



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
*P.O. Box 47600 • Olympia, Washington 98504-7600*  
*(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006*

December 7, 2015

Ms. Carrie Pederson  
PLIA  
300 Desmond Drive  
Lacey, WA 98504

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

- **Name:** Acme Fuel Bulk Plant 305
- **Property Address:** 305 Thurston Ave NE Olympia WA 98501
- **Facility/Site No.:** 37135969
- **VCP Project No.:** SW1382
- **Cleanup Site ID No.:** 11769

Dear Ms. Pederson:

Thank you for submitting documents regarding your proposed remedial action for the Acme Fuel Bulk Plant 305 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 diesel-range petroleum hydrocarbons (TPH-D and TPH-G) into the soil and groundwater;
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) and volatile organic compounds (BTEX) into the ground water.

Ms. Pederson  
CAP: Acme Fuel Bulk Plant 305 SW1382  
December 7, 2015

Ecology is providing this advisory opinion under the specific authority of RCW 70.1050.030(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 accordance with RCW 70.1050.040(4). The opinion is advisory only and not binding on Ecology.

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

1. Cleanup Action Plan, Acme Bulk Fuel Plant, 303 Thurston Ave, NE Olympia WA, AEG Project No. 12-114a of Nov 20, 2015.

The report listed above will be kept in the Central Files of the Headquarters office of Ecology (HQ) for review by appointment only. Appointments can be made by calling the HQ resource contact at (360) 407-7170.

The Site is defined by the extent of contamination caused by the following release(s):

- Total diesel-range petroleum hydrocarbons (TPH-D and TPH-G) into the soil and groundwater.
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) and volatile organic compounds (BTEX) into the ground water.

Based on a review of supporting documentation listed above, pursuant to **requirements contained in MTCA and its implementing regulations, Chapter 70.1050 RCW and Chapter 173-340 WAC, for characterizing and addressing the following releases(s) at the Site, Ecology has determined: We are unable to approve this CAP** at this time for the following reasons;

1. Previous Environmental Work Summary – Diesel Fuel Spill - 2011, p. 3. “The highest concentration of diesel-range TPH was exhibited at MW-5 (refer to AECOM report dated December 14, 2011). However, AECOM presents that the contamination exhibited at MW-5 “do not originate from the spill”. In addition, AECOM states that “well MW-3 is strongly cross-gradient from the spill area and groundwater flow regime and is unlikely to be impacted by potential migration from the spill location”. AECOM concluded that “petroleum constituents, either from on-site or up-gradient off-site sources, already existed at the site prior to the spill event. The data does not indicate significant spill migration beyond the contained spill area or at the site boundary”.

**Comment:** Repeated comments and attempts were made through this section to distinguish between existing contaminations prior to the 2011 spill. It is not clear to Ecology the rationale for this; is this CAP addressing contamination that has come to be located at the site or is the

Ms. Pederson  
CAP: Acme Fuel Bulk Plant 305 SW1382  
December 7, 2015

author alluding to off property contamination impacting this site? If so, please provide the data to support this assertion otherwise strike it from the record.

2. Groundwater analytical results for AECOM's monitoring wells showed the presence diesel-range TPH and/or benzene at MW-3 (northeast), MW-4 (directly adjacent east-northeast), and MW-5 (north of the containment area) above MTCA Method A cleanup levels during AECOM's September 2011 Groundwater Event.

**Comment:** Data-gap. Extent of groundwater contamination beyond MW-3 along the northeast and east of the site has not been fully delineated. This conclusion arises from the AECOM and AEG's depiction of groundwater flow at the site to be generally along the north, northeast and east of the site.

3. Remedial Investigation, AECOM – November 2014 “AECOM determined the extent of diesel- and gasoline-range TPH in soil and groundwater as illustrated in Figure 6, *TPH-Gx (Diesel) Concentrations in Groundwater*, Figure 7, *TPH-Gx (Gasoline) Concentrations in Groundwater*, Figure 8, *TPH-Dx (Diesel) Concentrations in Soil*, and Figure 9, *TPH-Gx (Gasoline) Concentrations in Soil.*”

**Comment:** Please use Cross-sections to depict both the lateral and vertical extent of contaminations of TPH-d, TPH-g and benzene as appropriate described under this section; show geologic, contaminant and groundwater contact zones.

4. Off-Property Investigation, AEG –October 2015, page 8. “Based on the analytical results, AEG determined the extent of diesel- and gasoline-range TPH in soil and in groundwater throughout the Site as illustrated in Figure 6, *TPH-Gx (Diesel) Concentrations in Groundwater*, Figure 7, *TPH-Gx (Gasoline) Concentrations in Groundwater*, Figure 8, *TPH-Dx (Diesel) Concentrations in Soil*, and Figure 9, *TPH-Gx (Gasoline) Concentrations in Soil.*”

**Comment:** Please use Cross-sections to depict both the lateral and vertical extent of contaminations of TPH-d, TPH-g and benzene as appropriate described under this section; show geologic, contaminant and groundwater contact zones.

5. Off-Property Investigation, AEG –October 2015, page 8. 2<sup>nd</sup> paragraph. “Because of the facility's location near Puget Sound, AEG also continuously logged water levels in monitoring wells MW-1, MW-2, and MW-3 over a two week period to determine whether local groundwater gradients are influenced by the diurnal tidal cycle in nearby Budd Inlet.

**Comment:** Please show the physical location of the **Budd Inlet** mentioned above in relation to the Site; especially show its relationship to the monitoring wells MW-1, MW-2, and MW-3

6. Potential Air Exposure Pathways, page 11 and Cleanup Standards page 13 “Concentrations of benzene have been detected in soil and groundwater beneath the Site, and groundwater concentrations of benzene have, at times, exceeded the MTCA Method B Groundwater Screening Level (2.4 µg/L) considered protective of indoor air. As such, inhalation exposure via the soil-to-vapor pathway is considered a potentially complete pathway.”

**Comment:** Benzene is not the only COC for the vapor pathway for this site. For indoor air consideration, are there building foundations more than that the lateral exclusion zone that precludes further vapor assessment? Please consider using the ITRC (2014) and EPA (2015) as the basis for this evaluation.

If indoor vapor is a concern please consider the following COC and cleanup levels:

MTCA Method-B Cleanup Levels for Indoor Air	
Contaminant of Concern (COCs)	Cleanup Level (µg/m <sup>3</sup> )
APH Fraction (EC5-8 Aliphatics)	2,700
APH Fraction (EC9-12 Aliphatics)	140
APH Fraction (EC9-10 Aromatics)	180
Naphthalene	1.37
Benzene	0.321
Toluene	2,290
Ethylbenzene	457
Total Xylenes	45.7

**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.

The state, Ecology, and its officers and employees make no guarantees or assurances by

Ms. Pederson  
CAP: Acme Fuel Bulk Plant 305 SW1382  
December 7, 2015

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.

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). As you conduct your cleanup, please do not hesitate to request additional services. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: [www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm](http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm). If you have any questions about this opinion, please contact me by phone at 360-407-7244 or e-mail at [nmad461@ecy.wa.gov](mailto:nmad461@ecy.wa.gov).

Sincerely,

  
  
NNAMDI I. MADAKOR

Nnamdi Madakor P.HG, P.G., VCP Statewide Coordinator  
HQ – VCP Policy & Technical Manager  
Toxic Cleanup Program

cc: Khan Adams, Great American (email only)  
Scott Rose, AEG (email only)  
Lisa Sweitzer, Ecy (email only)  
Kelly Fox, Ecy (email only)  
Christophe Allen, ACME (email only)