



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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July 13, 2011

Mr. Edward Yuen
ExxonMobil Environmental Services Company
18685 Main Street Suite 101 PMB #601
Huntington Beach, CA 92648-1719

Re: No Further Action at the following Site:

- **Site Name:** Exxon 73674
- **Property Address:** 16409 20th Ave West, Lynnwood, WA 98037
- **Facility/Site No.:** 89674139
- **VCP Project No.:** NW2256

Dear Mr. Yuen:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Exxon 73674 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:

- Gasoline-range petroleum hydrocarbons (TPH-GRO), diesel-range petroleum hydrocarbons



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(TPH-DRO), oil-range petroleum hydrocarbons (TPH-O), benzene, toluene, ethylbenzene, and xylenes into the Soil

- Lead into the Soil
- Gasoline-range petroleum hydrocarbons (TPH-GRO), diesel-range petroleum hydrocarbons (TPH-DRO), oil-range petroleum hydrocarbons (TPH-O), benzene, toluene, ethylbenzene, and xylenes into the Ground Water
- Lead into the Ground Water

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

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

Basis for the Opinion

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

1. Environmental Resolutions, Inc. *Emails and Field Notes – 2010 through April 2011, providing waste documentation of PCS excavation and removal, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256*
2. Environmental Resolutions, Inc., *Site Summary and Voluntary Cleanup Program Application, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256, January 8, 2010.*
3. Environmental Resolutions, Inc., *Confirmation Boring Report, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256, Aug 25, 2009.*
4. Environmental Resolutions, Inc., *Drilling and Well Installation Report, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256, August 31, 2007.*
5. Environmental Resolutions, Inc. *Soil Sampling and Groundwater Monitoring Well Installation, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256, January 9, 2007.*

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6. SEACOR, *Installation of One Groundwater Monitoring Well, One Vapor Extraction Well, and Air Sparge Points, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256*, April 26, 1995.
7. Enviro-Logic, Inc., *Phase IV Site Investigation, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256*, August 12, 1992.
8. Enviro-Logic, Inc., *Off-Site Hydrocarbon Delineation Investigation, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256*, May 18, 1992.
9. Enviro-Logic, Inc., *Hydrocarbon Delineation Investigation (Phase III), Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256*, October 21, 1991.
10. Enviro-Logic, Inc., *Subsurface Environmental Investigation Related to Delineation of Hydrocarbon Contamination, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256*, February 9, 1990.
11. Enviro-Logic, Inc., *Phase I Site Investigation, Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256*, May 30, 1989.
12. Various, *Monitoring and Status Reports (46 reports total), Former Exxon Station 73674, 16409 20th Avenue West, Lynnwood, Washington, VCP # NW2256, 1992-2009*

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) 649-7190.

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**.

Your characterization is sufficient because the horizontal and vertical extent of the contamination associated with the former underground storage tanks was determined.

2. Establishment of cleanup levels.

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

Soil

Cleanup Levels: The Site does not meet the MTCA definition of an industrial property, therefore soil cleanup levels suitable for unrestricted land use are appropriate. For unrestricted land use, direct contact, either Method A or Method B cleanup levels can be used. EPH/VPH analysis necessary to establish Method B cleanup levels for total petroleum hydrocarbons at this Site were not done, therefore Method A cleanup levels for TPH are applicable. Cleanup Levels protective of terrestrial ecological receptors are not necessary as the current or planned zone use makes wildlife exposure unlikely (based on the Simplified Terrestrial Ecological Evaluation Exposure Procedure).

Point of Compliance: For soil cleanup levels based on direct contact, and protection of groundwater, the point of compliance is defined as throughout the Site.

Groundwater

Cleanup Levels: Appropriate groundwater cleanup levels are the MTCA WAC 173-340 Method A Table 720-1 values of 800 ug/l for TPH – GRO, 5 ug/l for Benzene, 1,000 ug/l for Toluene, 700 ug/l for Ethylbenzene, and 1,000 ug/l for Xylenes, and 15 ug/l for lead.

Point of Compliance: The standard point of compliance for groundwater is throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected.

3. Selection of cleanup action.

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

The selected interim action consisted of excavation and removal of petroleum and metal contaminated soil containing concentrations above Method A soil and groundwater cleanup levels, preceded by soil vapor extraction and other in-situ techniques, and followed by reliance on natural attenuation. This action meets applicable minimum cleanup requirements stipulated in WAC 173-340-360; protect human health and the

environment, comply with cleanup standards, use permanent solutions, and provide for reasonable restoration time frames.

Additional information pertaining to volume of contaminated soil removed and sent to a permitted waste disposal facility was provided for additional assessment to judge sufficiency of the cleanup.

4. Cleanup.

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

Contamination was discovered in 1989 in borings conducted as part of a planned property transfer investigation. Operation of the gas station had ceased by 1989, and five underground storage tanks (USTs) had been removed in 1988.

Between October 1998 and October 1999, approximately 1,200 tons of soil from the location of the former UST basin were excavated and removed from the Property. An additional estimated 500 tons of soil adjacent to the former pump island were excavated and removed.

In August 2000, a volume of soil measuring 13 feet deep by 27 feet wide by 56 feet long was also excavated from the western portion of the Property.

Prior to the excavations, various in-situ systems were operated. From 1990 to 1998, a soil vapor extraction (SVE) system on the Property extracted an estimated total of 1,086 pounds of petroleum hydrocarbons.

A groundwater pump and treat system, with air-stripping tower and infiltration trench was installed in 1991. A non-aqueous phase liquid recovery system was installed in one monitoring well in 1992.

In 1994 an SVE and air sparging system was installed that provided some off-Property coverage of the downgradient residential property to the west. In 1995 an air sparging/dual phase extraction ring pump system was added. The off-Property remediation operated until early 1997.

Ground water sampling had shown concentrations greatly exceeding cleanup standards prior to 2000, but sampling during the past year or two showed groundwater meeting cleanup standards. In the past, groundwater contamination had been detected as far away as approximately 150 feet west of the Property.

Method A levels for contaminants of concern have been achieved in soil and groundwater by the described remedial actions at the Site.

Listing of the Site

Based on this opinion, Ecology will remove the Site from our Confirmed and Suspected Contaminated Site List and Leaking Underground storage Tank 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).

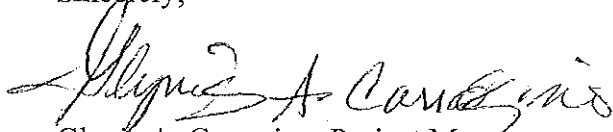
Termination of Agreement

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (VCP # NW2256).

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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, please contact me by phone at (425) 649-4422 or e-mail at gcar461@ecy.wa.gov.

Sincerely,



Glynis A. Carrosino, Project Manager
NWRO Toxics Cleanup Program

gc/kh

By certified mail 7011 0470 0003 3819 5799

Enclosure: A – Description and Diagrams of the Site

cc: Jacob Letts, Project Manager
Environmental Resolutions, Inc.
815 Industry Drive, Tukwila WA 98188

Dolores Mitchell, Ecology Fiscal Manager, HQ