soil | water | air compliance consulting

228 East Champion Street, Suite 101 Bellingham, WA 98225 **tel** 360.752.9571 | **fax** 360.752.9573 www.whatcomenvironmental.com

September 11, 2015

Mr. Steve and Mrs. Jacklyn Rossing Acme General Store 2035 Valley Hwy Acme, WA 98220

#### **RE:** Proposal for Remediation – Acme General Store

Mr. and Mrs. Rossing:

Whatcom Environmental Services Inc. is pleased to submit this scope of work and cost estimate for conducting site remediation work at the Acme General Store located at 2035 Valley Highway in Acme, WA 98220 (subject property).

Previous site characterization work conducted at the site in 2014 and 2015 determined that petroleum contaminated soil (PCS) and groundwater are located near the southeast corner of the store. Figure 1 shows the approximate location of the PCS.

We have prepared this proposal to remove the PCS from the site, document the cleanup process, and prepare a site cleanup report for submittal to the Washington Department of Ecology Voluntary Cleanup Program. The proposal includes costs associated with excavation and removal of 675 tons of PCS from the site, documentation of the PCS removal action, collection and analyses of soil and groundwater samples, installation of groundwater monitoring wells, and preparation of data reports.

#### **Project Scope**

The goal of the project is to remove soil containing gasoline range petroleum constituents which exceed the Model Toxics Control Act Method A target cleanup levels. The estimated area to be excavated is shown on Figure 1.

Whatcom Environmental Services will subcontract Ultra Tank Services to conduct the PCS removal action. Whatcom Environmental personnel will be onsite to direct the PCS excavation work and collect clean confirmation soil samples.

For purposes of this cost estimate, the maximum extent of the soil contamination is anticipated to be approximately 18 feet below ground surface (bgs). Based on the proposed excavation area shown on Figure 1, approximately 675 tons of PCS will be removed from the site. Contaminated soil will be hauled to the CEMEX facility in Everett for treatment and disposal by thermal desorption. Water will be removed from the excavation as required to remove the PCS. For purposes of preparing this cost estimate, we have estimated the total cost to excavate and haul the PCS to CEMEX, treat and dispose the PCS at CEMEX, store and dispose of contaminated water, backfill the excavation, and re-asphalt the site at \$185/ton. Ultra Tank Services will bill the work on a time-and-materials basis (not at a fee of \$185/ton).

We have determined that the Department of Transportation (DOT) Right-of-Way extends approximately 30 feet west of the centerline of Valley Highway (Highway 9). Soil excavation in the DOT Right-of-Way will require that a permit be obtained from DOT.

During the PCS removal work, Whatcom Environmental Services personnel will be onsite to field screen excavated soil using a photoionization detector (PID) and by conducting sheen tests. The excavated soil will be evaluated while in the excavator bucket and designated as either clean soil or PCS. The criteria for designating soil as PCS are as follows:

- Soil with organic vapors as measured by the PID, or
  - Soil exhibiting moderate or heavy sheens

Clean confirmation soil samples will be collected from the floor and sidewalls of the excavation to document the subsurface soil quality at the completion of the PCS removal action. Clean confirmation soil samples will be collected when field screening indicates that all PCS has been removed from an area of the excavation. The sample locations will be spaced at intervals of approximately 20 feet. Samples will be collected from the excavation floor and sidewalls as the PCS removal action progresses. All samples will be collected using clean stainless steel sampling implements decontaminated with Alconox detergent and rinsed with distilled water. All samples will be collected using Method 5035A and placed in containers provided by the lab. Clean confirmation samples will be analyzed for gasoline range TPH via Method NWTPH-Gx, benzene, toluene, ethylbenzene, and total xylenes (BTEX) and MTBE via Method EPA 8021. Selected samples will also be analyzed for EDB and EDC and naphthalene via Method EPA 8260, and lead via Method EPA 6020.

Whatcom Environmental will maintain a field notebook during the remedial action documenting the location of all soil samples, their descriptions, and sample depths. Soil descriptions will generally follow ASTM D 2487 Unified Soil Classification System procedures for description and identification of soils. Soil color, structure, texture, and moisture content will be included in the sample descriptions.

Soil designated as clean will be stockpiled for use in backfilling the excavation. Several composite samples will be collected from the clean stockpile to confirm that no PCS was inadvertently placed in the stockpile. Each composite sample will consist of three sub-samples collected from the stockpile surface.

Following the completion of the remedial action, Whatcom Environmental will prepare a report documenting the site cleanup action results. The report will include summary data tables, site maps showing the site location and all soil sample locations, and all original laboratory analytical reports. The site will be entered into the Voluntary Cleanup Program (VCP) and the site remediation report will be submitted with the goal of obtaining a No-Further Action determination from Ecology.

Three groundwater monitoring wells will be installed at the site after the excavation has been backfilled. The wells will be developed and the monitoring well system will be sampled for four quarters to obtain the groundwater data required by Ecology. The groundwater samples will be analyzed for gasoline and diesel range TPH, BTEX, MTBE, EDB, EDC, and dissolved lead. The samples will be submitted for analysis at ALS Environmental Lab in Everett, WA. At the completion of four quarters of groundwater monitoring a groundwater data report will be submitted to the VCP project manager for review. All project data will be entered into the EIM database as required by Ecology.

#### **Projected Cost**

The cost to perform the work described above is estimated at \$233,878. A cost breakdown is provided in Table 1. The project will be billed on a time and materials basis subject to the rate sheet provided in Attachment A. Subcontracted costs will be billed at cost plus 15%. This cost estimate is valid for 90 days.

#### **Terms and Conditions**

All work will be performed according to Whatcom Environmental's Terms and Conditions for Professional Services (Terms), which have been previously agreed to between the parties.

#### **Projected Schedule**

Whatcom Environmental Services will immediately start work on the project upon written notification from the client. We anticipate completing the excavation work within approximately sixty (60) working days from receipt of your notice to proceed, assuming there are no significant weather delays and there is no difficulty in obtaining the DOT Permit, scheduling the subcontractor, or accessing the property.

#### **Proposal Acceptance**

If you are satisfied with the professional services, scope of work, and costs presented herein, you may indicate your acceptance of this proposal in writing. On behalf of Whatcom Environmental Services, I thank you for the opportunity to submit this proposal. We look forward to working with you on this project. If you have any questions regarding the services or terms set forth in this proposal, please call me at (360) 752-9571.

Sincerely,

Mash

Harold Cashman Whatcom Environmental Services



### Table 1. Remediation Cost Estimate - Acme General Store

	Unit Cost	Units	Sub Cost	WES Cos
Project Management				
Senjor Project Manager	\$130	20		\$2,600
Environmental Professional 2	\$110	6		\$660
	ψΠΟ	0		\$000
DOT Permit Preparation				
Senior Project Manager	\$130	4		\$520
Environmental Professional 1	\$100	16		\$1,600
DOT Permit Fees			\$3,000	
PCS Removal Action				
Senior Project Manager	\$130	12		\$1.560
Environmental Professional 2	\$110	80		\$8,800
Private Utility Locate	ψΠΟ	00	\$250	\$0,000
PCS Removal Action (Subcontractor)	\$185	675	\$124 875	
Mileage	\$0.57	500	φ121,010	\$285
Field Fauinment/Sample Shipping	φ0.07	000		\$1,000
Laboratory Analyses				φ1,000
Soil Gy/RTFX/MTRF (NWTPH-Gy/FPA 8021)	\$92	20	\$1.840	
Soil FDB/FDC/Nanhthalene (FPA 8260)	\$180	4	\$700	
Soil Lead (EPA 6020)	\$07	т 4	\$108	
Water Gy/BTEY/MTBE (NWTPH_Gy/EPA 8021)	φ27 \$80	5	\$400	
water GX/DIEA/MIDE (INWIFII-GX/EFA 6021)	φου	5	φ+00	
Well Installation/Development/4 Q Sampling				
Well Installation (3 wells)			\$5,000	
Well Survey (Licensed Surveyor)			\$1,500	
Senior Project Manager	\$130	4		\$520
Senior Environmental Professional	\$120	10		\$1 200
Environmental Professional 1	\$100	45		\$4 500
Field Equipment	φ100	10		\$200
		100		\$300 \$300
Mileage	\$0.57	400		\$228
Laboratory Analyses				
Soil Gx/BTEX/MTBE (NWTPH-Gx/EPA 8021)	\$92	3	\$276	
Water Gx/BTEX/MTBE (NWTPH-Gx/EPA 8021)	\$80	20	\$1,600	
Water EDB/EDC/Naphthalene (EPA 8260)	\$180	5	\$900	
Water Dissolved Lead	\$15	5	\$75	
Popert Proposition /FIM Database Proposition	and Syshmittal			
Licensed Hydrogeologist	\$150	8		\$1 200
Environmental Professional 1	\$100	80		φ1,200 ¢2,000
Project Administrator	\$50 \$50	00 4		ф0,000 ¢200
Report Production	φου	4		Φ200 \$100
Report Production				\$100
	Subcontract	Subcontract Subtotal:		
	Markup:		\$21,082	
	WES Total		\$33,273	
	Project Cost		\$194.899	
	20% Conting	ency	\$38,980	
	_0,0 conting		<u>+30,900</u>	
	Total Cost E	stimate	\$233,878	

## Attachment A

Whatcom Environmental Services Rate Sheet

Professional Level	Billing Rate (\$/hr)
Professional Engineer/Licensed Hydrogeologist	\$150
Senior Project Manager	\$130
Project Manager	\$125
Senior Environmental Professional	\$120
Environmental Professional 2	\$110
Environmental Professional 1	\$100
Senior Project Staff	\$95
Project Staff 2	\$90
Project Staff 1	\$80
Support Staff 2	\$70
Support Staff 1	\$60
Project Administrator	\$50
Project Accountant	\$50

# Whatcom Environmental Services Labor Rate Sheet

Subcontract Costs	<b>Billing Rate</b>
Subcontract costs (drillers, excavators, labs, etc.)	Cost + 15%

Office/Production Charges	Billing Rate
Fax	\$1.00
Photocopy	\$0.20
8.5x11 inch color print	\$10.00
Bound Report (mylar cover, binding comb, tabs, etc)	\$10.00
External report production costs	Cost + 15%

Travel	<b>Billing Rate</b>
Mileage	IRS Rate/mile
Travel Costs	Cost + 15%

#### Item Cost Per Unit (\$) **Field Equipment** Disposable Bailer \$8.00 0.45 Micron Filter \$20.00 Poluethylene Tubing (per foot) \$0.50 Tygon Tubing (per foot) \$2.50 \$0.50 Large Sample Bags Vinyl Gloves (box) \$12.00 Nitrile Gloves (box) \$15.00 Work Gloves (pair) \$10.00 Distilled Water (1 gal) \$2.00 \$0.25 Wire Flags Field Notebook \$8.00 Paper Towels \$1.50 **Respirator Cartridge Set** \$20.00 Stainless Soil Auger (per day) \$10.00 Depth to Water Meter (per day) \$20.00 Digital Camera (per day) \$20.00 Photoionization Detector (per day) \$50.00 Photoionization Detector (per month) \$300.00 Photoionization Detector Filter \$10.00 TVA 1000B Toxic Vapor Analyzer (per day) \$150.00 TVA 1000B Toxic Vapor Analyzer (per month) \$600.00 Horiba Groundwater Parameter Meter (per day) \$100.00 Hach Turbidity Meter (per day) \$50.00 Metal Detector (per day) \$25.00 Submersible/Peristaltic Pump (per day) \$50.00 Forced Air Blower (per month) \$150.00 Handheld Data Collection Device (per day) \$25.00 Handheld Data Collection Device (per month) \$150.00 \$25.00 FE Crystal Bluetooth Data Transmission Device (per day) \$150.00 FE Crystal Bluetooth Data Transmission Device (per month) Cooler Packaging / Ice \$5.00 Safety Glasses \$5.00 Scrub Brush \$2.00 Absorbant Pads \$1.00 5 Gallon Bucket \$8.00 \$70.00 55 Gallon DOT Drum Vehicle (per day) \$50.00 Vehicle (per month) \$400.00 Cost + 15% Field Equipment purchased or rented for environmental projects Cost + 15% Subcontract costs (drillers, excavators, labs, etc.) Consumables (calibration gases, tags, filters, etc.) Cost + 15%

## Whatcom Environmental Services Equipment Rate Sheet