

February 27, 2025

Stan Watkins 750 Shadow Lane Kalispell, MT 59901

Donnie McCurry Petroleum Tank Cleanup Section Montana DEQ P.O. Box 200901 Helena, MT 59620-0901

RE: Groundwater Monitoring (GWM) Work Plan (WP) for the Petroleum Release at former Bestmar (Shelby) Distributors, 130 Central Avenue, Shelby, Montana; Facility ID 56-13871 (TID 30550), Release 3300, Work Plan 35011

Dear Mr. McCurry,

On behalf of our client and in accordance with the Montana Department of Environmental Quality (DEQ) request letter dated February 10, 2025, Big Sky Civil & Environmental, Inc. (BSCE) has prepared this Groundwater Monitoring Work Plan for the subject petroleum release. Fieldwork will include groundwater monitoring as defined herein.

Site History

The following was included in a previous remedial investigation report regarding the site history:

The two USTs removed by Falcon Construction on December 5, 1997, were installed in 1961 and last used in 1986 according to the best available data. The USTs are designated as South #1, and North #2, corresponding to their relative location on the property before removal. UST South #1 was a 1,000-gallon tank and UST North #2 was a 500-gallon tank. The USTs were used to fuel fleet trucks and it is believed that the USTs predominantly contained diesel, however, gasoline was also known to have been stored periodically during the operational life of the tank. Removal of the USTs revealed that the USTs were in a very poor condition and were constructed of bare steel. During the removal of the two USTs, a combined total of approximately 25 cubic yards of petroleum contaminated soil was removed from the two excavations and disposed of at the Toole County Landfarm. (Falcon Environmental, 2000)

Following removal of the USTs, remedial investigation and groundwater monitoring have been completed from 1998 through present day. To date, thirteen (13) groundwater monitoring wells have been installed at the site, which are referred to as MW-1 through MW-13. Upon review of historical monitoring events, petroleum hydrocarbons were previously detected in excess of regulatory limits at MW-2, MW-4 and MW-6.



In summer of 2023, a remedial excavation was conducted which removed ~800 cubic yards of petroleum-impacted soils from the site. The soils were hauled to the Northern Montana Joint Refuse Disposal District (NMJRDD) near Valier, MT for final treatment and disposal. After cleanup, groundwater monitoring was completed in 2024; no exceedances of RBSLs were encountered in any of the samples. (BSCE, 2024)

Facility Summary and Current Conditions

According to the Montana Cadastral website, the legal description, geocode and size of the site are as follows:

Legal Description: Section 27, Township 32 North, Range 02 West, LEASE #40500880 Geocode: 21-4424-27-2-77-06-2000 Size: 0.474 acres

The subject site and surrounding vicinity are shown using applicable quadrangle map imagery from the United States Geological Survey (USGS) on **Figure 1**. Based on best available information, the onsite building is currently leased by BNSF Railway Company (BNSF) and is used as offices, for storage of supplies, and for parking and maintenance of equipment and trucks.

The nearest surface water topographically downgradient from the site is the Marias River (and contributing perennial streams), which is located ~6 miles south/southeast of the site. Based on information from topographic maps and GoogleEarth, the elevation of the site is approximately 3,278 feet above mean sea level.

According to the Groundwater Information Center (GWIC) website, there are no drinking water wells in the vicinity of the facility (within half a mile). A source water and delineation and assessment report notes, "the production wells that supply water to the Shelby PWS are all located approximately 5-6 miles south of [Shelby] along the Marias River just east of where the river is crossed by Highway 15." (DEQ, 2003)

Potential migration pathways, receptors, and subsurface utilities are discussed in Section 4.0, of the 2024 Groundwater Monitoring Report. (BSCE, 2024)

The web soil survey from the United States Department of Agriculture (USDA) National Resources and Conservation Service (NRCS) lists site soils as Marvan silty clay with 0 to 4% slopes; the typical profile is listed as silty clay from 0 to 60 inches bgs. During previous investigations and cleanup, site soils were reported to consist of clay with varying amounts of silt and fine grained sand to a depth of approximately 19 feet with interbedded sand lenses ranging from 0.2 feet to 1 foot in thickness. (Hydrometrics, 2019)

Historically, the depth to groundwater has been measured between 1 and 10 feet below ground surface (bgs) at the site. The hydraulic gradient has generally been observed to flow northerly, northeasterly and easterly.



Objectives of the Investigation

The objective of this work plan is to complete the required compliance monitoring at the subject petroleum release site and determine whether the release can be formally closed.

Work Plan Tasks

BSCE proposes to conduct fieldwork activities at the subject release site as defined herein.

- Semiannual groundwater monitoring will be completed at the site for one year (a total of two events) using low-flow techniques recommended by DEQ. Fluid levels will be gauged at all the wells; samples will be collected from wells MW-12 and MW-13.
- Monitoring/sampling will generally be completed as follows:
 - First, a water level measurement will be taken using a Solinst oil/water interface probe. Next, the well will be purged using a peristaltic pump, and field parameters (dissolved oxygen, pH, temperature, conductivity, oxidation-reduction potential and turbidity) will be measured and recorded. After stabilization of field parameters, samples will be collected and sent to Energy Laboratories, Inc. in Helena, MT. Groundwater samples will be analyzed for VPH, EPH screen (with fractionation if the screen exceeds 1,000 ug/L) and lead scavengers (EDB and EDC via methods 8011 and 8260, respectively).
- Purge water from groundwater monitoring will be disposed of in accordance with the purge water disposal flowchart.

Reporting

- After completion of the first groundwater monitoring event, a groundwater interim data submittal will be submitted.
- After the final groundwater monitoring event, a Groundwater Monitoring Report will be prepared and submitted to DEQ. At a minimum the report will include the following: exhibits depicting the location of site features, utilities, soil borehole and monitoring well locations, well logs, all pertinent data tables including analytical data in tabular format, lab reports, data validation summary forms, an updated Release Closure Plan, receptor survey, data interpretations, conclusions, and recommendations.
- Standardized DEQ report formats will be used for all documents. Reports and supporting documentation will be submitted following DEQ submittal requirements.



Quality Assurance / Quality Control (QA/QC)

All groundwater monitoring will be completed in strict accordance with BSCE's standard operating procedures, which are on-file with the DEQ and are available upon request. Additionally, 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 were 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 the corrective action cleanup and the following monitoring well construction and sampling.

Cost Estimate

Estimated costs to complete groundwater monitoring are included in the attached cost estimate.

<u>Schedule</u>

Fieldwork is estimated to begin summer 2025 and be completed by fall 2026. As such, BSCE requests a due date of December 31, 2026.

Please feel free to contact us with any questions or concerns you may have.

Respectfully, **Big Sky Civil & Environmental, Inc.**

Jan M Mally Joseph N. Murphy, P.E.

encl. Fig. 1 – Site Map Cost Estimate

Paxton Ellis, P.E.

Stan Watkins cc:



References

Falcon Environmental, 2000. Remedial Investigation Report for Shelby Distributors, Inc.

Hydrometrics, Inc., 2019. Groundwater Monitoring Report for Bestmar Distributors.

- MT DEQ, 2003. City of Shelby Public Water Supply PWS ID # MT0000328, SOURCE WATER DELINEATION AND ASSESSMENT REPORT.
- MT DEQ, 2018. Montana Risk-Based Corrective Action Guidance for Petroleum Releases.
- BSCE, 2024. GROUNDWATER MONITORING REPORT, Former Bestmar (Shelby) Distributors, 130 Central Avenue, Shelby, Montana, Facility ID 56-13871, TID 30550, Release 3300, Work Plan 34547

Mr. Donnie McCurry February 27, 2025



SITE MAP





COST ESTIMATE