

# STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

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May 20, 2016

Mr. Scott Rose L.G. Associated Environmental Group, LLC 605 11<sup>th</sup> Avenue SE, Suite 201 Olympia, Washington 98501

Re: No Further Action at the following Site:

• Site Name: Restover Truck Stop

• Site Address: 2725-93rd Avenue SW Tumwater, WA 98512

• Facility/Site No.: 244

• Cleanup Site ID No.: 116

• VCP Project No.: SW1426

## Dear Mr. Rose:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Restover Truck Stop (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:

- Benzene, toluene, ethylbenzene, xylene (BTEX) and gasoline-, diesel-, and oil-range total petroleum hydrocarbons (TPHg, TPHd, TPHo) into the Soil.
- BTEX and TPHg, TPHd into the groundwater.

Enclosure A includes a detailed description and diagram 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 parcel(s) associated with this Site are affected by other sites.

## Basis for the Opinion

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

1. Associated Environmental Group, LLC, Final Cleanup Report, Restover Truck Stop, Olympia, WA April 15, 2016.

This document and other Site documents are kept in the Central Files of the Headquarters Office of Ecology (HQ) for review by appointment only. You can make an appointment by calling the HQ resource contact at (360) 407-6000.

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**.

Soil

Subsurface soil investigations and compliance sampling have determined the lateral and vertical extent of the releases.

Groundwater

A total of three groundwater monitoring wells (MW-1, MW-2, MW-3) have been installed at the Site and define the lateral and vertical extent of groundwater contamination.

## 2. Establishment of cleanup standards.

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

Soil Cleanup Levels

A terrestrial ecological evaluation (TEE) has been completed and is excluded because all contaminated soil, is or will be covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife. Therefore, soil cleanup levels protective of terrestrial species are not required.

The Site does not meet the MTCA definition of an industrial property; therefore, soil cleanup levels suitable for unrestricted land use are appropriate. Soil cleanup levels based on leaching (protection of surface water protective of human health and aquatic organisms) and protection of direct contact are appropriate. MTCA Method A cleanup levels for BTEX, TPHg, TPHd, and TPHo were selected for soils at the Site.

Groundwater Cleanup Levels

Groundwater water cleanup levels protective of direct contact were developed in accordance with WAC 173-340-730(3). MTCA Method A cleanup levels for BTEX, TPHg, TPHd, were selected for groundwater at the Site.

## 3. Selection of cleanup action.

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

Cleanup actions at the Site included multiple soil excavations, vapor extraction treatment, and injection of biochemical reagents from 1992 to 2015. Soil characterization indicates that soil contamination has been removed. Groundwater investigations indicate that groundwater impacts have been remediated.

## 4. Cleanup.

May 2012 approximately 800 pounds of Regenesis' Oxygen Releasing Compound-Advanced was injected into the subsurface in the vincity of well WDOE-6A in an effort to accelerate the biodegradation of TPH-G and benzene in groundwater with limited effect. On April 9, 2013, soils were excavated to a depth of 16 feet below ground surface (bgs), immediately above the saturated zone.

July 2015, approximately 19,000 cubic yards of contaminated soil was removed and transported off Site for disposal. Approximately 19,000 cubic yards of backfill was imported. Soil characterization data shows that soil contamination has been removed to below Method A cleanup levels.

Following pumping and treating of excavation groundwater, a total of 357,000 gallons of water was discharged to stormwater. Two consecutive quarters of post-cleanup groundwater data from MW-1, MW-2, and MW-3 were below MTCA Method A cleanup levels.

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site Groundwater and soil at this site, and that soil and groundwater impacts have been remediated and are complete.

## 5. Periodic Review of Post-Cleanup Conditions.

No periodic reviews of post-cleanup conditions at the Site will be necessary at this site based on Ecology's determination of the current site information.

## 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 (#NW2842).

For more information about the VCP and the cleanup process, please visit our web site: <a href="www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm">www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm</a>. If you have any questions about this opinion or the termination of the Agreement, please the Site Manager, Sandra Caldwell at (360) 407-7236 or email at Sandra.Caldwell@ecy.wa.gov

Sincerely,

Barry Rogowski

Cleanup Section Manager HQ Toxics Cleanup Program

BR: anf

Enclosures (1): A - Description and Diagrams of the Site

cc: Mr. Dayabir (Pintu) Bath

Mr. Glen Connelly, Chehalis Tribe

Ms. Sandra Caldwell, Ecology

Mr. Matthew Alexander, Ecology

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# Enclosure A Description and Diagrams of the Site

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## **Site Description**

#### Site Definition

The Site is located at 2725-93<sup>rd</sup> Avenue Southwest, Olympia, WA 98512. Contamination at the Site consists of BTEX, TPHg, TPHd, TPHo, to soil and/or groundwater.

Area Description

The Site is located southwest of the intersection between 93rd Avenue Southwest and the I-5 south exit/entrance at exit 99 in Olympia, Washington. The former Restover Truck Stop occupies Thurston County parcel number 12721210200 and is approximately 5.5 acres.

**Property History** 

The former Restover Truck Stop was comprised of a vehicle fueling area, retail sales, a convenience store, a restaurant, and a motel. The truck stop was operated by Cosden Oil, Inc., since 1969, through a lease agreement with the owners of the property. The Site ceased operations in April 2014. Three 10,000-gallon diesel USTs, one 10,000-gallon regular gasoline UST, and one 6,000-gallon premium gasoline UST were incorporated into a UST nest located north of the convenience store. Four gasoline dispensers under a canopy were located east of the convenience store and eight diesel fuel dispensers under a canopy were located west of the convenience store.

The four 10,000- gallon USTs were installed in 1969 and upgraded in 1991, and the 6,000-gallon UST was installed in 1971 and upgraded in 1991. The gasoline USTs were constructed of single-wall fiberglass with single-wall product lines protected with automatic line leak detection. The diesel UST was a steel "STP tank" with sacrificial anodes for corrosion protection, steel product lines, and a release detection mechanism.

## Contaminate Sources and History of Release

In 1971, a shallow domestic water well located north of 93rd Avenue was reported contaminated with petroleum hydrocarbons. Subsequently, and through 1982, petroleum product was reported in other shallow wells, successively farther from the former truck stop.

From 1976 to 1984, a number of investigations were performed at the Restover Truck Stop, which resulted in enforcement actions to halt the release of petroleum hydrocarbons to the subsurface. Ecology estimated that approximately 65,000 gallons of gasoline were lost between 1974 and 1981. In 1979, approximately 2,000 gallons of leaded gasoline and diesel/oil was released to the ground when a logging truck struck a fuel dispenser.

In 1983, Ecology issued Restover Truck Stop a notice of violation and ordered that the USTs be leak tested. Results of the tests confirmed that at least one diesel tank was leaking. In 1983 and 1984, Ecology installed six groundwater-monitoring wells and discovered petroleum product in the groundwater.

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Geology

The regional area of the Restover Truck Stop site is underlain by non-glacial alluvium deposits and Vashon Till deposits. The alluvium deposits consists of silt, sand, gravel. The till deposits consist of compacted moisture of clay, silt, sand, and gravel.

The local Site geology is defined by the soil borings that have been advanced at the Site.

#### Groundwater

Groundwater in the lower aquifer flows to the southwest. The maximum seasonal variation of the water table is about 9 feet. Groundwater flow rates average from 20 to 60 feet per years.

## Surface Water

The nearest waterways include Salmon Creek, located approximately 1.7 miles southwest of the Site, and Black Lake, located approximately 2.5 miles to the northwest of the Site.

## **Ecological Setting**

The area surrounding the property is primarily commercial development. A playfield park is also near the property.

## Release and Extent of Contamination - Soil

Soil contamination was generally from the UST nest area and underneath the gasoline and diesel dispensers to approximately 20 feet bgs. Contamination had migrated beneath the convenience store building, which was able to be accessed and excavated once the structure was removed. Depending on the severity of the upper elevation-related leaks, areas of soil contamination concentrations varied with depth. Soil contamination included BTEX, TPHg, TPHd, TPHo.

## Release and Extent of Contamination - Groundwater

Groundwater investigation revealed dissolved-phase gasoline petroleum hydrocarbons as the groundwater contaminant, with a plume extending approximately 1,500 to 2,000 feet to the north and 1,500 feet east and west of the Site. Groundwater contamination included BTEX, TPHg, TPHd.

## Cleanup Actions

1992, an Interim Action consisting of an air sparge/vapor extraction system (VES) was initiated in the summer of 1993. Operation of the VES was terminated in the fall of 1997, since benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations had substantially decreased, and continued operation of the system was no longer cost efficient.

By late 1998 and early 1999, the VES and most of the remaining monitoring wells were decommissioned, and with the continued decrease of BTEX concentrations in groundwater sampled from well WDOE-6A, the groundwater monitoring program was reduced to a five-year cycle.

In 2001, a restrictive covenant was filed on the property by Ecology to address residual contamination in the groundwater.

May 2012 approximately 800 pounds of Regenesis' Oxygen Releasing Compound-Advanced was injected into the subsurface in the vincity of well WDOE-6A in an effort to accelerate the biodegradation of TPH-G and benzene in groundwater with limited effect. On April 9, 2013, soils were excavated to a depth of 16 feet below ground surface (bgs), immediately above the saturated zone.

July 2015, approximately 19,000 cubic yards of contaminated soil was removed and transported off Site for disposal. Approximately 19,000 cubic yards of backfill was imported.

Following pumping and treating of excavation groundwater, a total of 357,000 gallons of water was discharged to stormwater. Two consecutive quarters of post-cleanup groundwater data from MW-1, MW-2, and MW-3 were below MTCA Method A cleanup levels.

## Summary of Cleanup Levels for the Site

## Cleanup Levels:

The land use is designated for commercial use and the selected Method A standards used at this Site for soil and groundwater are protective of human health and the environment:

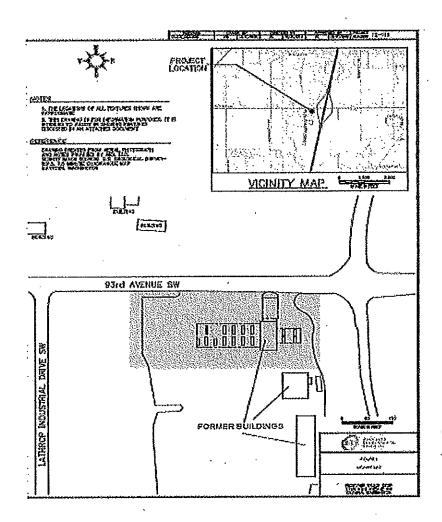
## Soil

Benzene – 0.03 mg/Kg Ethlybenzene- 6 mg/Kg Toluene – 7 mg/Kg Xylenes – 9 mg/Kg Gasoline- 30 mg/Kg Diesel- 2,000 mg/Kg Oil-2,000 mg/Kg

## Groundwater

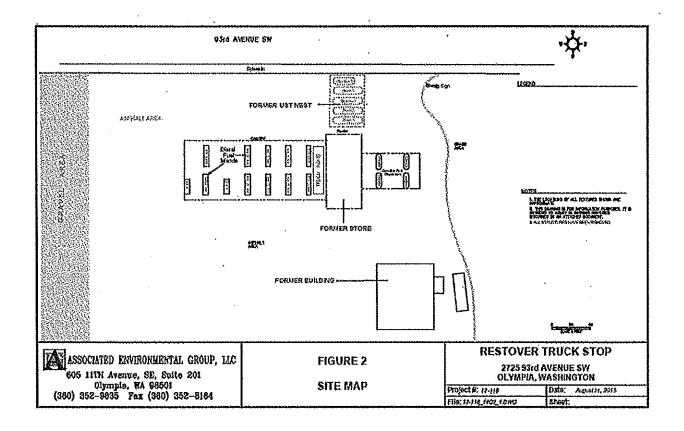
Benzene – 5 μg/l
Ethlybenzene- 700 ug/liter
Toluene – 1,000 μg/l
Xylenes – 1,000 μg/l
Gasoline – 800 μg/l
Diesel-500 ug/l

# Vicinity Site Diagram



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## Site Diagram



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