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PLSA ENGINEERING & SURVEYING

November 28, 2005

BRADLEY J. CARR, PE
DOUG FURR, PE
LORIE W. WEISHEIT JR., PLS
RICHARD L. WERE, PLS

Dr. Lloyd Butler
1214 North 20th Avenue
Yakima, Washington 98902

Re: Result of soil and water sample analysis
400 East Mountain View Ave. Ellensburg, WA.

Dear Dr. Butler,

On November 9, 2005 an engineer from PLSA Engineering & Surveying met with Mike Smith of Smith Excavating to investigate and report the status of underground storage tanks that are currently listed on the Department of Ecology Underground Storage Tank Inventory. Two locations on the site were excavated based upon local knowledge of the site and observations made during earlier field reconnaissance.

The first excavation was located near the southeast corner of the residence and extended through loose undocumented fill to a depth of approximately 10 feet where groundwater was encountered. This was the reported location of underground fuel storage tanks that were previously removed. No tanks were observed in this excavation however soils at the base of the excavation had a strong petroleum odor. Both soil and groundwater were sampled.

The second excavation was located near the northwest corner of the truck mechanics shop. An approximate 2-inch diameter pipe was observed just above the ground surface. After removal of 24 inches of soil near the pipe a small underground storage tank was observed. The tank was severely rusted and fragile. The top of the tank was damaged during the excavation, creating a 5" by 12" opening in the tank. A sludge like material from inside the tank was sampled as well as soil along side the tank.

All samples were stored and delivered to Valley Environmental Laboratory in Yakima, Washington, WSDOE Accreditation Number C345, in a refrigerated, insulated container. Analysis for WTPH-HCID was requested for each characterization sample. Results of the analysis indicate that there was petroleum product present in all samples. Follow-up analysis by NWTPH-Dx or NWTPH-GX was requested based on the results of the hydrocarbon identification.

Results of the analysis indicate that only one sample has concentrations of heating oil range petroleum hydrocarbons that exceed MTCA cleanup action levels. See attached laboratory analytical reports. A summary of the analytical results can be seen below in Table 1. Since the tanks that were removed from this location were reported to be fuel tanks it is likely that the measured concentrations of heating oil range hydrocarbons is likely to be a crossover from volatilized diesel hydrocarbons. It is also worth noting that concentrations of petroleum contamination in the soil samples for the first excavation are relatively low compared to that measured in the groundwater. It is likely that the excavation, near the residence, was within the contamination plume but was not at the source of the contamination.

Excavation ID	Sample ID	Media Sampled	Max. TPH Reported	MTCA Limit
First Excavation Near residence	EXW	Groundwater	**130,000 (ppb) Heat Oil Range**	1000 (ppb)
	EX1	Soil	240 (ppm) Diesel Range	2000 (ppm)
	EX2	Soil	70 (ppm) Diesel Range	2000 (ppm)
Second Excavation Near Shop	TW	Water in Tank	1.9 (ppm) Lube Oil Range	For Disposal Info Only
	TS	Soil Near Tank	379 (ppm) Lube Oil Range	2000 (ppm)
	TSL	Sludge in Tank	10,200 (ppm) Lube Oil Range	For Disposal Info Only

Table 1: (Bold values exceed MTCA Method "A" cleanup trigger levels)

The extent of the investigation completed to date identifies some environmental concerns that will require additional investigation to document the extent of the contamination. In most cases this can be accomplished in conjunction with future cleanup efforts. Once the cleanup is completed, groundwater will need to be monitored by sampling from a minimum of three wells on a quarterly basis for approximately one year. Should you decide to proceed with the cleanup, contact PLSA Engineering and we can provide a detailed remediation plan.

At such time that the current owner or operator has information that a hazardous substance has been released into the environment, they shall report the release to the Department of Ecology (DOE) in accordance with Washington Administrative Code (WAC) 173-340-300. Submittal of a copy of this report to the DOE will provide basic technical data.

It has been a pleasure to be a service to you. Should you have any questions, please contact Brad Card or myself at our office.

Sincerely,

Scott Garland

Scott Garland, EIT
Project Manager

SG:jc
Enclosures

VALLEY Environmental Laboratory

Washington State Certified Lab #153 - DOE Accredited Lab C345

NWTPH-HCID

Lab/Sample No: Below	Date Collected: 11/09/05	
Date Received: 11/09/05	Date Reported: 11/16/05	Supervisor: BKO
Sample Location: See description below		Invoice#: 5629

Send Report To:	Sample Information	Matrix: Wastewater
PLSA Engineering Attn: Scott 1120 West Lincoln Avenue Yakima, WA 98902	Dr. Lloyd Butler	

NWTPH-HCID

Analyte:			Hydrocarbon ID:	Surrogate	Diesel	Lube Oil	Gasoline	Heat Oil
Code/Method:			NWTPH-HCID	Recovery	TPH-Dx	TPH-Dx	TPH-Gx	TPH-Gx
Units:					ppm	ppm	ppm	ppm
Lab/Sample No	Date Collected	Sample ID	Results	Results	Results	Results	Results	Results
15304006	11/09/05	Butler - TW	Lube Oil	79.1	<10	1.9		
15304007	11/09/05	Butler - TS	Lube Oil	79.0	<10	379		
15304008	11/09/05	Butler - TSL	Oil and Diesel	91.2	2130	10200		
15304009	11/09/05	Butler - EXW	Diesel range	78.6		<1	<0.1	130
15304010	11/09/05	Butler - EXS1	Diesel	79.3	240	<1	<1	
15304011	11/09/05	Butler - EXS2	Diesel	84.6	70	<1	<1	

MRL (Method Reporting Level): Indicates the minimum reporting level required and obtained by the laboratory (always > MDL).

Trigger: DOH Drinking Water response level.

MCL (maximum contaminant level): Highest level recommended by the federal government for public water systems.

ND (Not Detected): Indicates this compound was analyzed and not detected at a level greater than or equal to the MRL.

Approved By:

407 N. 1st St., Suite #3 Yakima, WA 98901 509-575-3999 Fax: 509-575-3068

04006-nwtph

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04006-nwtph

TW - WATER IN TANK

TS - SOIL EXT. TO TANK

TSC - SLURRY TO TANK