



June 6, 2019

Mr. Jeremy Whitlock
Facility Manager
Butte School District #1 Bus Barn
1220 East Front Street
Butte, MT 59701

RE: Additional Corrective Action and Work Plan Required for the Petroleum Release at the Butte School District #1 Bus Barn, 1220 East Front Street, Butte, Silver Bow County, Montana, Facility ID 47-01980, Release 1058, Work Plan 33861

Dear Mr. Whitlock,

Water & Environmental Technologies (WET) is pleased to provide this attached Standardized Groundwater Monitoring Corrective Action Plan (CAP_MR-01) and cost estimate for environmental consulting services at the abovementioned facility. The CAP was prepared in response to a Montana Department of Environmental Quality (DEQ) Work Plan Request letter dated May 14, 2019.

SCOPE OF WORK

The scope of work specified in the DEQ Work Plan Request includes semi-annual sampling and analysis of groundwater for one year during seasonal high and low groundwater, validation of analytical data, preparation of a Standardized Groundwater Monitoring Report (Report_MR-01) submitted after the second groundwater monitoring event, and preparation of an updated release closure plan (RCP). WET's proposed approach to complete the work in accordance with DEQ's letter request is detailed in the following paragraphs, with the exception of Work Plan Preparation.

PROPOSED WORK

Project Management

WET personnel will provide informal status reports to the DEQ project manager on an as-needed basis. Other duties associated with this task include scheduling field work and project reporting; coordinating field activities with current facility operators; and monitoring the project budget and deliverables.

Mobilization

WET personnel will mobilize to the site approximately two times to complete the work specified in the CAP, and deliver samples to a courier for transport to Energy Laboratories, in Helena, MT.

Groundwater Monitoring

WET will conduct groundwater monitoring events during high and low groundwater. Monitoring will include measuring depth-to-water and collecting groundwater samples from the all site monitoring wells associated with the petroleum release. Samples will be collected using a low-flow bladder pump, disposable polyethylene tubing, and low-flow purge and sampling procedures. Purge water will be disposed of on pervious ground on-site in accordance with DEQ guidance. Should free product be detected in a well during monitoring, purge water from the affected well(s) will be containerized and disposal arranged with Clean Harbors. One duplicate and one field blank will be collected during each event. Groundwater field parameters will be measured in each well during purging, and once parameters stabilize, groundwater samples will be collected in laboratory-supplied bottles and analyzed for volatile petroleum hydrocarbons (VPH); extractable petroleum hydrocarbon screen (EPH), with fractionation if appropriate; and intrinsic biodegradation indicators (IBI) ferrous iron, manganese, methane, nitrate/nitrites, and sulfates.

Laboratory Analysis

Samples will be submitted to Energy Laboratories in Helena, Montana for VPH, EPH, and IBI. If the EPH screen results exceed 1,000 µg/L, the sample will be further analyzed for EPH fractions. One trip blank and one field duplicate sample will be analyzed for each sampling event for quality assurance/quality control (QA/QC) purposes. The field duplicate sample will be collected by splitting a natural sample in the field. The QA/QC samples will be submitted to Energy Laboratories and analyzed for the same constituents as the natural samples.

Waste Management

Purge water generated from groundwater monitoring will be disposed of in accordance with the DEQ purge water disposal guidance. Much of the site is paved, however, pervious area exists on the east side of the property. No free product was detected in wells during the 2019 monitoring event, therefore purge water will be discharged to the ground. Should conditions exist that preclude purge water disposal (i.e. free product), purge water will be containerized and properly disposed of.

Data Validation

The analytical data will be validated by qualified WET personnel in accordance with DEQ standards and a Data Validation Summary Form (DVSF) will be included in the final report.

Project Reporting

Upon completion of monitoring activities, and within 60-days of receipt of analytical results from the second monitoring event, WET will prepare and submit a Standardized Groundwater Monitoring Report (MR-01), which will include a discussion of any data gaps that may exist and recommendations for future work to resolve the release. Also included with the MR-01 report will be:

- A completed DVSF form.
- An updated Release Closure Plan (RCP).

COST AND SCHEDULE

Work effort levels have been estimated using best professional judgement and typical scenarios related to work of this type. The estimated cost for WET to complete this project is \$21,243.20. A detailed cost estimate is provided as **Attachment A**.

If you have any questions or concerns, please contact me at lsurratt@waterenvtech.com or by phone at 406-497-8687.

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Surratt', written over a horizontal line.

Laura Surratt
Project Engineer

Cc: William Bergum, Petroleum Tank Cleanup Section
Attachments: Attachment A – Project Cost Estimate



**Project Cost Estimate
5-Jun-19**

**Butte School District #1 Bus Barn
1220 East Front St. Butte, Montana
Facility ID 47-01980, Release 1058
Work Plan 33861**

TASK DESCRIPTION	PRICE	UNITS	QTY	PRICE
TASK 1. Project Management				
Project Engineer	\$120.00	HR	10	\$1,200.00
TASK 1 SUBTOTAL:				\$1,200.00
TASK 2. Work Plan Preparation (CAP_MR-01)				
Senior Engineer	\$125.00	HR	1	\$125.00
Project Engineer	\$120.00	HR	4	\$480.00
TASK 2 SUBTOTAL:				\$605.00
TASK 3. Mob/Demob Costs (2 events)				
Staff Engineer	\$105.00	HR	1	\$105.00
Mileage	\$0.58	MILE	40	\$23.20
TASK 3 SUBTOTAL:				\$128.20
TASK 4. Groundwater Monitoring (11 Wells, 2 Events)				
Staff Engineer	\$105.00	HR	31	\$3,255.00
YSI Combo Meter w/ Flow Through Cell	\$10.00	HR	31	\$310.00
Oil-Water Interface Probe	\$10.00	HR	31	\$310.00
Well Consumables	\$5.00	EA	22	\$110.00
TASK 4 SUBTOTAL:				\$3,985.00
Task 5. Monitoring Equipment Rental				
Bladder pump rental	\$40.00	DAY	4	\$160.00
Bladder pump shipping cost, round trip	\$80.00	EA	2	\$160.00
TASK 5 SUBTOTAL:				\$320.00
Task 6. Laboratory Analysis (22 samples, 2 duplicates, 2 blanks)				
VPH (Water)	\$120.00	SAMPLE	24	\$2,880.00
EPH (Water)	\$75.00	SAMPLE	24	\$1,800.00
IBIs (Water)	\$120.00	SAMPLE	24	\$2,880.00
Lead Scavengers (water)	\$150.00	SAMPLE	24	\$3,600.00
PTRCB Sampling Fee	\$10.00	SAMPLE	22	\$220.00
TASK 5 SUBTOTAL:				\$11,380.00
Task 7. Waste Management (2 events)				
Staff Engineer (I)	\$105.00	HR	1	\$105.00
TASK 6 SUBTOTAL:				\$105.00
Task 8. Data Validation (DVSF, 2 events)				
Staff Engineer (I)	\$105.00	HR	4	\$420.00
TASK 7 SUBTOTAL:				\$420.00
Task 9. Project Reporting (MR-01, RCP)				
Senior Engineer	\$125.00	HR	2	\$250.00
Project Engineer/Hydrogeologist	\$120.00	HR	6	\$720.00
Staff Engineer	\$105.00	HR	16	\$1,680.00
GIS Specialist	\$90.00	HR	5	\$450.00
TASK 8 SUBTOTAL:				\$3,100.00
TOTAL COST :				\$21,243.20