



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
1250 W Alder St • Union Gap, WA 98903-0009 • (509) 575-2490

October 22, 2018

Laura Skow
ES Engineering Services, LLC
1 Park Plaza #1000
Irvine, CA 92614

Re: No Further Action at the following Site –Groundwater Model Remedy #5:

Site Name: Grandview Market Petrosun 1070
Site Address: 100 E Wine Country Road, Grandview
Facility Site No.: 91458995
Cleanup Site No.: 6845
VCP Project No.: CE0442

Dear Laura Skow:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Grandview Market Petrosun 1070 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 release:



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- Gasoline range petroleum hydrocarbons (GRPH), benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), 1, 2 dichloroethane (EDC), and lead into groundwater.
- GRPH and BTEX into soil.

Enclosure A includes a 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 documents:

- Time Oil Co. "*Soil Sampling Results/Confirmation of Release at Grandview Market 100 East Wine Country Road Grandview, Washington (Property No. 01-070)*". October 6, 1998.
- Maxim Technologies, Inc. "*Preliminary Soil and Groundwater Screening Time Oil Property 01-070 100 East Wine Country Road Grandview, Washington*". February 17, 2000.
- Maxim Technologies, Inc. "*Remedial Investigation/Feasibility Study Time Oil Property 01-070 100 East Wine Country Road Grandview, Washington*". April 7, 2000
- Brown and Caldwell. "*Groundwater Monitoring*". June 2005 through 2002.
- Brown and Caldwell. "*Corrective Action Report Time Oil Property 01-070 Grandview, Washington*". August 2001
- GeoEngineers, Inc. "*Groundwater Monitoring/Operation & Maintenance Reports*". 2003 through 2nd Quarter 2005.
- Sound Environmental Strategies. "*Groundwater Monitoring/Operation & Maintenance Reports*". 2006 through 2007.
- Environ Strategy Consultants, Inc. "*Transmittal: Voluntary Cleanup Program Application Site 01-070100 East Wine Country Road, Grandview, Washington*". June 15, 2010.
- Environ Strategy Consultants, Inc. "*Voluntary Cleanup Program Terrestrial Ecological Evaluation Form*". Received by Ecology June 21, 2010.
- ES Engineering Services, LLC. "*Additional Site Assessment Report, Site No. 0700, 100 East Wine Country Road, Grandview, WA*". February 13, 2017.

- ES Engineering Services, LLC. "*Site Cleanup Action Report, Site No. 0700, 100 East Wine Country Road, Grandview, WA*". February 26, 2018.
- Grandview Market Petrosun 1070 Correspondence File, Ecology's Central Regional Office.

These documents are kept at the Central Regional Office of Ecology (CRO) for review by appointment only. You can make an appointment by contacting the Records Officer at (360) 407-6040 or RecordsOfficer@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.

A gas station currently operates at the Site location. Existing features include: a convenience store building, a pump island canopy, one (1) dispenser, and three (3) USTs.

a. Summary of Site History and Characterization Activities

1965 - Present

A retail fueling station has operated at the Site since 1965.

1991

The Site was discovered in 1991 when petroleum vapors were reported inside an adjacent building, and a soil gas survey was performed.

1998 & 2000

Several soil and/or groundwater investigations were performed, and both soil and groundwater were determined to be impacted by a release of petroleum hydrocarbons.

The source of the release was not specifically determined, but it is likely associated with the previous generation of USTs replaced in 1972.

2002 - 2006

A remediation system operated at the Site. The system consisted of groundwater pumping and treatment coupled with air sparging & soil vapor extraction. Groundwater monitoring continued until 2007.

2016 - 2017

Quarterly groundwater monitoring resumed in January 2016, and continued for eight (8) consecutive quarters until November 2017.

In December 2016, confirmational soil sampling was performed. A temporary well was installed at soil boring location CB-10; generally down-gradient of the sentinel monitoring well MW-07, to verify the lateral extent of contamination in groundwater.

2. Establishment of cleanup standards.

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

The Site meets the eligibility criteria and individual provisions for **Groundwater Model Remedy #5**. This model remedy applies to petroleum contaminated Sites where, following remediation, sufficient monitoring data is collected to confirm that the MTCA Method A groundwater cleanup levels are met throughout the Site. An empirical demonstration is then used to show any remaining soil contamination will not impact groundwater in the future. After demonstrating the soil leaching to groundwater pathway is no longer complete, MTCA Method B soil CULs protective of the direct contact pathway (with the addition of the generic TPH CUL) are appropriate to demonstrate compliance.

Use of the generic soil TPH CUL (1,500 mg/kg) is one of two options presented in the model remedy guidance for establishing direct contact TPH CULs, and is limited to Sites where only GRPH, or mixtures including, are present.

a. Soil Cleanup Standards

CULs: The generic Total Petroleum Hydrocarbon (TPH) CUL and MTCA Method B Soil Cleanup Levels for the human direct contact exposure pathway.

Sufficient groundwater monitoring data was collected to demonstrate low concentrations of GRPH, present in soil, between about 17 and 23 ft bgs, is no longer impacting groundwater. Based on this empirical demonstration, the saturated soil leaching to groundwater exposure pathway was determined to be incomplete.

The Site COCs are limited to GRPH & associated compounds. The generic TPH CUL is appropriate and protective of direct contact exposure.

POC: Standard, throughout the Site extending from the soil surface to 15 ft bgs.

Contaminant	Cleanup Level (mg/kg)	Method CUL Based on:
GRPH	1,500	Generic TPH CUL as discussed in Ecology's <i>Model Remedies for Sites with Petroleum Contaminated Soils</i> (Pub. No. 16-09-057).
Benzene	18.2	MTCA Method B – human direct contact, cancer
Ethylbenzene	800	MTCA Method B – human direct contact, non-cancer
Toluene	6,400	MTCA Method B – human direct contact, non-cancer
Total Xylenes	16,000	MTCA Method B – human direct contact, non-cancer

b. Groundwater Cleanup Standards

CULs: Based on MTCA Method A Cleanup Levels for Groundwater (intended to provide conservative CULs for drinking water beneficial uses).

POC: Standard, throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the Site.

Contaminant	Cleanup Level (ug/L)	Method CUL Based on:
GRPH	800	MTCA Method A – benzene present
Benzene	5	MTCA Method A
Ethylbenzene	700	MTCA Method A
Toluene	1,000	MTCA Method A
Total Xylenes	1,000	MTCA Method A
MTBE	20	MTCA Method A
EDC	5	MTCA Method A
Lead	15	MTCA Method A

3. Selection of cleanup action.

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

The cleanup actions selected were groundwater pumping & treatment coupled with air sparging & soil vapor extraction.

The cleanup actions selected meet the threshold requirements, and are permanent, as outlined in WAC 173-340-360(2).

4. Cleanup.

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

a. Soil

Petroleum contaminated soil at the Site was effectively remediated to concentrations below the established CULs throughout the Site.

Confirmational soil sampling performed in December 2016 found detectible concentrations of GRPH present at 17 ft bgs in soil borings CB-3 & CB-10; and at 17 & 22 ft bgs in CB-4. However, the reported concentrations (max. 400 mg/kg) were significantly lower than the established CUL (1,500 mg/kg).

CB-3 and CB-4 are located near the source of the petroleum release at the Site. CB-10 is located down-gradient of monitoring well MW-7; a sentinel well used to characterize the lateral extent of groundwater contamination.

Based on the following, it appears the GRPH present in soil at CB-10 at 17 ft bgs is associated with a release from an adjacent cleanup Site to the west (Debocks Main Street Texaco (CSID: 6910)):

- Soil samples collected at CB-8, located closer to the release source and adjacent to MW-7, had no COC detections.

Note: This opinion is not intended to be used for decision making at the adjacent Debocks Site.

b. Groundwater

Petroleum contaminated groundwater at the Site was effectively remediated to concentrations below the established CULs throughout the Site.

Compliance with cleanup standards was demonstrated through eight (8) consecutive quarters of groundwater monitoring. COC lab results were reported as below the lab detection limits, for all monitoring events, with two (2) exceptions discussed below:

- GRPH and BTEX were present in the groundwater sample collected from RW-04 in the 1st quarter of 2016. All reported concentrations were significantly below the established CULs.

- Lead was present at low levels in many of the groundwater samples. Concentrations in two (2) samples collected from MW-06 in the 4th quarter of 2016 and the 1st quarter of 2017 were anomalously high, and exceeded CULs. The samples with exceedances were analyzed for total lead only. A secondary sample was collected after each occasion, during the same quarter, and analyzed for both total and dissolved lead. The results of the supplemental sampling were less than the lab detection limit for both total and dissolved lead. This suggests the elevated lead concentrations were likely associated with turbidity, and are not representative of Site groundwater conditions.

Listing of the Site

Based on this opinion, Ecology will initiate the process of removing the Site from our lists of hazardous waste sites, including:

- Hazardous Sites List.
- Confirmed and Suspected Contaminated Sites List.
- Leaking Underground Storage Tank List.

That process includes public notice and opportunity to comment. Based on the comments received, Ecology will either remove the Site from the applicable lists or withdraw this opinion.

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.

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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 (#CE0442).

For more information about the VCP and the cleanup process, please visit our web site <https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-process/Cleanup-options/Voluntary-cleanup-program>. If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (509) 454-7839 or e-mail at Jennifer.Lind@ecy.wa.gov.

Sincerely,



Jennifer Lind
CRO Toxics Cleanup Program

JL:rl

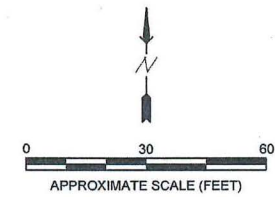
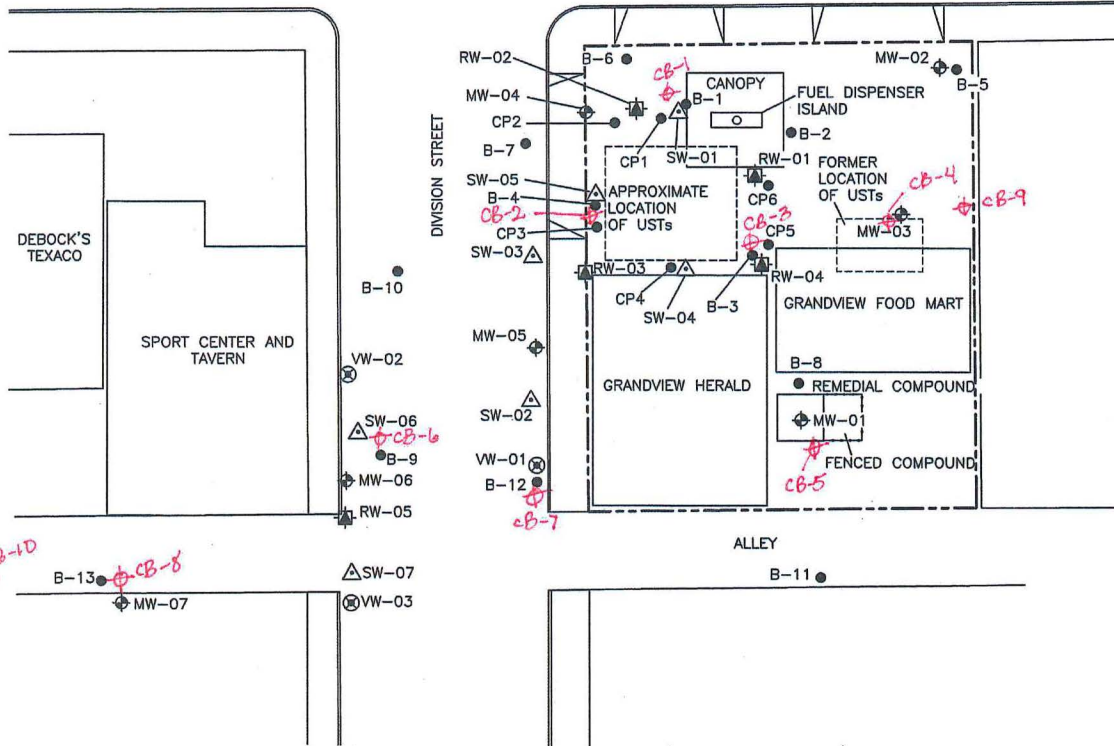
Enclosures (1): A – Diagrams of the Site

cc: Hamed Adib, Eagle Canyon Capital
Joanna Richards, VCP Financial Manager

Enclosure A

Diagrams of the Site

EAST WINE COUNTRY ROAD



- LEGEND**
- RW-02 RECOVERY WELL
 - VW-03 VAPOR WELL
 - SW-04 SPARGE WELL
 - MW-01 MONITORING WELL
 - PROPERTY BOUNDARY
 - B-11 APPROXIMATE GEOPROBE LOCATION
 - CP2 APPROXIMATE GEOPROBE LOCATION
 - CB-2 Boring Location 2016*

CB-10
CB-8
 B-13 ● *CB-8*
 MW-07

BASE SOURCE: SOUND ENVIRONMENTAL STRATEGIES

<p>ES ENGINEERING SERVICES <small>1 Park Plaza Suite 1000 Irvine CA 92614 949.261.0500 949.950.0524</small></p>	<p>FIGURE 2 SITE PLAN</p>	<p>DATE DRAWN 01/25/2018</p>
	<p>Site No. 0700 100 E. Wine Country Road Grandview, Washington</p>	<p>PROJECT NO. 123243</p>
		<p>FILE NO. 123243F2-SP</p>