



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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September 27, 2010

Walter Sprague
Director of Retail Services
Pacific Convenience and Fuels, LLC
603 Camino Ramon, Suite 350
San Ramon, CA 94583

Re: Further Action at the following Site:

- **Site Name:** PetroSun 01-070
- **Site Address:** 100 East Wine Country Road, Grandview, WA 98930
- **Facility/Site No.:** 91458995
- **VCP Project No.:** CE0330

Dear Mr. Sprague:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the PetroSun 01-070 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?

YES. Ecology has determined that 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:



- Gasoline range organics (GRO), benzene, ethyl benzene, toluene, total xylene, methyl tertiary-butyl ether (MTBE), 1,2 dichloroethane (EDC), and lead into the soil and groundwater.

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 documents listed in **Enclosure B**. Those documents are kept in the Central Regional Office of Ecology for review by appointment only. You can make an appointment by calling Roger Johnson at 509-454-7658.

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 **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 not sufficient to select a cleanup action.

In 1998 Time Oil, Inc. discovered a release had occurred at 100 East Wine Country Road, Grandview, Washington. At that time, soil samples were collected while installing cathodic protection for an existing system. However, the extent of soil contamination was not investigated.

Six monitoring wells (MW-05 through MW-07), two recovery wells (RW-03 through RW-05), two vapor extraction wells (VW-01 and VW02), and seven air sparging wells (SW-01 through SW-07) have been installed at the Site for purposes of characterization and remediation of groundwater.

Monitoring well MW-02 is an up-gradient well that has had non-detect results for all contaminants of concerns (COCs) analyzed. MW-07 is the most down-gradient well. Groundwater sampling during the most recent monitoring event, August 20, 2007, detected EDC at concentrations above MTCA Method A Cleanup Levels in MW-07.

Wells MW-05 and MW-06, had concentrations of GRO/benzene and MTBE/EDC, respectively, above MTCA Method A Cleanup Levels during the most recent monitoring event, August 20, 2007. Recovery wells RW-01 and RW-04 had concentration of GRO and benzene above MTCA Method A Cleanup Level during the last sampling event, October 24, 2001.

The Site has not been screened for n-hexane and naphthalenes. Future monitoring events must include these parameters.

The exceedances of Method A Cleanup Levels for Groundwater in MW-07 indicate the extent of contamination at the Site has not been adequately characterized. A sentinel well, and possibly additional monitoring wells, are required to determine the down-gradient extent of contamination at the Site.

2. Establishment of cleanup standards

Ecology has determined the use of MTCA Method A Cleanup Levels for soil and groundwater, WAC 173-340-704, is appropriate for this site.

Contaminant of Concern	CAS #	Ground Water, Method A, Table Value (µg/L)	Soil, Method A, Unrestricted Land Use, Table Value (mg/kg)
benzene	71-43-2	5	0.03
dichloroethane;1,2-	107-06-2	5	--
ethylbenzene	100-41-4	700	6
ethylene dibromide (EDB)	106-93-4	0.01	5.00E-03
hexane;n-	110-54-3	--	--
lead	7439-92-1	15	250
methyl naphthalene;2-	91-57-6	--	--
methyl tert-butyl ether	1634-04-4	20	0.1
toluene	108-88-3	1000	7
tph: gasoline range organics, benzene present*		800	30
xylenes	1330-20-7	1000	9

3. Cleanup

Ecology has determined the cleanup actions performed to date do not meet any cleanup standards at the Site.

Time Oil, Inc operated a remediation system (pump and treat, air sparging, and soil vapor extraction) to treat contamination at the Site. The remediation system was no longer in operation after 2006.

Subsequent monitoring of the Site revealed the remediation strategy was insufficient to treat groundwater contamination. Concentrations of GRO, benzene, MTBE, and EDC remain above MTCA Method A Cleanup Level for Groundwater. In addition, benzene and EDC exceed Groundwater Quality Standards, WAC 173-200, for protection of drinking water.

Pacific Convenience and Fuels, LLC must implement a remediation strategy to treat contaminants present at the Site. For example, the existing remediation system installed by Time Oil, Inc could be brought back online with updates to the system and obtaining the proper air and water quality permits:

More information is needed to:

- Delineate the extent of any remaining soil contamination in the source areas;
- Delineate the vertical and lateral extent of groundwater contamination;
- Identify the vertical groundwater flow direction; and
- Characterize general groundwater geochemistry.

In order to demonstrate groundwater has been remediated to MTCA Method A Cleanup Levels a minimum of four (4) consecutive quarters of monitoring results below cleanup levels are required.

4. Terrestrial Ecological Evaluation (TEE)

The Site does not qualify for exclusion based on condition WAC 173-340-7491(1)(b), Barriers to Exposure. This condition requires the recording of an environmental restrictive covenant for the Site. A Simplified TEE may need to be performed for this Site.

5. Environmental Information Management System (EIM)

In accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), data generated for Independent Remedial Actions shall be submitted simultaneously in both a written and electronic format. For additional information regarding electronic format requirements, see the website <http://www.ecy.wa.gov/eim>.

Data must be submitted to Ecology in this format for Ecology to issue a No Further Action determination.

Please submit the data collected from 2000 to present, as well as any future data in this format. Be advised that Ecology requires up to two weeks to process the data once it is received.

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).

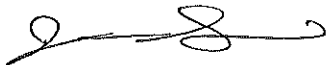
Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

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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 (509) 454-7834 or e-mail at jason.shira@ecy.wa.gov.

Sincerely,



Jason Shira
Toxics Cleanup Program
Central Regional Office

Enclosures (1): B – Basis for the Opinion: List of Documents

cc: Chang and Pong Kim, Property Owners
Cus Arteaga, City of Grandview
Laura Skow, Environ Strategy Consultants, Inc
Dolores Mitchell, Ecology (without enclosures)

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Enclosure B

Basis for the Opinion: List of Documents

1. 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.
2. Maxim Technologies, Inc. *Preliminary Soil and Groundwater Screening Time Oil Property 01-070 100 East Wine Country Road Grandview, Washington*. February 17, 2000.
3. Maxim Technologies, Inc. *Remedial Investigation/Feasibility Study Time Oil Property 01-070 100 East Wine Country Road Grandview, Washington*. April 7, 2000.
4. Brown and Caldwell. *Groundwater Monitoring*. June 2005 through 2002. In file.
5. Brown and Caldwell. *Corrective Action Report Time Oil Property 01-070 Grandview, Washington*. August 2001.
6. GeoEngineers, Inc. *Groundwater Monitoring/Operation & Maintenance Report*. 2003 through 2nd Quarter 2005. In file.
7. Sound Environmental Strategies. *Groundwater Monitoring Reports and Operation and Maintenance*. 2006 through 2007. In file.
8. Environ Strategy Consultants, Inc. *Transmittal: Voluntary Cleanup Program Application Site 01-070 100 East Wine Country Road Grandview, Washington*. June 15, 2010.
9. Environ Strategy Consultants, Inc. *Voluntary Cleanup Program Terrestrial Ecological Evaluation Form*. Received by Ecology June 21, 2010.