



# Olympus Technical Services, Inc.

May 30, 2019

William Bergum  
Montana Department of Environmental Quality/Petroleum Tank Cleanup Section  
P.O. Box 200901  
Helena, MT 59620-0901

Re: Additional Corrective Action and Work Plan Required for the Petroleum Release  
Town Pump,  
520 Northeast Main Street, Lewistown, Montana  
Facility ID No. 14-08711 Release No. 5278  
DEQ Work Plan ID No. 33860  
Olympus Work Order No. A4766

Dear Mr. Bergum:

Olympus Technical Services, Inc. (Olympus), on behalf of Town Pump, Inc. (Town Pump), is submitting this updated corrective action work plan for the above referenced Facility. The Montana Department of Environmental Quality/Petroleum Cleanup Section (DEQ) requested an additional work plan in correspondence dated May 8, 2019. The purpose of the work is to install four soil borings to be completed as groundwater monitoring wells and conduct quarterly groundwater monitoring to determine the verify the presence of contamination on-site.

## Scope of Work

The scope of work consists of the following primary tasks:

- Task 1: Work Plan Preparation
- Task 2: Soil Boing and Well Installation
- Task 3: Well Surveying
- Task 4: Groundwater Monitoring
- Task 5: Project Management
- Task 6: Reporting

### Task 1 – Work Plan Preparation

DEQ requested a Standardize Abbreviated Generic Applications Corrective Action Work Plan (WP) AC-07. Olympus will provide this AC-07 work plan detailing the scope of work and associated costs.

### Task 2 – Soil Boing and Well Installation

This task includes the installation of four soil borings which will be completed as monitoring wells in order to define potential groundwater contamination. During the advancement of soil borings, samples will be collected on a continuous basis in five-foot intervals. Soil will be screened using a photo-ionization detector (PID) for volatile organic chemicals (VOCs) utilizing a headspace method. Soil samples will be collected from the area of the boring exhibiting the highest PID readings, the soil/groundwater interface, and the bottom of the borings in each proposed boring/well location. All soil samples will be placed in laboratory-supplied containers and immediately placed on ice after collection. The samples will be submitted for analysis of

volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbon (EPH) screen, according to chain-of-custody procedures. The cost estimate assumes that up to six samples may require analysis of EPH fractionation. Samples will be submitted to Energy Laboratories, Inc. in Billings, Montana.

A staff scientist/engineer will be provided to construct lithologic logs for each monitoring well using the USCS format.

Two-inch diameter, pre-packed monitoring wells will be installed in the borings and completed with flush grade monuments. The wells will be developed following a pumping and surging method prior to sampling.

### Task 3 – Well Surveying

The wells will be surveyed for location by a registered surveyor. The surveyor will also survey the property boundaries for a legal description of the property.

### Task 4 - Groundwater Monitoring

Groundwater monitoring will be conducted on a quarterly basis for a period of one year. All four installed wells will be sampled during each event. Monitoring will include:

- Measurement of groundwater levels in all 4 monitoring wells during each groundwater monitoring event using an electronic oil/water interface probe;
- Collection of groundwater samples, including a field duplicate, with a bladder pump according to a low flow method. Field measurements of groundwater turbidity, dissolved oxygen, specific conductivity, pH, and oxidation-reduction potential will be recorded during groundwater sample collection.
- All samples will be submitted for laboratory analysis of VPH, EPH screen, and intrinsic biodegradation indicators to include methane, manganese, ferrous iron, nitrates/nitrites and sulfates. The cost estimate assumes that up to two samples may require analysis EPH fractions.

Groundwater monitoring schedules and the scope of laboratory analysis may change with DEQ approval and based on the results of future monitoring events. Groundwater monitoring will be performed by an Olympus Technician III.

### Task 5 - Project Management

Project management includes coordination and management of all aspects of the project including planning, scheduling, discussion of on-going and potential updating of work plan tasks and interim laboratory analytical results with DEQ case manager, and other miscellaneous administrative tasks associated with the project. An Olympus Project Scientist will be responsible for project management.

### Task 6 - Reporting

The project results will be documented in a Standardized Abbreviated Soil Boring and Monitoring Well Installation Report (AR-03). The report will include Facility background

information, a site map depicting site features, data tables that include the most recent and historical analytical results, data validation, the most recent laboratory reports, and present recommendations for further actions. The report will also include a completed initial Release Closure Plan (RCP). The RCP will be updated as necessary and included in subsequent reports. The report will be submitted within approximately four weeks of receipt of the groundwater analytical results. Reports will be prepared by a staff scientist with review by a project scientist and senior project scientist.

### Cost

The cost to complete the scope of work outlined above is estimated at \$36,944.85 as detailed on the attached cost schedule. The cost estimate is based on the following assumptions:

- Quarterly groundwater sampling will be conducted for one year; and
- PTRCB-approved 2019 standard unit costs are used in the estimate. These rates may change.

Please contact me if you have any questions regarding this plan.

Sincerely,



Jake Hover  
Project Scientist

Attachment: Work plan cost estimate

cc: Don Edmisten, Town Pump, 600 South Main, Butte, MT 59701  
Ross Eaton, PTRCB, PO Box 200902, Helena, MT 59620-0902

**Olympus Technical Services, Inc. Cost Estimate**

**Date:** 5/30/2019

**Client:** Town Pump, Inc.

**Project Name:** Lewistown Town Pump

**Olympus Project/Proposal No.:** A4766

**ODC**

<b>Labor</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>
Principal	2	Hours	\$166.00	\$332.00
Project Scientist	8	Hours	\$132.00	\$1,056.00
			Labor Subtotal	\$1,388.00

**Comments/Notes:**

1. AC-07 Work Plan
- 2.
- 3.
- 4.
- 5.

<b>Subtotal</b>	\$1,388.00
<b>Contingency</b>	\$0.00
<b>GRAND TOTAL</b>	\$1,388.00

**Olympus Technical Services, Inc. Cost Estimate**

**Date:** 5/30/2019

**Client:** Town Pump, Inc.  
**Project Name:** Lewistown Town Pump  
**Olympus Project/Proposal No.:** A4766

**ODC** 7%

<b>Labor</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>
Staff Scientist/Engineer	12	Hours	\$112.00	\$1,344.00
Field Supervisor/Operator	8	Hours	\$100.00	\$800.00
Field Supervisor/Operator (OT)	4	Hours	\$122.00	\$488.00
Field Technician/Operator	8	Hours	\$88.00	\$704.00
Field Technician/Operator (OT)	4	Hours	\$96.00	\$384.00
			Labor Subtotal	\$3,720.00

<b>Mobilization</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>
Staff Scientist/Engineer	4	Hours	\$112.00	\$448.00
Field Supervisor/Operator	4	Hours	\$100.00	\$400.00
Field Technician/Operator	4	Hours	\$88.00	\$352.00
Mileage (2 Trucks)	500	Miles	\$0.63	\$315.00
			Mobilization Subtotal	\$1,515.00

<b>Materials &amp; Equipment</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>
PID	1.25	Day	\$65.00	\$81.25
Geoprobe	1.25	Day	\$500.00	\$625.00
Liners	16	Each	\$6.00	\$96.00
Bentonite	4	Bag	\$15.00	\$60.00
2" Pre-Packed Wells	8	Each	\$100.00	\$800.00
Well Sand	4	Bag	\$17.50	\$70.00
2" Casing (10 feet)	4	Each	\$27.50	\$110.00
3.75" Expendable Points	4	Each	\$50.00	\$200.00
Well Monuments	4	Each	\$65.00	\$260.00
Peristaltic Pump (Well Development)	1	Day	\$72.60	\$72.60
Silicon Tubing	4	Foot	\$3.00	\$12.00
Vinyl Tubing	80	Foot	\$1.00	\$80.00
			Materials & Equipment Subtotal	\$2,466.85

<b>Per Diem</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>
Per Diem	3	Day	\$23.00	\$69.00
			Per Diem Subtotal	\$69.00

<b>Lodging</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>
Lodging	3	Day	\$220.00	\$660.00
			Lodging Subtotal	\$660.00

<b>Laboratory Charges</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>	
VPH (soil)	12	Each	\$120.00	\$1,440.00	
EPH Screen (Soil)	12	Each	\$75.00	\$900.00	
EPH Fractionations	6	Each	\$150.00	\$900.00	
Analytical Services	12	Sample	\$10.00	\$120.00	
			Other Direct Charges Subtotal	\$3,360.00	
<b>Other Direct Charges (ODC)</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>ODC*</b>	<b>Cost</b>
Well Contractor	10	Hour	\$100.00	*	\$1,000.00
ODC Items*	1000		7.0%		\$70.00
<b>Comments/Notes:</b>					
1. 4 Borings to 20 feet			<b>Subtotal</b>		\$11,790.85
2. Wells completed as 2" prepack completions			<b>Contingency</b>		\$0.00
3.			<b>GRAND TOTAL</b>		\$11,790.85
4.					
5.					

**Olympus Technical Services, Inc. Cost Estimate**

**Date:** 5/30/2019

**Client:** Town Pump, Inc.  
**Project Name:** Lewistown Town Pump  
**Olympus Project/Proposal No.:** A4766

**ODC** 7%

<b>Labor</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>	
Staff Engineer	2	Hours	\$112.00	\$224.00	
			Labor Subtotal	\$224.00	
<b>Other Direct Charges (ODC)</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>ODC*</b>	<b>Cost</b>
Surveyor	1	LS	\$1,000.00	*	\$1,000.00
ODC Items*	1000		7.0%		\$70.00
			ODC Subtotal		\$1,070.00

**Comments/Notes:**

1.	<b>Subtotal</b>	\$1,294.00
2.	<b>Contingency</b>	\$0.00
3.	<b>GRAND TOTAL</b>	\$1,294.00
4.		
5.		

**Olympus Technical Services, Inc. Cost Estimate**

**Date:** 5/30/2019

**Client:** Town Pump, Inc.  
**Project Name:** Lewistown Town Pump  
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**ODC** 7%

<b>Mobilization</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>
Staff Scientist/Engineer	4	Hours	\$112.00	\$448.00
Mileage	250	Miles	\$0.63	\$157.50
Labor Subtotal				\$605.50

<b>Groundwater Monitoring</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>
Groundwater Monitoring	4	Well	\$186.00	\$744.00
Materials & Equipment Subtotal				\$744.00

<b>Other Direct Charges (ODC)</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>ODC*</b>	<b>Cost</b>
VPH (soil)	4	Each	\$120.00		\$480.00
EPH Screen (Soil)	4	Each	\$75.00		\$300.00
EPH Fractionations	2	Each	\$150.00		\$300.00
Analytical Services	4	Sample	\$10.00		\$40.00
Other Direct Charges Subtotal					\$1,120.00

Groundwater Sampling Event Subtotal:	\$2,469.50
Number of Proposed Events:	4
Groundwater sampling Total	\$9,878.00

**Comments/Notes:**

1.	<b>Subtotal</b>	\$9,878.00
2.	<b>Contingency</b>	\$0.00
3.	<b>GRAND TOTAL</b>	\$9,878.00
4.		
5.		

**Olympus Technical Services, Inc. Cost Estimate**

Date: 5/30/2019

Client: Town Pump, Inc.

Project Name: Lewistown Town Pump

Olympus Project/Proposal No.: A4766

ODC

7%

Labor	Quantity	Unit	Rate	Cost
Principal	4	Hours	\$166.00	\$664.00
Project Scientist	16	Hours	\$132.00	\$2,112.00
			Labor Subtotal	\$2,776.00

**Comments/Notes:**

1.			<b>Subtotal</b>	\$2,776.00
2.				
3.			<b>Contingency</b>	\$0.00
4.				
5.			<b>GRAND TOTAL</b>	\$2,776.00

**Olympus Technical Services, Inc. Cost Estimate**

**Date:** 5/30/2019

**Client:** Town Pump, Inc.

**Project Name:** Lewistown Town Pump

**Olympus Project/Proposal No.:** A4766

**ODC**

<b>Labor</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Cost</b>
Principal	2	Hours	\$165.00	\$330.00
Project Scientist	4	Hours	\$132.00	\$528.00
Staff Engineer	80	Hours	\$112.00	\$8,960.00
			Labor Subtotal	\$9,818.00

**Comments/Notes:**

1. Includes DEQ RCP (8 hrs)
2. AR-03 and MR-01 Reports.
- 3.
- 4.
- 5.

<b>Subtotal</b>	\$9,818.00
<b>Contingency</b>	\$0.00
<b>GRAND TOTAL</b>	\$9,818.00

**Olympus Technical Services, Inc. Cost Estimate**

Date: 5/30/2019

Client: Town Pump, Inc.  
Project Name: Lewistown Town Pump  
Olympus Project/Proposal No.: A4766

ODC

Work Plan	\$1,388.00
Soil Boring and Well Installation	\$11,790.85
Well Surveying	\$1,294.00
Groundwater Monitoring	\$9,878.00
Project Management	\$2,776.00
Reporting	\$9,818.00

Comments/Notes:

1.	Subtotal	\$36,944.85
2.		
3.	Contingency	\$0.00
4.		
5.	GRAND TOTAL	\$36,944.85