

October 10, 2024

Mr. Johnathan Love
Montana Department of Environmental Quality
Petroleum Technical Section
Airport Business Park IP-9
1371 Rimtop Drive
Billings, MT 59105-9702

RE: *Standardized Additional Remedial Investigation Work Plan (CAP- RI-02)*
MDT Right-of-Way (Mabel's Kitchen)
801 E. Main
Laurel, MT
DEQ Facility ID #60-15143; Release #4756; Work Plan ID #34952

The Montana Department of Transportation (MDT) Environmental Services Bureau presents this work plan to conduct groundwater monitoring and sampling at the above-mentioned facility. The work plan has been prepared based on conversations with Mr. Jonathan Love of the Montana Department of Environmental Quality (DEQ). The work will be performed by Olympus Technical services out of Billings, MT in November 2024.

Background

Petroleum impacted soil was initially encountered by an MDT contractor during excavation for storm sewer main improvements in September 2009, and approximately 75 cubic yards of soil was removed. Two 560-gallon USTs were discovered and removed from MDT right-of-way (ROW) during construction activities on East Main Street-US Highway 10. The USTs were perforated, partially crushed, and contained water. During the tank removal, approximately 177 cubic yards of additional impacted soil was removed from ground surface to 11-14 feet below ground surface (bgs).

Because the soil contamination appeared to originate from USTs and associated impacted soil located on MDT ROW, MDT contracted with Olympus Technical Services to complete a remedial investigation (RI). For the RI, five soil borings were drilled utilizing a hollow stem auger drill rig. Four of these borings were completed as groundwater monitoring wells (M1 to M4). Groundwater samples collected from well M1, located approximately 35 feet up gradient of the former tank basin, contain the largest detections of petroleum contamination of any of the monitoring wells. Soil samples were collected from a soil boring located between M1 and the former UST basin and the results were below detection levels. Meanwhile the worst case groundwater monitoring well (M2), installed directly within the former UST basin at the Mabel's Kitchen facility, shows a general decreasing trend and is currently below the Risk Based Screening Levels (RBSLs).

Analytical results from the May 2019 groundwater monitoring event indicate that the sampling occurred during average groundwater conditions and that dissolved phased contamination levels

continue to decrease beneath the RBSLs in the worst case well. M2, once again, was non-detect for all constituents including the lead scavengers. The upgradient well, however, does not appear to be attenuating and the contamination within that well may be migrating from the upgradient Town & Country Supply.

Scope of Work

The current work plan will be to collect groundwater samples from M1, M2, & M3. Groundwater monitoring will be done concurrently with monitoring at Fastlane C stores (56-05083) and Town & Country Supply (Facility ID 56-04497). Work is expected to occur in November 2024. Olympus has availability the week of the 11th or the week of the 18th. If neither of those time-frames work, DEQ will need to contact them immediately for alternative scheduling.

Groundwater Monitoring will include:

- Record depth to groundwater measurements in each of the three onsite monitoring wells M1, M2, and M3.
- Collect groundwater samples from monitoring wells M1, M2, and M3.
- Record field measurements for pH, temperature, specific conductivity, dissolved oxygen (DO), and oxygen reducing potential (ORP).
- Place samples on ice and deliver to Energy Labs for analysis within the specified holding time. Analyze groundwater samples for Volatile Petroleum Hydrocarbons (VPH) and Extractable Petroleum Hydrocarbons (EPH).
- Collect data from two neighboring sites for their November 2024 groundwater monitoring events.
- Prepare a Standardized Abbreviated Groundwater Monitoring Report (AR-01) for DEQ review.

Cost Estimate

Attached is a unit cost worksheet to complete the work.

Please don't hesitate to contact me with any questions or concerns.

Sincerely,



Aaron Anderson
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Town & Country
Petroleum Release

Kwik Way #15
Petroleum Release

Mabel's
Kitchen

M1

M3

M2

M4
Destroyed

36ft

esri®

40°19'N 108°45'39"W

Source: NASA, NGA, USGS