

**REFERENCES**

Revised 8/21/14