BIG SKY CIVIL & ENVIRONMENTAL, INC

August 4, 2025

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

RE: Groundwater Monitoring Work Plan for the Petroleum Release at the former Elmer's Restaurant, 1600 Fox Farm Road, Great Falls, Cascade County, Montana
Facility ID 07-03053 (TID 17207), Release 4355, Work Plan 35066

Dear Mr. McCurry,

Big Sky Civil & Environmental, Inc. (BSCE) has prepared this Groundwater Monitoring Work Plan on behalf of our client for continued compliance monitoring at the subject petroleum release site. In accordance with the Montana DEQ request letter dated July 7, 2025, BSCE proposes to conduct fieldwork and reporting as defined herein.

Facility Summary and Current Conditions

The Former Elmer's Restaurant is located in Township 20 North, Range 3 East, Section 15, within the corporate limits of the City of Great Falls. Adjacent public rights-of-way are Country Club Blvd (10th Avenue South) and Fox Farm Road. The property is currently operated as P. Gibson's Sports Grill and Casino. Surrounding land use is also commercial.

The site was formerly operated as a gas station and had three (3) underground storage tanks (USTs). The UST's were removed in 1984 under the supervision of the local fire department. A Phase II Environmental Site Assessment activities was completed for the site in 2004. Laboratory results from this work indicated that benzene concentrations in groundwater exceeded the Montana Tier 1 Risk Based Screening Levels (RBSL's). Subsequently, another phase of investigation was completed with multiple rounds of groundwater monitoring.[1]

Based on the results of previous investigations, a remedial soil excavation was completed in July 2008. The cleanup project resulted in the removal and disposal of 3,330 banked yards of contaminated soil and 6,000 gallons of contaminated groundwater.[1] Several groundwater monitoring events have been completed since the remedial soil excavation. During groundwater sampling in 2019 and 2020, petroleum hydrocarbons were quantified above the RBSLs in samples from MW-1R, MW-3 and MW-6.

Additional cleanup was completed at the subject facility in September 2023, which included injections of bioremediation products. For the injections, approximately 1,000 lbs of products

were pumped into the subsurface utilizing eleven boreholes and 3 existing monitoring wells. Results of groundwater samples collected before and after the injections generally indicate favorable parameters for bioremediation and attenuation of petroleum hydrocarbons. However, concentrations of petroleum hydrocarbons remain elevated above RBSLs at MW-1R and MW-6, and additional groundwater sampling is considered necessary.

Objectives of Work Plan

The objective of fieldwork is to monitor levels of petroleum contamination and evaluate natural attenuation trends of contaminants.

Work Plan Tasks

- Groundwater monitoring will be completed at the site on a semiannual basis for up to two years (a total of four events). If contaminant concentrations drop below the DEQ risk-based screening levels (RBSLs) for all analytes in two consecutive events, then formal closure of the release will be recommended. Based on the results and in consultation with the DEQ, additional sampling events may become necessary or the frequency of sampling may change.

- For monitoring, BSCE will collect groundwater samples at MW-1R and MW-6 using low-flow techniques recommended by DEQ. Sampling procedures will generally be as follows:
    - First, water level measurements will be taken using a Solinst oil/water interface probe. Next, wells will be purged using a peristaltic pump, and field parameters (dissolved oxygen, pH, temperature, conductivity, oxidation-reduction potential and turbidity), and water levels will be measured and recorded in approximately five-minute intervals. Sample collection will begin after stabilization of water levels and field parameters. If stabilization does not occur after 20 minutes or if water level drawdown is encountered despite use of low-purge rates (e.g., <0.2 L/min), then samples will be collected immediately as conditions allow.

- Groundwater samples as detailed in the previous bullet point will be sent to Energy Laboratories, Inc. in Helena, MT, for analysis of volatile petroleum hydrocarbons (VPH).

- Purge water will be disposed of according to DEQ's Purge Water Disposal Flowchart.

Reporting

- As requested by DEQ and because it will be necessary to eventually obtain closure of the release, the consultant will review previously submitted reports and create a cumulative soil analytical results table where the concentrations are compared to the direct-contact and leaching to groundwater RBSLs for subsurface soils. The cost for

this additional item above and beyond a typical groundwater monitoring report is included in the attached cost estimate.

- After each groundwater monitoring event, an Interim Data Submittal (IDS) will be completed and sent to DEQ. The IDS will include analytical results of groundwater samples in tabular format and other tables and supporting documents as detailed within the Groundwater Monitoring Report Guidance for Petroleum Releases. The purpose of the IDS is to determine if formal closure of the release can be obtained, and if subsequent groundwater monitoring events are necessary.

- After completion of the final sampling event, as detailed previously, a Groundwater Monitoring Report will be submitted to DEQ. At a minimum the report will include: scaled map(s) showing the location of all sampling points and physical features of the site, tabular presentation of cumulative groundwater data, a discussion section identifying results of the completed monitoring, and conclusions & recommendations to resolve the release. The following will be appended to the report: field data sheets, analytical lab reports, data validation summary forms (DVSFs) and an updated release closure plan (RCP).

- Reports and supporting documentation will be submitted following DEQ submittal requirements.

Quality Assurance and Quality Control (QA/QC)

All sampling will be completed in strict accordance with BSCE's standard QA/QC procedures which are on file with DEQ and are available upon request. The following procedures will be used during sample collection to provide quality assurance and quality control (QA/QC), to minimize loss of volatiles, and to maintain the suitability of samples for analysis. Sample collection and analytical procedures will be consistent with SW-846: *Test Methods for Evaluating Solid Waste*, November 1986, and updates published by the U.S. EPA. QA/QC methods used are defined below:

- All sample containers/preservatives will be supplied by a state-certified laboratory. Analyses will be performed by a state-certified laboratory.
- All samples will be handled in a manner which minimizes the loss of organic compounds to volatilization and biodegradation.
- All samples for analyses will be placed in a cooler on ice (at a temperature of 4° C) immediately following collection.
- Chain-of-custody procedures will be utilized during sampling and delivery.
- Documentation of the sampling and QA/QC procedures including notes will be available for DEQ inspection. These notes will document the procedures for sampling and all other routine activities, along with field notes describing the sequence of activities that took place during fieldwork.

Cost Estimate

Attached is a cost estimate for completion of the above-mentioned corrective action fieldwork, analytical testing and report writing.

Project Schedule

The anticipated timeline for fieldwork and reporting is as follows:

Description	Timeline
Semi-annual Groundwater Monitoring	2025-2027
Final Groundwater Monitoring Report	December 30, 2027

Signature

Donnie, thank you for your continued cooperation and assistance with this site. Please feel free to contact us with any questions or concerns you may have regarding this Work Plan.

Respectfully,
Big Sky Civil & Environmental, Inc.

Joseph N. Murphy, P.E.

Paxton Ellis, P.E.

encl. Fig. 1 – Site Map
Cost Estimate

cc. Brett Haverlandt

References

[1] Big Sky Civil & Environmental, Inc., 2008. *Corrective Action Report Elmer's Restaurant, Great Falls, MT.*

[2] Big Sky Civil & Environmental, Inc., 2020. *Groundwater Monitoring Report Former Elmer's Restaurant.*

bsc&e
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PROFESSIONAL SEAL

BY: JPE

DATE: 12/22/2023

OWNER:

BRETT
HAVERLANDT

PROJECT NAME:

FORMER ELMER'S
RESTAURANT
DEQ FACILITY
ID#0703053
RELEASE #4355

SHEET TITLE:

SITE MAP

DRAWING INFORMATION:

OFFICE PROJECT NUMBER:
OWNER FILE NUMBER:
CADD FILE NAME:
ASSOCIATED PROJECTS:

FIGURE:

1

Mr. Donnie McCurry
August 4, 2025

Cost Estimate

Petroleum Tank Release Compensation Board
STATE OF MONTANA
P.O. Box 200902 • Helena, MT 59620-0902 • (406) 444-9710

7/28/2022

Groundwater Monitoring and Sampling Summary Sheet

Cost Estimate Expl. | Work Plan Tasks | Unit Cost Worksheet | Help

Monitoring Well Details

12	Total Number of Wells at Site
0	Number of Fluid Level Measurements Only (2)
3	Number of Wells to be Monitored/Sampled (4-11)
2	Average Well Casing Diameter (inches)
10	Average Depth to Groundwater (ft)
20	Average Depth of Wells (ft)

Sampling Method

☑	Low-Flow
	Low Yield Aquifer
	No Purge
☐	Other (please specify)

of Events - Monitoring/Sampling Interval

Estimated Start Date: Fall 2025

4	Semi-Annual
	Annual
	Bi-Annual
	Other

4 **Total Events**

Sampling Instrument

X	Peristaltic Pump
	Bladder Pump
☐	Submersible Pump
☐	Bailer
☐	Other (please specify)

8	< 25 ft total depth
	25 - 50 ft total depth
	50 - 75 ft total depth
	75 - 100 ft total depth
8	Total