



AJM, Incorporated

1805 Kenyon Drive, Bozeman, MT 59715
e-mail : dennis@ajm-inc.net lars@ajm-inc.net
Phone : 406-600-2045 406-224-8282
www.environmentalmontana.com
A Full Service Environmental Company

September 12, 2025
Revised October 8, 2025

Eric Krueger
Montana Department of Environmental Quality
Petroleum Tank Cleanup Section
PO Box 200901
Helena, MT 59620-0901
Rachel.mindt@mt.gov

Mr. Paul Townsend
Town Pump, Inc.
PO Box 6000
Butte, MT 59702

**RE: Work Plan Requested to Investigate Petroleum-Contaminated Media at the Town Pump
Inc Bozeman 2, 2607 West Main Street, Bozeman, Gallatin County, Montana;
Facility ID 16-08675 (TID 21506), Petroleum Release 6689, Work Plan 35084**

Mr. Krueger,

Per Montana Department of Environmental Quality work plan request dated August 22, 2025, AJM Incorporated (AJM) has completed the following work plan to conduct groundwater monitoring well installation, development, and sampling at the Bozeman 2 Town Pump located at 2607 West Main Street, Bozeman, MT. The purpose of this investigation is to determine the extent and magnitude of the petroleum impacts observed during the underground storage tank and fuel system removal that completed on February 24, 2025. Remedial investigation will include installing five monitoring wells and collecting soil samples during the well installation. Groundwater sampling events will be conducted to evaluate petroleum hydrocarbon impacts.

BACKGROUND

The former Town Pump Bozeman 2 location operated as a fuel station from 1984 to 2025. This facility is now a decommission fuel station with that previously had the following underground storage tanks (USTs): Tank #2441 Diesel 10,000 gallons steel, Tank #2442 Gasoline 10,000 gallons steel, Tank #2443 Gasoline 10,000 gallons steel, #2444 Gasoline 12,000 gallons fiberglass.

In April 2001, release #4242 was reported. A remedial investigation showed minor impacts to the local shallow groundwater and no impacts were found over the course of several years of monitoring regarding the local groundwater potable wells for the local development. This release was closed in September 2021 with a No Further Corrective Action Letter,

On Feb. 18, 2025 at 11:52am AJM Inc. personnel reported elevated levels of VOC concentrations under Tank #2442 and evidence of minor staining and odors. Laboratory samples were collected per UST removal guidelines and were submitted to the DEQ.

AJM
Incorporated

OBJECTIVES OF INVESTIGATION

The purpose of this investigation is to determine the extent and magnitude of impacts in the soil and groundwater at this facility around the former UST basin and dispenser islands.

MINIMUM WORK PLAN TASKS

The minimum tasks to complete this work include site utility identification, compiling site historical documentations, and observe possible environmental receptors and migration pathways. Currently there is no longer any infrastructure so a private locate will not be necessary and only public utilities will be identified before well installation. On site, the environmental investigation will include groundwater monitoring well construction, soil sample collection from monitoring well cores, and develop wells. Following the initial site work, groundwater samples will be collected quarterly for the first year, complete a new site survey will be generated, and all necessary reporting will be submitted to the DEQ under a Remedial Investigation Report.

TASK I – SOIL SAMPLE COLLECTION

Up to 16 soil samples will be collected from the five monitoring well construction soil borings and three additional soil borings. These samples will be collected from any depth the shows evidence of petroleum hydrocarbon impact and another sample will be collected at the soil water interface. In field testing will be conducted using a photoionization detector (PID) and heated head space to measure volatile organic compounds (VOC). If soil cores show less than 50ppm VOCs via PID and no visual or olfactory evidence of impact, then only a soil water interface sample will be collected. Field data sheets will be collected illustrating soil characteristics, textures, petroleum observations, and locations and submitted to DEQ in the report. Documentation will following standardized guidance outlined by the Unified Soil Classification System (USCS). The driller will upload all monitoring well records to Montana Groundwater Information Center (GWIC), official logs will be included in the DEQ report. This soil data, in combination with the soil data collected during the 2024 UST removal, will be sufficient in determining the extent of soil impact.

Minor soil cuttings will be generated by the used of direct push tooling, all soil and single use plastic sheeves for soil analysis will be contained in a drum and await proper disposal following laboratory analysis.

Soil samples will be immediately cooled on ice and sent to an accredited laboratory for analysis of volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), EPH fractionation without PAHs, lead scavengers, and one TCLP metals sample for landfill evaluation. Soil EPH fractionation will be conducted if total extractable hydrocarbons exceeds 200mg/kg. All soil analytical data will be combined to the existing soil summary sheet that contains the UST removal analytical data.

TASK II – MONITORING WELL CONSTRUCTION

AJM proposes installing five 2 inch geo-probe monitoring wells to approximately 20ft below ground surface (bgs). Flush threaded schedule 40 PVC 0.02 slot wells will be screened from 5-20ft bgs and solid casing to be installed from 5ft bgs to grade. 10/20 silica sand pack will be used from the total depth to 3ft bgs, then hydrated bentonite from 4ft bgs to 2-foot bgs, and a flush mounted 8 inch monitoring well box. See Figure 2 for proposed monitoring well installation locations. In general, the wells placed will collect data representing upgradient, side gradient, downgradient, and source impacts.

The expected groundwater depth is estimated to be approximately 12-13ft bgs and flows in a northerly direction.

A Professional Land Survey (PLS) company will be contracted to conduct a survey of the area and tie-in well head elevations into a local USGS benchmark. Street curbs along with both underground and overhead utilities and buildings will also be incorporated into the PLS work. This will provide AJM with A-CAD figures so that groundwater flow direction and gradient can be calculated along with potential future work at the facility and prevent damage to underground utilities.

Monitoring Well Development

Monitoring wells will be developed after well construction to purge silt and sediment ensuring a viable sample can be sent to an accredited laboratory. A two-stage downhole pump and 3/8-inch tubing will be used to purge excess sediment from the wells after installation. This will include surging the tubing and removing both water and silt from the 2-inch diameter wells until water flow has cleared to less than 10 Nephelometric Turbidity Units (NTU). All purge water will be disposed following DEQ Guidance found under the 2015 Disposal of Untreated Purge Water from Monitoring Wells document (Attached in Appendix C). This may include storing the purged water onsite until laboratory data determines the petroleum hydrocarbon concentrations and following discussions with the DEQ project manager. Groundwater sampling may occur no sooner than 72 hours after well development.

TASK III - GROUNDWATER SAMPLING

Groundwater samples will be collected from newly construction monitoring wells quarterly for the first year. During well purging, stabilization parameters will be collected including temperature, pH, dissolved oxygen, conductivity, turbidity and ORP. Once the above parameters are within 10% of previous readings, ± 0.1 units for pH, and $\pm 3\%$ for specific conductivity a sample will be collected. All sampling will be conducted per AJM's Quality Assurance Project Plan along with the established MDEQ Quality Assurance Plan (QAP). Sampling order will be determined based on previous well contamination moving from least known concentrations to higher concentrations.

All non-well specific equipment will be washed with Alconox and triple rinsed prior to sampling a subsequent well. Standard HDPE 1/4 inch tubing will be installed into the monitoring wells and a low flow (less than 300mL/min) peristaltic pump will be used to collect groundwater samples. Appropriate labeling, cooling, and chain of custody protocols will be followed. Samples will be delivered under chain of custody to an accredited laboratory for analysis of VPH, EPH, and lead scavengers, using appropriate DEQ and Environmental Protection Agency (EPA) methodology. EPH fractionation without PAHs will be conducted if total extractable concentrations exceed 1000 μ g/L. Intrinsic Biological Indicators (IBI) will be analyzed during the first groundwater sampling event. This will serve to further identify the aquifer should bio-augmentation be considered as a remedial option. All water produced from this sampling process will follow the same guidance mentioned under monitoring well development. If approved by DEQ project manager and laboratory data permitting, purge water will be disposed of onsite to evaporate on a non-porous surface.

SCHEDULE AND REPORT WRITING

After the final groundwater monitoring event, one Remedial Investigation Report (Report) will be completed following the standardized DEQ guidance document found on the dropdown on the Petroleum Tank Cleanup Section (PTCS) webpage. This Report will include the following:

- Components of a Well Installation Report and Groundwater Monitoring Report.

AJM
Incorporated

- All laboratory results and data validation summary forms.
- Discussion of the monitoring method results, deviations from the approved work plan, recommendations, and conclusions.
- Baseline groundwater data tables.
- Include a receptor survey.
- Updated soil analytical summary sheet.
- Submit WP and reports electronically following the PTCS requirements.
- Validate all laboratory data using the DEQs DVFS.
- Create and submit a release closure plan (RCP)

A cost estimate for the above-described work and can be found in Appendix B. Work at Town Pump Bozeman 2 can begin upon written approval by the DEQ. This project is predicted to begin fall 2025 and conclude after submitting the final Report following the last groundwater sampling round, projected to be in spring 2027. Please contact if there are any questions or if we can provide any additional information.

Sincerely,

Lars Heinstdt

AJM Incorporated
Lars Heinstdt, Staff Scientist
lars@ajminc.net

Dennis Franks

AJM Incorporated
Dennis Franks, President
dennis@ajminc.net

Appendix A
Site Location
Site Map



Figure 1 - Site Location
Bozeman #2 Town Pump
Bozeman, Gallatin County, Montana



- Proposed Monitoring Well Locations
- Proposed Soil Boring Location

Figure 2 - Site Map
Bozeman #2 Town Pump
Well Installation

AJM INCORPORATED



100 ft