

February 6, 2012

Mr. Dan Venable Advance Environmental 3620 49<sup>th</sup> Avenue, SW Olympia, Washington 98512

## **Ref:** Excavation of Petroleum Contaminated Soils

For the 7406 Riverside Drive East Property, Sumner, Washington 98390

Dear Mr. Venable:

We appreciate the opportunity to submit to you this letter report summarizing our findings from the excavation activities to remove petroleum impacted soils at the Sumner Washington property identified above. Associated Environmental Group, LLC (AEG) followed the customary protocols for conducting site assessment activities as established by the Washington State Department of Ecology (Ecology), Washington Administration Code (WAC) 173-340, Washington State Department of Ecology Model Toxics Control Act (MTCA Method A). AEG also followed the appropriate industry standards and protocols associated with the handling of environmental samples.

It appears that residual concentrations of diesel and motor oil range total petroleum hydrocarbons (TPH) were detected in soils collected at depth (3.5 feet) below ground surface (bgs) at several sidewall locations. Specifically, diesel range TPH was found in the soil sample collected from the central portion of the south sidewall at a concentration of 63 mg/kg. This concentration is below the MTCA Method A Cleanup Level of 2,000 mg/kg for diesel range TPH. Motor oil range TPH was detected in 3 sidewall samples collected. These samples were from the east and west central sidewalls, and from the southeast corner of the excavation. Concentrations of motor oil range TPH ranged from 59 mg/kg to 124 mg/kg. These concentrations were below the MTCA Method A Cleanup Level of 2,000 mg/kg for motor oil range TPH. Attached please find the laboratory analytical results for the soil sampling performed.

A brief summary of the field effort is provided below.

## **Motor Oil Spill Excavation**

AEG provided environmental support to Advance Environmental on January 26, 2012 at the Marsyla Property located at 7406 Riverside East in Sumner, WA (the Site). Excavation of soil contaminated with motor oil range total petroleum hydrocarbons (TPH) was identified at the Site during a Phase II Environmental Site Assessment (ESA) conducted in February 2011 by GeoEngineers. This area is in association with the Sample location DP-8 identified in the Phase II report. The area of contaminated soil was observed by AEG to have a surface area of approximately 16 square feet. Laboratory results from soil samples collected from this area during the 2011 Phase II ESA indicated elevated concentrations of motor oil range TPH at the surface to approximately 3 feet below ground surface. The location of this area was found to be west of the main storage area, in the northwest portion of the Site.



AEG observed Advance Environmental excavate the TPH contaminated soil and over excavate surrounding soil with a mini track hoe. Approximately seven cubic yards of soil was removed during the January 2012 excavation activities. The excavated area was measured to be 7 feet in width, 7.5 feet in length and 3.5 feet in depth bgs. The material excavated was observed to be organic rich soil and gravel fill from surface to six inches bgs, which was underlain by grey and brown, very dense, wet silty-sandy gravel and cobbles. Organic matter was observed throughout the soil profile. Surface water immediately infiltrated the excavation and hindered the collection of soil samples at depths greater than 3.5 feet bgs. Sidewall samples were collected from the excavation at a uniform depth of 3.5 feet bgs, specifically from the northwest corner, north sidewall, east sidewall, southeast corner, south sidewall, and west sidewall.

Soil excavated was transported under waste manifest via truck services provided by Ramond Mohas to the certified petroleum contaminated soil waste disposal facility operated by Waste Management, Inc in Seattle, WA.

## Recommendations

No further assessment at the site is warranted in the area investigated by AEG. This is based on the above presented findings and laboratory analytical results.

We appreciate the opportunity to provide to you environmental consulting services on this project. If you have any questions or concerns about this work, please feel free to contact our office at (360) 352-9835.

Sincerely,

Associated Environmental Group, LLC

ybailb

Michael S. Chun, RSA General Manager/Principal

Encl: Laboratory Analytical Results

## Table 1 Summary of Soil Analytical Results Marsyla Property Sumner, WA

Sample Number <sup>1</sup>	Sample Depth (feet)	Date Sampled	Diesel Extended TPH <sup>2</sup> (mg/Kg)		
			Diesel	Heavy Oil	Mineral Oil
SW-BE-3 1/2	3.5	1/26/2012	<25	117	<40
SW-BN-3 1/2	3.5	1/26/2012	<25	<40	<40
SW-BS-3 1/2	3.5	1/26/2012	63	<40	<40
SW-BW-3 1/2	3.5	1/26/2012	<25	59	<40
SW-BNW-3 1/2	3.5	1/26/2012	<25	<40	<40
SW-BSE-3 1/2	3.5	1/26/2012	<25	124	<40
PQL			25	40	40
Ecology MTCA Method A Clean Up Levels			2,000	2,000	4,000

Notes:

<sup>1</sup>Approximate sample locations are shown in figure 2

<sup>2</sup> Diesel extended range total petroleum hydrocarbons (TPH). Analyzed by

Northwest Method NWTPH-Dx/Dx Extended

mg/Kg = milligrams per kilograms

MTCA = Model Toxics Control Act

PQL=Practical Quantitation Limits

-- = not analyzed for this constituent

< = not detected above laboratory limits

\* Ecology has not designated a MTCA Method A cleanup level for this constituent

Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level