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A Full Service Environmental Company

June 9, 2025

Mr. Jay Shearer
Montana Department of Environmental Quality
Senior Project Manager
1371 Rimtop Dr.
Billings, Mt 59705-1978
jshearer@mt.gov

Mr. Paul Townsend
Town Pump, Inc.
Post Office Box 6000
Butte, Montana 59702

RE: Work Plan to excavated vadose zone soils and install shallow product collection infrastructure for Town Pump of Miles City; 1210 South Haynes Ave. Miles City, Custer County, MT. Facility ID #09-07081, Release #6705, WP ID #35055

Dear Mr. Shearer:

Pursuant to our conversations on June 2 and June 4, 2025 and the Montana Department of Environmental Quality (DEQ) Work Plan Request dated June 5, 2025, AJM Inc. (AJM) has prepared the following work plan. This work plan will address Release #6705 at the Miles City Town Pump, FID #09-07081. AJM proposes to conduct soil excavation and proper offsite disposal during the projected June 2025 underground storage tank (UST) removal. Additionally, AJM proposes to install shallow PVC conduits throughout the existed impacted perched groundwater table to later install a remedial system.

Site Location and Brief History

The Town Pump facility is located at 1210 South Haynes Ave., Miles City, in Custer County MT. The legal description for the site is Township 7 North, Range 47 East, Section 2, (see Figure 1 Attachment 1). During a recent facility up-grade and pipe testing, it was found that a small hole in the diesel piping syphon line was found via the Warren Rogers continuous statistical inventory reconciliation (SIRs) method and was confirmed by a licensed line testing company. It is estimated that over the course of up-to a week, that several hundred gallons of diesel were released into tank sump 2402. This is a pre-energy act sump installed before 2009 where the release was found used SIR pipe data for primary release detection and Electronic Line Leak Detectors (ELLD) for catastrophic leak detection. The facility is in compliance with ARM 17.56.408 method of leak detection for piping. Therefore, the fueling system was in

compliance at the time of the release with all applicable state and federal rules and regulations a the time of release.
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Purpose and Objective

Due to the presence of diesel floating on the shallow water table (approximately 3-4ft below ground surface, bgs), DEQ had authorized AJM and the on-site contractor to pump-out and skim product into 275-gal totes and 55-gal drums. AJM along with the contractor were able to remove approximately 200 gallons of fuel along with about 100 gallons of water as part of the pumping and absorbent actions. This material is being stored on-site and will be disposed of by a recycling facility.

The DEQ has requested that during the up-coming fuel system removal, that soil in the vadose zone be evaluated and excavated as necessary to help with the remediation process. During this time, all the concrete in the area is being removed and replaced as part of this project. While the vadose zone is exposed and UST are being removed, AJM can determine hydrocarbon impacted soils and excavate the material to onsite storage and future disposal. The local substrate has been identified to have a perched groundwater table that is likely 3-4ft bgs, which will limit the depth of soils to be removed.

Because of the perched groundwater, product was noticed in areas near the UST basin, specifically tank sump #2402, and along the tank canopy fuel lines corridor. While the soil is exposed, a shallow infrastructure designed to collect light non-aqueous phase liquid (LNAPL) can be installed with minimal expense compared to installing a similar system post construction.

Work Plan Tasks

Product Removal

During the recent facility upgrades, LNAPL was found floating on the shallow water table. The depth of the product was a few inches in several spots in the tank basin and under the canopy. Pumps and absorbent materials were used to reduce this to a sheen. However, as the sheen became thicker, it was evident that this type of recovery system would not be efficient, and further activities were halted until a new design was discussed with DEQ.

Soil Excavation

Per DEQ's request, during the tank removal process planned for June 2025, AJM personnel will be on site to evaluate and test the vadose zone soils and direct the excavation of impacted media. Depending on the spread of the diesel LNAPL impacts, it is anticipated that up to 500 yards of soil could be removed and hauled to the Custer County Landfill (see Figure 2 for general area of anticipated soil removal). The landfill will accept the hydrocarbon impacted soils with a waste tracking form approved by the landfill manager.

Since a new fuel system is being installed on a different portion of the site prior to the old system being removed, AJM will use the contractor who is also removing the system to provide excavation and hauling services as no cost for mobilization will be required except for hauling material to the landfill.

As part of the Over-excavation of soils, AJM will collect soil samples along either the bottom of the tank basin or along the sidewalls depending on height of the perched water table. Additional samples will also be collected along any piping trench where over-excavation is required. Samples to be taken during the normal course of tank removal activities will not be included in AJMs sample regime.

As appropriate, heated head space samples using baggies and a photoionization detector (PID) will be used to guide the excavation activities. Since this is a diesel release, excavation of soils above a PID reading of 100 will be taken to the landfill.

Once it appears that no further over-excavation is required, AJM will collect up to 20 soil samples as appropriate. Volatile Petroleum Hydrocarbon (VPH) and Extractable Petroleum Hydrocarbon (EPH) analysis will be done to evaluate if any concentration of hydrocarbons remain at the site. Samples will be collected in accordance with the DEQ and AJM Quality Assurance Project Plan and in accordance with standard sampling procedures. Under a Chain of Custody (COC), samples will be sent to an accredited laboratory for VPH, EPH, and EPH fractionation if screening levels exceed 200mg/kg.

LNAPL Collection structure installation

Due to the presence of LNAPL on top of the perched water table as observed in the tank sump and in the shallow water found just under the gravels under the canopy, it is proposed to install up to 7 shallow 4-inch slotted schedule 40 PVC casing along the west and south perimeter of the canopy (within the gravel area) and at least one or two casings in the tank backfill area (depending on amount of free product observed during the UST removal). See Figure 2 in attachment 1 for basic layout.

Since excavation equipment will be onsite for the UST removal, AJM will have a shallow pit dug to approximately 6 feet bgs and will stay within the clay confining layer. The 4-inch slotted casing will be placed vertically into the pit and covered with clean gravel. While the former UST basin is excavated, similar PVC casings will be installed to a depth of 6- 10 feet bgs. By placing these slotted casings into the area, it is anticipated that any LNAPL on-top of the water will be captured within the casing in the future should a product recovery system be installed. As part of this plan, lateral 1.5inch PVC casings will be installed to act as a conduit for future tubing to be pulled to each casing head. Appropriate sweeps will be installed to allow for future installation of a “Xitech” type product collection system. Each casing head will have an 18-in steel access box cemented in place.

Report Preparation

Once this portion of work is completed a soils excavation report will be completed along with cumulative soil data tables to include current and historical soil sample data, along with data validation of current samples and a release closure plan to discuss any additional work that may be required to bring this release toward closure.

Work Plan Budget

Cost estimate is included in Attachment 2. Work at this site can begin upon written approval by the DEQ. . Please do not hesitate to call if there are any questions or if we can provide any additional information.

Sincerely,

Lars Heinstedt

AJM Incorporated
Lars Heinstedt, Staff Scientist
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Dennis Franks

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Dennis Franks, President
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Attachment 1
Figures

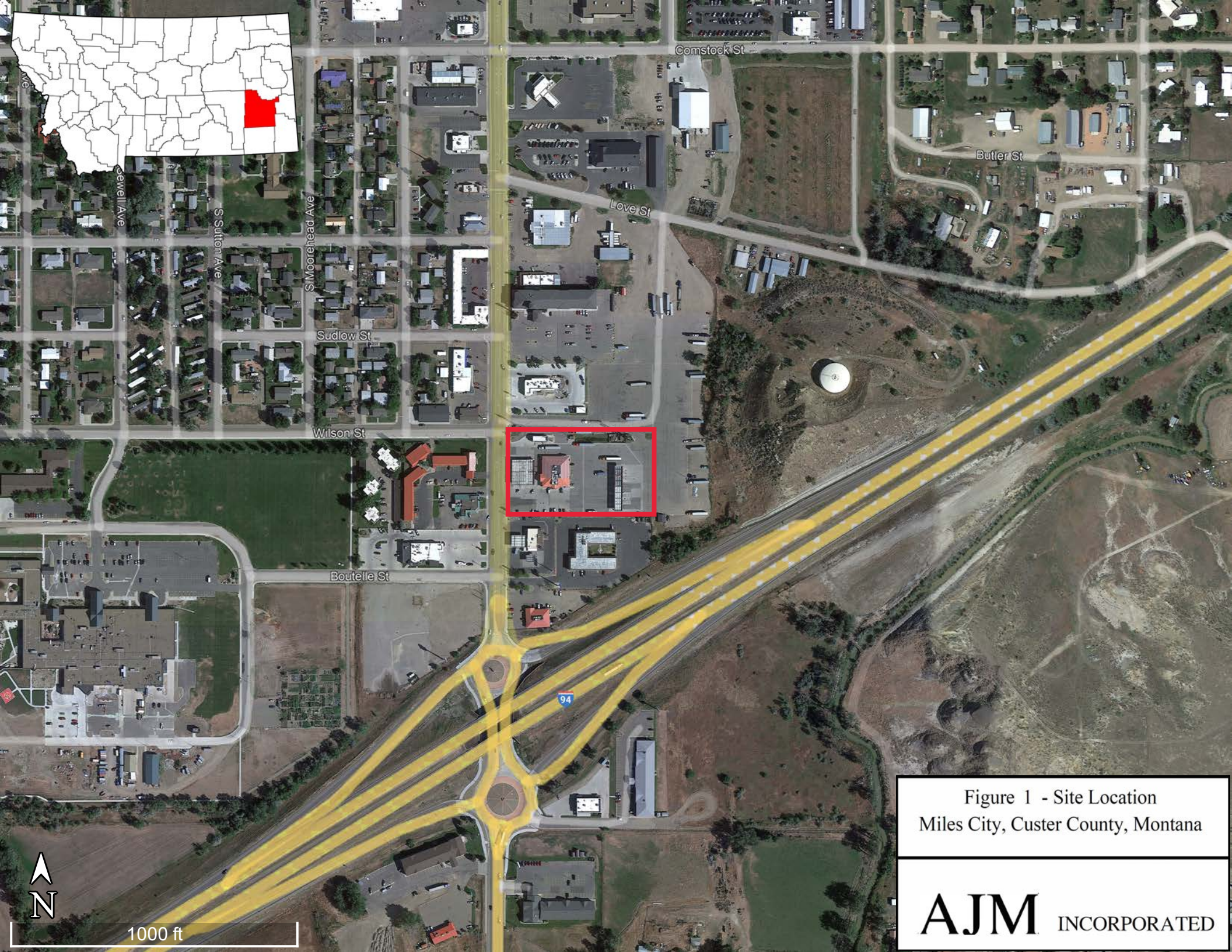

Figure 1 - Site Location
Miles City, Custer County, Montana

AJM INCORPORATED

6" WITH # 4 REBAR 24" O.C
NEW CONCRETE SLAB

27'

TIE INTO
EXISTING LINES
HERE

NEW FOOTING

28'

24'

24'

90'

Building Addition

STORE BUILDING

OPTION # 1
SEE SPECS FOR DETAILS

EXISTING #2 DIESEL

EXISTING # 2 DIESEL
LINE TO BE CONNECTED
TO PROVIDE DIESEL
TO FRONT ISLANDS

MAKE CONNECTION
IN THIS SUMP

2 FE-PETRO
TURBINES
MANIFOLDED
REMOVE

SIPHON
TO NE

ELECTRICAL GUTTER BOX

4in PVC Slotted casing

1.5in PVC lateral conduits

Predicted excavation to groundwater (4ft bgs)

Possible Product Recovery Shed

VENTS

EXISTING 3-HP
FE-PETRO TURBINE

Not to Scale

AutoCAD SHX Text
TO FRONT ISLANDS

AutoCAD SHX Text
EXISTING LINES