



May 29, 2025

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**Subject: Work Plan for 2025 Remedial Investigation
Tire-Rama Havre – 205 First Street West, Havre, Montana 59501
DEQ FID 60-15135 (TID 30879); Release 4723; WPID 34944
AWS Project 12120.5**

Air Water Soil, LLC (AWS) is pleased to present this work plan for completing remedial investigation (RI) activities at the *Tire-Rama Havre* petroleum release site (hereafter, “the site”). The site is located at 205 First Street West in Havre, Montana (Figures 1 and 2, Attachment A). The work plan has been prepared on behalf of Tire-Rama, the property owner and “responsible party” of record for the release, in response to the Montana Department of Environmental Quality Petroleum Tank Cleanup Section (DEQ) *Additional Corrective Action Work Plan Required* letter, dated October 4, 2024.

The original deadline for submission of the work plan was November 22, 2024. Following an inadvertent miscommunication between DEQ, Tire-Rama, and AWS, DEQ agreed to extend the work plan submission deadline to May 30, 2025.

BACKGROUND

AWS’s understanding of the history of the petroleum release at the Site is based on information provided by Tire-Rama, the DEQ, the Montana Department of Transportation (MDT), and the City of Havre Fire Department, as well as findings from previous remedial investigations at the site. Information prior to 2020 presented below was aggregated and provided to AWS by the previous consultant, CTA Environmental (CTA). Site features referenced in the following summary are illustrated on the figures presented in Attachment A:

- Retail gasoline was sold at the Site until approximately 1982, at which time the dispensers were removed.
- Closure of the Underground Storage Tanks (USTs) was completed in 1984. Havre Fire Department records indicate a closure in conformance with then-current Uniform Fire Code regulations. State of Montana regulations for UST closure were not in place until

1989. Fire Department records do not indicate the number or capacities of USTs closed, nor do they refer to the closure method(s) used (i.e., removal or closure-in-place).

- Anecdotal evidence suggests the UST closure consisted of removal and disposal of 2 retail fuel USTs and closure-in-place of 1 waste oil UST. The waste oil UST was closed in place to avoid potential damage to the building's foundation, because it was believed to be very close to or partially beneath the southeast corner of the building's foundation. CTA reported visible evidence of 2 former vent lines at the southeast exterior corner of the site building, indicating the former UST basin was likely nearby. Information was not provided regarding the removal or disposal of underground product supply lines, although CTA also reported visible evidence of a former dispenser island and the supply line trench in the concrete pavement.
- A groundwater monitoring well (HHO-7) was placed on site, east of the former dispenser island, during an unrelated remedial investigation of a petroleum release at the Holiday Station south of the Site (DEQ Release 3537), beyond US Highway 2. Analytical data from a May 2007 groundwater monitoring event found petroleum analyte concentrations were in exceedance of then-current DEQ Risk Based Screening Levels (RBSLs). The well was destroyed during US Highway 2 roadway reconstruction during 2007 and 2008.
- During the 2007 and 2008 US Highway 2 roadway reconstruction activities, Montana Department of Transportation (MDT) excavated and disposed approximately 898 cubic yards (CY) of petroleum-impacted soil from municipal water, sanitary sewer, and storm sewer utility trenches proximate to the site.
- An initial remedial investigation was conducted at the site in 2010, at which time 4 monitoring wells were installed at the site: TMW-1, TMW-2, TMW-3, and TMW-4. Soil and groundwater data indicated the petroleum release at the site consisted predominantly of gasoline (likely from the dispenser island and UST basin) and potentially waste oil (presumed to be limited to the vicinity of the waste oil UST). Groundwater flow direction was reported as being toward the north-northeast.
- In 2011, 2 additional monitoring wells were installed: TMW-5 and TMW-6. Monitoring well TMW-5 contained a sludge-like emulsion of free product at approximately 9.5 feet below ground surface (bgs), and TMW-6 exhibited dissolved petroleum analyte concentrations above then-current RBSLs. Groundwater flow direction was reported as being consistently toward the northeast during late 2011 and 2012.
- In 2013, 3 additional monitoring wells were installed at and proximate to the site, including TMW-7, TMW-8, and TMW-9. Soil and water samples from TMW-7 indicated the presence of petroleum contaminants at concentrations exceeding regulatory criteria. A vapor intrusion (VI) assessment was also completed at the Subway building, which adjoins the site to the east. The VI assessment did not result in exceedances of then-current regulatory criteria, indicating no significant risk of exposure of petroleum vapors to the occupants of the Subway restaurant.
- Groundwater monitoring conducted in 2014, 2015, and 2016 continued to display elevated levels of contamination in wells TMW-2, TMW-3, TMW-5, TMW-6, and TMW-7. Groundwater was observed to occur at approximately 8 to 9 feet bgs at the site, with a flow direction toward the east-northeast.

- In 2018, a geophysical evaluation conducted prior to excavation identified the waste oil UST believed to have been closed in place near the southeast corner of the building. The tank was located and removed during subsequent remedial excavation; at which time it was confirmed to be a 500-gallon steel tank. Approximately 180 gallons of waste oil were removed from within the tank prior to removing it from the ground.
- The 2018 remedial excavation included the removal of approximately 448 cubic yards of petroleum impacted soil from the drive area between the east side of the site building and the west side of the adjoining Subway building. Excavated soil was disposed at the Hill County Unified Disposal landfill east of Havre. Residual petroleum-impacted soil was left in place due to sloping requirements necessary to avoid structural damage to the Tire-Rama and Subway buildings.
- During backfill, a horizontal injection line was installed at a depth of approximately 8 feet bgs along the west edge of the excavation, generally parallel to the Tire-Rama building. The injection line consists of 40 lineal feet of 2-inch diameter PVC well screen attached to a 2-inch PVC injection point riser located near the southeast corner of the building. The horizontal line was placed in pea gravel bedding and covered with geosynthetic fabric prior to placement of overlying gravel fill (1 ½ inch maximum aggregate size). The injection point riser, labeled IP-1, is accessible within a steel flush-mount well protector.
- 2018 remedial excavation activities also included the preliminary abandonment of well TMW-5 and subsequent installation of replacement well TWM-5R following completion of excavation, backfill, and repaving.
- Groundwater monitoring completed in July 2022 indicated dissolved petroleum contaminants persisted above then-current regulatory criteria in wells TMW-3, TMW-5R, TMW-6, and TMW-7. Groundwater flow direction was reported as being toward the east-northeast.
- Review of available soil and groundwater analytical data at the time of preparation of this work plan (including: original boring/well, post-excavation, and replacement boring/well soil data; and historic and recent groundwater petroleum and metals data) indicates:
 - Petroleum impacts in exceedance of regulatory criteria relating to the potential waste oil release are limited and likely do not extend beyond the immediate vicinity of the former waste oil UST basin. More specifically, concentrations of Extractable Petroleum Hydrocarbon (EPH) fraction range C₁₁₋₂₂ aromatics exceeding the current regulatory criterion have been observed in soil samples collected from original boring TMW-5 and along the excavation sidewalls proximate to the former waste oil UST. However, soil samples from replacement boring TMW-5R did not exhibit evidence of EPH analyte exceedances, and there have been no historic or current EPH analyte exceedances in groundwater samples from any site wells.
 - Residual petroleum impacts at concentrations exceeding regulatory criteria at the site are generally located in soil in the vicinity of the former UST basin (along the southern portions of the excavation sidewalls, at depths of approximately 5 to 10 feet bgs, and along the excavation base, at depths of approximately 10 to 14 feet bgs), and in the vicinity of the former dispenser island (near well TMW-2, extending to well TMW-3, at depths ranging from 10 to 12 feet bgs). Soil samples from wells

TMW-6 and TMW-7 have also exhibited exceedances of regulatory criteria within saturated zones at roughly 12 to 17 feet bgs.

- Impacts to groundwater exceeding regulatory criteria continue to be observed in samples from wells MTW-3, TMW-5R, TMW-6, and TMW-7.
- Lead scavengers 1,2-dichloroethane (DCA) and ethylene dibromide (EDB) have not been detected in groundwater samples collected from any of the existing site wells. Analysis of lead scavengers was completed for samples from the original 4 monitoring wells (October 2010) and for samples from all 9 existing site wells (July 2022).

OBJECTIVES

DEQ's October 4, 2024, work plan request letter referenced the findings and recommendations presented in AWS's *2022 Groundwater Monitoring Report*, dated December 23, 2022, and stipulated the following primary objectives for the requested work plan:

- Install monitoring wells to assess the magnitude and extent of potential petroleum contamination to groundwater to the east.
- During monitoring well installation, collect soil samples necessary to assess the magnitude and extent of petroleum contamination, assess risk, and determine appropriate remedial techniques as applicable.
- Monitor groundwater in existing and newly installed monitoring wells by gauging fluid levels and collecting samples by low-flow sampling methods.
- Design and propose a pilot test for in-situ injection of a remediation solution to assess the feasibility of and provide necessary information for a full-scale design of in-situ treatment of petroleum contamination in soil and groundwater.
 - Identify the product that will be used, the area to be treated (laterally and vertically), the volume of treatment product to be applied, product application rate, etc.
 - Identify the criteria which will be used to evaluate the efficacy of the in-situ injection.
- Collect soil and groundwater data needed to assess the effectiveness of the treatment.
 - Identify the method, timing, and location of sample collection.
 - Identify the disposal method of soil cuttings (if applicable) and purge water.
- Analyze all soil and groundwater samples for petroleum constituents as required by Montana's Risk-Based Corrective Action Guidance for Petroleum Releases (RBCA). Include analysis of constituents necessary to assess risk or determine appropriate remedial actions. Validate data using DEQ's data validation summary form.
- Prepare an updated Release Closure Plan (RCP) and discuss the results with DEQ's project manager.
- Prepare and submit a "Cleanup Report" detailing results of the well installation, pilot test, and monitoring completed under the requested scope of work.

SCOPE OF WORK

In order to achieve the project objectives identified above, AWS has prepared the scope of work for this work plan to include the following 14 tasks: 1) Preliminary Coordination and Work Plan

Preparation; 2) Project Management; 3) Mobilization; 4) Per Diem and Lodging; 5) Monitoring Well Installation; 6) Monitoring Well Development and Survey Update; 7) Groundwater Monitoring; 8) Remedial Injection Pilot Study Design; 9) Interim Data Submittal; 10) Limited Remedial Injection Pilot Study; 11) Laboratory Analyses; 12) Data Validation Form Preparation; 13) Release Closure Plan Update; and, 14) Report Preparation.

AWS's standard task naming for petroleum release projects is intended to generally align with the PTRCB's approach to task naming, although the PTRCB staff may reassign some tasks – or portions of tasks – to different task identifiers for their own purposes. AWS anticipates utilizing the PTRCB-assigned task names during implementation and reporting for this scope of work. However, in the event Tire-Rama requests initiation of the scope of work prior to PTRCB's issuance of a funding obligation letter, AWS will use the task naming presented in this work plan.

Implementation of the scope of work will be accomplished following a combination of AWS's Standard Operating Procedures (SOPs) and additional methods discussed below, where applicable. SOPs referenced in this work plan are presented in Attachment B.

Task 1 – Preliminary Coordination and Work Plan Preparation

Prior to and during preparation of this work plan, AWS completed a variety of preliminary coordination efforts. These included correspondence with Tire-Rama and DEQ regarding project status, site logistics, potential work plan elements, rough schedules, etc.

This work plan has been created to satisfy the requirements stipulated in DEQ's *Remedial Investigation CAP (CAP_RI)* work plan format. Additionally, the general scope of work presented herein is intended to address the objectives stated in DEQ's work plan request letter and subsequent correspondence, as discussed in the Objectives section above.

Preliminary coordination elements have already been completed by AWS as necessary to develop the scope of work and solicit subcontractor proposals for this work plan and are understood to be actual, reasonable, and necessary to the ongoing investigation and remediation of the release.

Task 2 – Project Management

Project management activities include correspondence with Tire-Rama and DEQ staff throughout the period of performance; coordinating the schedule for on-site activities with Tire-Rama's corporate and local personnel; preparation of a project-specific health and safety plan (HASP); scheduling AWS's field personnel and activities; and, procuring and coordinating equipment, supplies, and subcontracted and vendor services as necessary to complete the scope of work. Project management activities also include project budget tracking and invoicing.

Note that additional project management time is anticipated to be required for coordination of off-site property access agreements as necessary to complete the scope of work discussed in this work plan. Additional project management time is also expected to be required for coordination with the US Environmental Protection Agency (EPA), including preparation and submission of a

Class V Injection Well Notification to EPA's Region 8 offices prior to planned remedial injection activities.

Task 3 – Mobilization

Mobilization includes labor and vehicle mileage costs for project travel necessary to complete the scope of work. This generally includes AWS personnel's travel to and from the site, as well as preparation time of up to 1 hour per mobilization event, as applicable, per PTRCB's standard reimbursement practice. Mobilization also includes costs for travel between the project site and hotel when overnight stays are required.

Field activities may be combined to reduce mobilization events and costs, where feasible. For the purpose of this work plan, the anticipated mobilization events necessary to complete the scope of work are summarized as follows:

- Soil Borings and Monitoring Well Installation
 - 1 mobilization event
 - Staff Engineer/Scientist + Tech II
- Soil Sample Direct Delivery (to comply with analytical hold times; see Task 5 below)
 - 1 mobilization events (0 preparation; 1 delivery to laboratory)
 - Tech II
- Monitoring Well Development and Survey Update
 - 1 mobilization event
 - Staff Engineer/Scientist + Tech II
- Groundwater Monitoring – Event #1
 - 1 mobilization event
 - Tech II
- Remedial Injection
 - 2 mobilization events
 - Staff Engineer/Scientist
- Groundwater Monitoring – Event #2
 - 1 mobilization event
 - Tech II
- Groundwater Monitoring – Event #3
 - 1 mobilization event
 - Tech II
- Groundwater Monitoring – Event #4
 - 1 mobilization event
 - Tech II

Task 4 – Per Diem and Lodging

Per diem and lodging costs will be invoiced using PTRCB's daily meal rates and actual hotel costs incurred during completion of the scope of work, per employee. A summary of the per diem and lodging anticipated to be necessary to complete the scope of work is presented below. Per diem

and lodging costs account for the mobilization schedule discussed above. The anticipated durations of mobilization events are based on AWS's professional experience and input from subcontractors, where applicable.

- Soil Borings and Monitoring Well Installation
 - Meals: 2 people, 2 days
 - Lodging: 2 people, 1 night
- Monitoring Well Development and Survey Update
 - Meals: 2 people, 1 day
 - Lodging: none
- Groundwater Monitoring – Event #1
 - Meals: 1 person, 2 days
 - Lodging: 1 person, 1 night
- Remedial Injection
 - Meals: 1 person, 6 days
 - Lodging: 1 person, 4 nights
- Groundwater Monitoring – Event #2
 - Meals: 1 person, 1 day
 - Lodging: none
- Groundwater Monitoring – Event #3
 - Meals: 1 person, 1 day
 - Lodging: none
- Groundwater Monitoring – Event #4
 - Meals: 1 person, 2 days
 - Lodging: 1 person, 1 night

Task 5 – Soil Borings and Monitoring Well Installation

AWS proposes completion of soil borings in each of 3 locations at and adjacent to the site (Figure 2, Appendix A). All 3 borings are expected to be completed as new groundwater monitoring wells, as discussed below. The proposed new monitoring wells have been tentatively labeled on Figure 2 as TMW-10, TMW-11, and TMW-12 for the purpose of discussion in this work plan. The final selection of boring locations and decisions regarding which are to be completed as monitoring wells will be based in part on site conditions and field observations.

As mentioned in Task 2 above, completion of drilling and monitoring well installation activities will require coordination with the adjacent property owner. Following identification of and preliminary coordination with the property owner, AWS will prepare a property access agreement form and submit it to the property owner for review and approval. Completion of soil boring and monitoring well installation on the adjoining property will be contingent on AWS's receipt of a signed access agreement.

Proposed well TMW-12 is located adjacent to – but not within – the north boundary of US Highway 2 (1st Street West) right-of-way (ROW), east of the site. Although the Montana Department of

Transportation (MDT) controls US Highway 2 ROW, special coordination with MDT (e.g., encroachment permit, specialized traffic control, etc.) is not expected to be required for this work.

Hollow-stem auger drilling methods have been used to good effect for installation of the existing monitoring wells at the site. AWS therefore proposes using hollow-stem auger drilling for soil borings and monitoring well installation activities to be completed as part of this work plan. AWS anticipates retaining Boland Drilling (Boland) to provide hollow-stem auger drilling services for completion of proposed soil borings and new monitoring wells included in this scope of work. Hollow-stem auger drilling services proposals were solicited from 4 separate firms. Boland submitted the only qualifying proposal. “No bid” responses were provided by Hansen Environmental Drilling and HazTech Drilling. O’Keefe Drilling did not respond.

Drilling provider proposals were requested to include total depths of 20 feet at each of 3 select borings (i.e., a total drilling depth of up to 60 feet). Residual soil contamination in the study area for this work plan is generally not expected to extend past approximately 15 to 17 feet bgs, based on historic soil data from previous borings. Actual boring locations may vary based on interpretation of field data, utility locations, or other site conditions which may be identified prior to or during completion of the work. Additional borings may be advanced if deemed appropriate based on field data, although the total drilling depth of 60 feet will not be exceeded without prior coordination with Tire-Rama, DEQ, and PTRCB, as feasible.

At least 2 full business days prior to initiating the subsurface investigation, AWS will submit a subsurface utility locate request through Montana811 (aka “Call Before You Dig” or “One-Call”). Montana811 will subsequently coordinate surface marking of public underground utilities within the study area.

Public utility lines located on the service sides of meters, and any other privately owned underground utilities, are generally excluded and may not be surface marked through the Montana811 utility locate process. There are no known privately owned underground utilities in the proposed study area. In the event Tire-Rama or the adjoining property owner are unable to surface mark or otherwise identify the locations of known private utilities within the study area, additional coordination may be required.

Proposed monitoring well TMW-10 is located proximate to an overhead electric line extending from the southeast corner of the Tire-Rama building to a lighted sign located near the southeast corner of the site property. For the purpose of this work plan, it is assumed Tire-Rama’s on-site personnel will be able to turn off the breaker (or otherwise deenergize the circuit) for this overhead electrical line during drilling operations. This location may also present coordination challenges relating to Tire-Rama’s normal business activities, including servicing larger vehicles which do not fit inside the shop bay areas. AWS will coordinate with Tire-Rama’s on-site personnel to minimize impacts in this regard as much as feasible.

Boland will remove pavement at boring locations and advance soil borings using hollow-stem auger drilling methods. Continuous soil core sampling will be achieved through hydraulic-assisted,

gravity-driven split-spoon sampling, or the equivalent. Reusable downhole equipment will be decontaminated by the driller before initiating each soil boring, as appropriate. Decontamination may not be necessary following completion of borings which did not exhibit evidence of petroleum contamination. Reusable sampling equipment will be decontaminated following *AWS SOP-01*.

Soil samples will be collected following the procedures outlined in *AWS SOP-02 – Soil Sample Collection*, including recording observations of lithology and the presence or absence of visual and/or olfactory evidence of petroleum impacts. Field splits will be analyzed following *AWS SOP-03 – Field Measurement of Total Organic Compounds (VOC)*.

Laboratory samples will be containerized from the potential laboratory splits as summarized below. The actual number of samples to be collected will depend on observations and conditions at the time of sampling. For the purpose of this work plan, AWS anticipates the following samples will be collected:

- Worst-Case Total VOCs (3 grab samples): 1 grab sample will be collected from the interval exhibiting the highest total VOC concentration in each boring. This sample will not be collected for a given boring with no exceedances of 100 ppm total VOCs, and for which no visual evidence of impacts is observed.
- Groundwater Interface (3 grab samples): 1 grab sample will be collected from the soil/groundwater interface within each boring, if different from the samples above.
- Bottom of Hole (3 grab samples): 1 grab sample will be collected from the bottom of each boring, if different from the samples above.
- Construction Worker Risk (0 additional samples): Select natural samples from the above lists will be used to evaluate construction worker risk.
- Waste Characterization Samples (0 additional samples): Additional waste characterization samples are not expected to be required. Data from select natural samples from the above lists are expected to suffice for this purpose.
- Duplicate Samples (1 grab sample): Duplicate samples will be collected at the rate of 1 for every 20 natural samples. Duplicate samples will consist of direct splits from the potential laboratory split samples for the respective natural samples they represent.

Laboratory samples will be containerized, preserved, and transported to the analytical laboratory following *AWS SOP-08*, and in accordance with the referenced analytical methods, using vessels and preservatives provided by the laboratory. In order to adhere to the 48-hour analytical hold time for Volatile Petroleum Hydrocarbons (VPH) in soil, direct delivery of soil samples to the laboratory is expected to be required for this project. Since soil samples are expected to be collected over the course of 2 field days, AWS anticipates transporting all soil samples directly to the laboratory following completion of drilling field activities as part of Task 5. A single duplicate sample is anticipated to be submitted with the overall sample set. Laboratory analyses to be requested are discussed in Task 11, below.

Petroleum-impacted drill cuttings generated from borings which are completed as monitoring wells will be consolidated and temporarily stored at the site in steel drums to be provided by

Boland, pending waste characterization and waste profile/manifest processes required for disposal. Drill cuttings generated from other borings, if any (i.e., borings which will be abandoned rather than completed as monitoring wells), will be placed back into the borings from which they were derived, as feasible. The remaining boring voids, if any, will be backfilled with chipped or granular bentonite. Cuttings which cannot be placed back into the soil borings will be handled following the procedures outlined in *AWS SOP-56*. Unimpacted soil or asphalt cold patch will be placed by Boland to match the surrounding surfaces for all abandoned borings, where applicable. Drill cuttings which are determined not to be petroleum-impacted through field observation and review of field total VOC data may be spread on unpaved surfaces at the site, at the direction of Tire-Rama's on-site personnel.

Petroleum-impacted drill cutting waste is expected to be disposed at the Hill County Unified Disposal (HCUD) landfill, located southeast of Havre. Following receipt of waste characterization analytical data, AWS will coordinate with the landfill and Tire-Rama as necessary to establish a waste profile, with Tire-Rama listed as the "waste generator," to facilitate issuance of a waste manifest. AWS anticipates retaining Lakeside Excavation, Inc. (Lakeside) to transport and dispose drill cuttings following completion of waste characterization and waste manifesting.

AWS anticipates directing Boland to construct a groundwater monitoring well in each of 3 select soil borings, as indicated on Figure 2. Water levels at the site have been recorded at approximate depths of 9 to 10 feet bgs. In order to construct new monitoring wells to depths which intersect anticipated petroleum-impacted soil and anticipated groundwater depths, AWS proposes drilling to depths of approximately 20 feet bgs. The wells will consist of 2-inch diameter, schedule 40 polyvinylchloride (PVC) well casing blank and factory-slotted (0.010-inch or 0.020-inch) well screen. Casing joints will be flush-threaded; no PVC glue or adhesive will be used. The wells will be screened from approximately 5 to 20 feet bgs. AWS will mark the top north quadrant of each well casing with indelible ink to establish a permanent measuring point.

The annular space of the boring will be backfilled with inert filter-pack sand from the bottom of the screened interval to above the screened interval. Hydrated granular or chipped bentonite will be placed above the filter pack to create a well seal. A steel, flush-mounted well protector will be grouted in place over the well casing; concrete around the well protector will be finished smooth to match surrounding pavement, if present, and to prevent premature degradation.

Task 6 – Monitoring Well Development and Survey Update

Newly installed groundwater monitoring wells will be developed following the procedures outlined in *AWS SOP-04 – Field Measurement of Depth of Groundwater* and *AWS SOP-05 – Monitoring Well Development*. Purge water generated during development will be handled in accordance with *AWS SOP-56*. Reusable down-hole equipment will be decontaminated prior to initiating development of each well following *AWS SOP-01*.

While on site for well development activities, AWS will also update the existing site survey, including mapping of the horizontal locations of abandoned soil borings (if any) and new monitoring wells installed during completion of Task 5. Vertical elevations will also be surveyed

at the new monitoring well measuring points (top north of PVC well casings), relative to known elevations from the existing site survey. The site diagram will be updated with the new survey data.

Task 7 – Groundwater Monitoring

Groundwater monitoring will be conducted during 4 separate events as part of this work plan:

- Event #1 – Pre-Injection
- Event #2 – Post-Injection (approximately 1 month after injection)
- Event #3 – Post-Injection (approximately 2 months after injection)
- Event #4 – Post-Injection (6 to 9 months after injection)

The wells to be gauged and monitored under this work plan, and the analytical parameters to be evaluated for each are summarized by event in the groundwater monitoring analytical plan presented in Attachment C. The groundwater monitoring plan is intended to provide information necessary to develop the remedial injection pilot study design, and to evaluate the efficacy of the injection pilot study. Accordingly, Event's #1 and #4 will include gauging and sampling all monitoring wells in the site network, while Event's #2 and #3 will be limited to select wells proximate to the remedial injection study area.

Depth to water (DTW) will be measured following the procedures outlined in *AWS SOP-04*, and groundwater monitoring will be completed in accordance with *AWS SOP-06 – Groundwater Sampling*. AWS anticipates utilizing a peristaltic pump system to obtain samples for this project. Unused water evacuated from each well will be handled in accordance with *AWS SOP-56*. Reusable monitoring and sampling equipment will be decontaminated following *AWS SOP-01* prior to use in each monitoring well.

In the event free product is encountered in a monitoring well, a grab sample may be collected for laboratory hydrocarbon identification (HC ID) analysis. Free product grab samples may be collected using a disposable bailer and string instead of the pump system. AWS does not anticipate encountering free product during completion of this scope of work, based on previous site conditions.

Laboratory samples will be containerized, preserved, and transported to the analytical laboratory (Energy) following the procedures outlined in *AWS SOP-08*, and in accordance with the referenced analytical methods, using vessels and preservatives provided by the analytical laboratory. Laboratory analyses to be requested are discussed in Task 11, below.

Reusable monitoring and sampling equipment will be decontaminated following *AWS SOP-01* prior to use in each monitoring well. Unused water evacuated from each well will be handled in accordance with *AWS SOP-56*.

Task 8 – Remedial Injection Pilot Study Design

Field and laboratory analytical soil and groundwater data gathered during installation of the proposed new monitoring wells and completion of groundwater monitoring Event #1 will be reviewed and evaluated as part of the remedial injection pilot study design. This will be done to help ensure the design is based on data representing current conditions at the site.

Based on groundwater data from the July 2022 monitoring event, which are assumed to be generally representative of current conditions for the purposes of this work plan, AWS anticipates the remedial design will consist of enhanced sulfate reduction. Although the details of the pilot study design (including the actual injectate solution, overall dosing, application rates, etc.) will be developed as part of this task, the rough outline below is presented as a likely framework for planning and cost estimating purposes:

- Treatment area: The horizontal injection line (IP-1) was placed in pea gravel at a depth of approximately 8 feet bgs, which is roughly 2 feet above the typical groundwater interface. Application of injectate solution into IP-1 is therefore expected to affect subsurface soil and groundwater at these depths across the central and southern portions of the 2018 excavation area, as well as soil and groundwater downgradient from these areas. Although the lateral extents are yet to be determined, AWS anticipates observable effects at wells TMW-5R (within the injection area) and TMW-10 (immediately cross-gradient from the injection area). Petroleum-impacted wells TMW-3 (up-/cross-gradient), TMW-6 (cross-/down-gradient), TMW-7 (up-/cross-gradient) are unlikely to exhibit observable effects during the proposed study period.
- Injectate solvent: Potable water will be used as the injectate solvent.
- Primary injectate solute: Magnesium sulfate heptahydrate (aka Epsom salt) will be used as the primary injectate solute.
- Secondary injectate solute: Tersus Environmental, LLC's Nutrimens® is expected to be used as a secondary injectate solute, with the intended purpose of enhancing biodegradation through microbial stimulation.
- Delivery mechanism: The injectate will be delivered through gravity injection at IP-1.
- Dosing: Up to 3,000 total gallons of injectate may be delivered, including:
 - Potential batch dosing (increments of 50 to 300 gallons) may be necessary, depending on achievable infiltration rates.
 - The overall dose may be delivered over the course of several consecutive field days, potentially including a "rest" period of several days between increments, again depending on achievable infiltration rates.
- Evaluation of effective range and efficacy of treatment: field and laboratory data from post-injection monitoring events with pre-injection data. Changes in DTW, petroleum contaminant concentrations, and/or intrinsic biodegradation indicators (IBIs) will all be evaluated to determine the effective range and overall efficacy of remedial injections.

AWS will prepare a written summary of the remediation injection pilot study design, which will be presented to DEQ as an appendix to the groundwater monitoring Event #1 Interim Data Submittal discussed in Task 9, below. The pilot study design will include the elements in the framework

presented above, at a minimum, along with discussion of specific design and post-injection evaluation criteria to be used.

AWS also anticipates preparing and submitting a *Class V Injection Well Notification* to EPA Region 8 once the pilot study design has been completed.

Task 9 – Interim Data Submittal

AWS will prepare an interim data submittal (IDS), following DEQ's required IDS format, following completion of groundwater monitoring Event #1. The IDS will be submitted to Tire-Rama and DEQ electronically, in Portable Document File (PDF) format. A hard copy will not be prepared.

Preliminary findings presented in the IDS will be evaluated as part of AWS's pilot study design, which will be appended to the IDS. Preliminary findings will be discussed with DEQ to determine if changes to the remaining scope of work are warranted, especially in the event of significant changes from the anticipated remedial design framework presented in Task 8 above. Modifications to the remaining scope of work will be coordinated with Tire-Rama, DEQ, and the PTRCB, as appropriate.

Task 10 – Limited Remedial Injection Pilot Study

For the purpose of this work plan, AWS anticipates the limited remedial injection pilot study will be generally consistent with the rough framework discussed in Task 8 above. Pending receipt of DEQ's approval, AWS will coordinate with EPA Region 8, DEQ, and Tire-Rama as necessary to implement the approved injection plan as promptly as feasible.

AWS has utilized potable water from a spigot within the Tire-Rama building for previous field activities. However, given the volume of water expected to be required for the remedial injection pilot study, additional coordination with Tire-Rama's on-site personnel may be required.

Additionally, as mentioned in Task 5, it is understood Tire-Rama utilizes the area along the east side of their building (i.e., near IP-1) to service large vehicles which cannot fit inside the shop bay areas. We anticipate utilizing containers ranging from 55 to 300 gallons for mixing and delivery of injectate solution to IP-1. In order to limit impacts to Tire-Rama's operations in this area during remedial injections, while still allowing safe access for AWS's personnel, it may be necessary to position the mixing/dosing containers along the south side of the building, using hoses to deliver potable water to, and injectate from, the tanks.

Task 11 – Laboratory Analyses

AWS anticipates submitting soil and groundwater samples collected during completion of this work plan to Energy Laboratories, Inc. (Energy) in Helena, Montana. Standard analytical turnaround time will be requested for all analyses.

Laboratory analyses for soil and water samples collected under this scope of work will be requested for the respective tasks, as discussed below. Requested analyses have been selected

based on historic soil and groundwater data for the site and requirements stipulated primarily for gasoline releases in the February 2024 *Montana Risk Based Corrective Action Guidance for Petroleum Releases (RBCA)*.

It should be noted that, although Extractable Petroleum Hydrocarbon (EPH) screen and fractionation analyses have been completed for soil and groundwater samples originating from the site during past investigations, historic and recent analytical data for soil and water samples collected from site indicate continued analysis of EPH may not be warranted. AWS proposes completing EPH screen analysis for soil samples collected during this scope of work, and for water samples collected from wells TMW-5R and TMW-10 (i.e., in the vicinity of the former waste oil UST). Pending evaluation of soil data and groundwater Event #1 data, AWS may recommend complete discontinuation of further EPH analyses.

Lead scavengers 1,2-dichloroethane (DCA) and ethylene dibromide (EDB) have not been present in detectable concentrations in groundwater samples collected from the site. Therefore, AWS proposes discontinuation of DCA and EDB analyses for soil and groundwater samples for this release.

Soil Samples from Direct-Push Drilling (Task 5)

Soil samples collected during direct-push drilling activities will be analyzed for the following parameters:

- *Volatile Petroleum Hydrocarbons (VPH)*, by the Montana VPH Method: All soil samples, including natural and duplicate samples.
- *Extractable Petroleum Hydrocarbons (EPH) Screen*, by the Montana EPH Method: Natural samples from boring TMW-10 only. No duplicate samples.
- *EPH Fractions*: Natural samples from TMW-10 exhibiting Total Extractable Hydrocarbon (TEH) concentrations exceeding DEQ's EPH Screen criterion of 200 milligrams per kilogram (mg/kg), if any. No duplicate samples.

In addition to providing information necessary for evaluation of the extents of petroleum contamination in the study area, the analyses listed above are understood to be sufficient to characterize anticipated drill cutting waste for eventual disposal. For the purpose of this work plan, it is assumed eventual drill cutting waste will be transported to and disposed at the HCUD landfill, located southeast of Havre.

Water Samples from Groundwater Monitoring (Task 7)

The table in Attachment C summarizes the analyses which will be requested for natural and duplicate samples to be collected during each monitoring event. Laboratory analysis of select IBIs will be requested, along with laboratory analyses of petroleum analytes stipulated in the February 2024 RBCA for groundwater suspected of being contaminated by gasoline.

As discussed above, AWS proposes EPH screen analysis of groundwater samples from wells TMW-5R and TMW-10 for Event #1. Pending evaluation of soil sample data and Event #1

groundwater data, AWS may recommend discontinuation of future EPH analyses. In any case, EPH screen analysis are not recommended for Events #2 and #3, as VPH analyses are expected to be sufficient for evaluating the efficacy of remedial injections during these events. If warranted, Event #4 will include EPH screen analyses.

Task 12 – Data Validation Form Preparation

Upon receipt of final laboratory analytical data for each soil and groundwater sampling event, AWS will complete data validation in accordance with DEQ's *Data Validation Summary Form*. Data will be validated to assess the precision, accuracy, repetitiveness, comparability, and completeness of the reported parameters.

Note that PTRCB reimburses preparation of DEQ's *Data Validation Summary Form* separately from the actual validation of data, which is reimbursed as a portion of the Report Preparation task. AWS anticipates preparing a total of 5 *Data Validation Summary Forms* for this project, as discussed in the preceding sections and summarized below:

- 1 Soil Sample Analytical Report. As noted in Task 5 above, the VPH analytical hold time for soil samples is 48 hours. Since soil samples are expected to be collected over the course of 2 field days, soil samples are expected to be transported to the laboratory in a single sample set. The laboratory will subsequently deliver soil analytical results in a single report, meaning only 1 data validation form is expected to be required.
- 4 Groundwater Sample Analytical Reports. A separate analytical report is expected to be required for each of the 4 groundwater monitoring events discussed in Task 7, meaning 4 data validation forms are expected to be required.

Task 13 – Release Closure Plan Update

Following completion of Tasks 2 through 12, including receipt and review of all final analytical data, AWS will update the previous RCP. This will include assessing available historical data for the release, as well as data collected during the investigation to be completed under this work plan. The results will be evaluated to help determine an appropriate remediation plan to address residual contamination from the petroleum release at the site. The updated RCP will also list identified data gaps which should be addressed during future work.

Task 14 – Report Preparation

Following completion of Tasks 2 through 13, including receipt and review of all final analytical data, AWS will prepare a summary report which will comply with DEQ's *Remedial Investigation Report (RPT_RI)* format. As noted above, PTRCB reimburses data validation as a portion of the Report Preparation task, so data validation will be completed under Tasks 9 and 14, even though completion of the *Data Validation Summary Forms* will technically be completed under Task 12.

In any case, the report will include a discussion of methods and findings from the remedial activities completed as part of this scope of work, including evaluation of the efficacy of the remedial injection pilot study; discussion of data validation; and discussion of the updated RCP. Data will be presented in tabular form, and select information will be presented on a site

diagram(s). The report will be submitted to Tire-Rama and DEQ electronically, in PDF format. A hard copy of the report will not be prepared or provided.

SCHEDULE

Note that DEQ typically requires initiation of a work plan once approved, without regard to the timing of PTRCB's obligation of funding. AWS will initiate implementation of Tasks 2 through 14 following our receipt of DEQ PTCS's work plan approval, but only after also receiving Tire-Rama's authorization to proceed. Any delay of implementation after issuance of DEQ's work plan approval letter will need to be coordinated with DEQ.

The actual project schedule will be contingent on various conditions which are indeterminable at the time of preparation of this work plan, including but not limited to approval from all listed parties, weather, and availability of AWS personnel and subcontractors. AWS will coordinate with Tire-Rama, DEQ, and other stakeholders as appropriate and will make reasonable efforts to adhere to the desired schedule.

FEE

AWS's fee for completing the scope of work described in this Work Plan will be assessed in accordance with the cost estimate presented in Attachment D. The cost estimate includes drilling and excavation subcontractor fee proposals, as well as applicable portions of the DEQ/PTRCB groundwater monitoring unit cost tool.

It is important to note that costs associated with implementation of Task 10 (Limited Remedial Injection Pilot Study) cannot be known until the remedial injection design has been prepared and approved by DEQ. Accordingly, the costs shown in the cost estimate for Task 10 may need to be adjusted following preparation and approval of the pilot study design.

Services provided under this work plan will be invoiced using AWS's PTRCB labor and equipment rates for the period of performance. Our estimated total fee for completing the scope of work detailed above is approximately **\$84,342.80**. The estimated total fee is based on our 2025 PTRCB billing rates and the assumptions noted herein.

Actual costs may vary somewhat, depending on a variety of factors, including but not limited to unforeseen delays or other necessary but unexpected changes to the scope of work. AWS will coordinate changes to the scope of work, if necessary, with Tire-Rama, DEQ, and PTRCB staff prior to implementing the changes.

Petroleum release 4723 at the Tire-Rama Havre site is eligible for PTRCB reimbursement of eligible costs, with no known penalties or reductions in eligibility. AWS understands Tire-Rama is recognized by the PTRCB as an eligible party for reimbursement of costs associated with the investigation and remediation of the release.

The PTRCB has already reimbursed 50% of the first \$35,000 in eligible costs for this release (commonly referred to as the “\$17,500 co-pay” for a release) and is expected to provide reimbursement of 100% of subsequent eligible costs, up to a maximum of \$1 million (\$982,500.00 after deductible, with no penalty). It is important to note that some costs for common tasks are considered ineligible by the PTRCB staff, including costs incurred performing tasks required by DEQ, in some cases. Examples of costs which are typically ineligible for reimbursement include, but are not limited to, the following:

- Preliminary coordination efforts and other costs incurred prior to work plan preparation.
- Investigation and remediation activities completed without prior DEQ approval.
- Costs exceeding PTRCB staff’s established maximum allowable rates or task totals for project administration, groundwater sampling, work plan and report preparation, etc.
- All costs associated with closure/removal of USTs.
- Some costs associated with hazardous materials (e.g., asbestos, lead paint, etc.) assessment and abatement and subsequent building demolition.
- Some costs associated with maintenance and repair of monitoring wells and monitoring well protectors.
- Preparation of applications for PTRCB reimbursement of eligible costs.

Based on information provided by PTRCB staff on February 19, 2025, a total of \$325,230.60 in costs have been submitted for reimbursement for this release, and PTRCB has issued \$304,910.91 in reimbursements. Since the “co-pay” has already been met for this release, 100% of future eligible costs totaling up to \$677,589.09 are expected to be reimbursed by the PTRCB.

AWS will submit invoices relating to this scope of work directly to Tire-Rama for payment. We anticipate preparing and submitting an application for reimbursement to the PTRCB following completion of the final report for this work plan. The reimbursement application prepared and submitted by AWS will include additional documentation required by the PTRCB, including *Acknowledgement of Payment Form 6* documents confirming AWS’s receipt of payment from Tire-Rama for AWS invoices included with the application. Completed *Form 6* documents will also be included confirming AWS’s payment to our subcontractors, as applicable.

AWS anticipates the PTRCB will subsequently issue a reimbursement payment directly to Tire-Rama. As discussed above, and in our previous correspondence, AWS anticipates a portion of the anticipated costs shown in the Cost Estimate will be deemed ineligible by the PTRCB. Tire-Rama will remain financially responsible for payment of AWS’s invoices in the event costs are deemed ineligible for reimbursement by the PTRCB.

LIMITATIONS

The scope of work included in this work plan has been prepared for Tire-Rama and includes only those services described above. This work plan does not include remedial or disposal services, or costs for such services, beyond those listed specifically in the scope of work.

Monitoring results represent a “snapshot” of conditions during the monitoring period from which the samples were collected and may not be representative of potential future conditions. AWS cannot and does not warrant that the scope of services described in this work plan will be adequate to identify all potential environmental conditions or latent conditions at the site. Our scope of work will be performed with a standard of care meeting or exceeding that of other environmental consultants performing similar work in the area.

ACCEPTANCE

Tire-Rama authorized AWS to prepare this work plan by signing our *Work Order 12120.5* on February 26, 2025. Please indicate Tire-Rama’s acceptance of this work plan, and authorization for initiation of the scope of work presented herein under the terms of AWS’s *Work Order 12120.5*, by signing below and returning a signed copy to AWS.

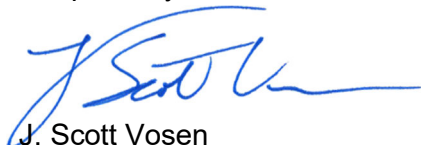
Work Plan Acceptance: _____
Signature / Printed Name Date

A copy of this work plan will be submitted to the Montana DEQ on behalf of Tire-Rama. It is understood DEQ’s review of the work plan will relate only to the technical aspects of the proposed scope of work.

Assuming DEQ approves the work plan from a technical standpoint, it is presumed they will forward the work plan and cost estimate to the PTRCB staff for their review. PTRCB staff’s review of the work plan is presumed to relate only to the proposed costs to implement the scope of work approved by DEQ. Note that DEQ may require implementation of the work plan prior to PTRCB’s obligation of funding. Any delay of implementation after issuance of DEQ’s work plan approval letter will need to be coordinated with DEQ.

If you have any questions or concerns relating to this work plan, please call me at your earliest convenience to discuss (406.315.2201).

Respectfully Submitted,



J. Scott Vosen

Principal

scott@airwatersoil.com

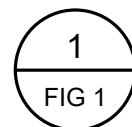
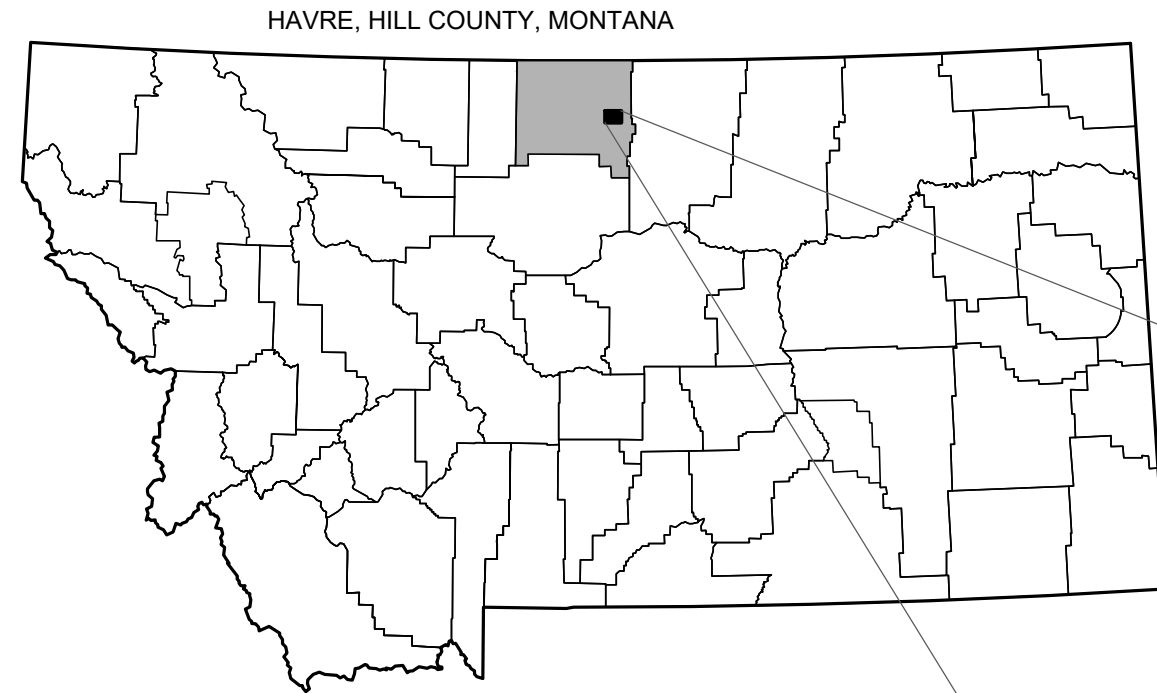
Attachments: A – Figures
B – AWS Standard Operating Procedures
C – Groundwater Monitoring Analytical Plan
D – Cost Estimate

cc: Donnie McCurry, Montana DEQ PTCS, P.O. Box 200901, Helena, MT 59620. Transmitted via email to DMcCurry@mt.gov.



ATTACHMENT A

Figures



SITE VICINITY MAP

205 FIRST STREET WEST, HAVRE, MONTANA 59501
TIRE-RAMA HAVRE
2025 WORK PLAN FOR ADDITIONAL RI
TIRE-RAMA

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05.09.2025
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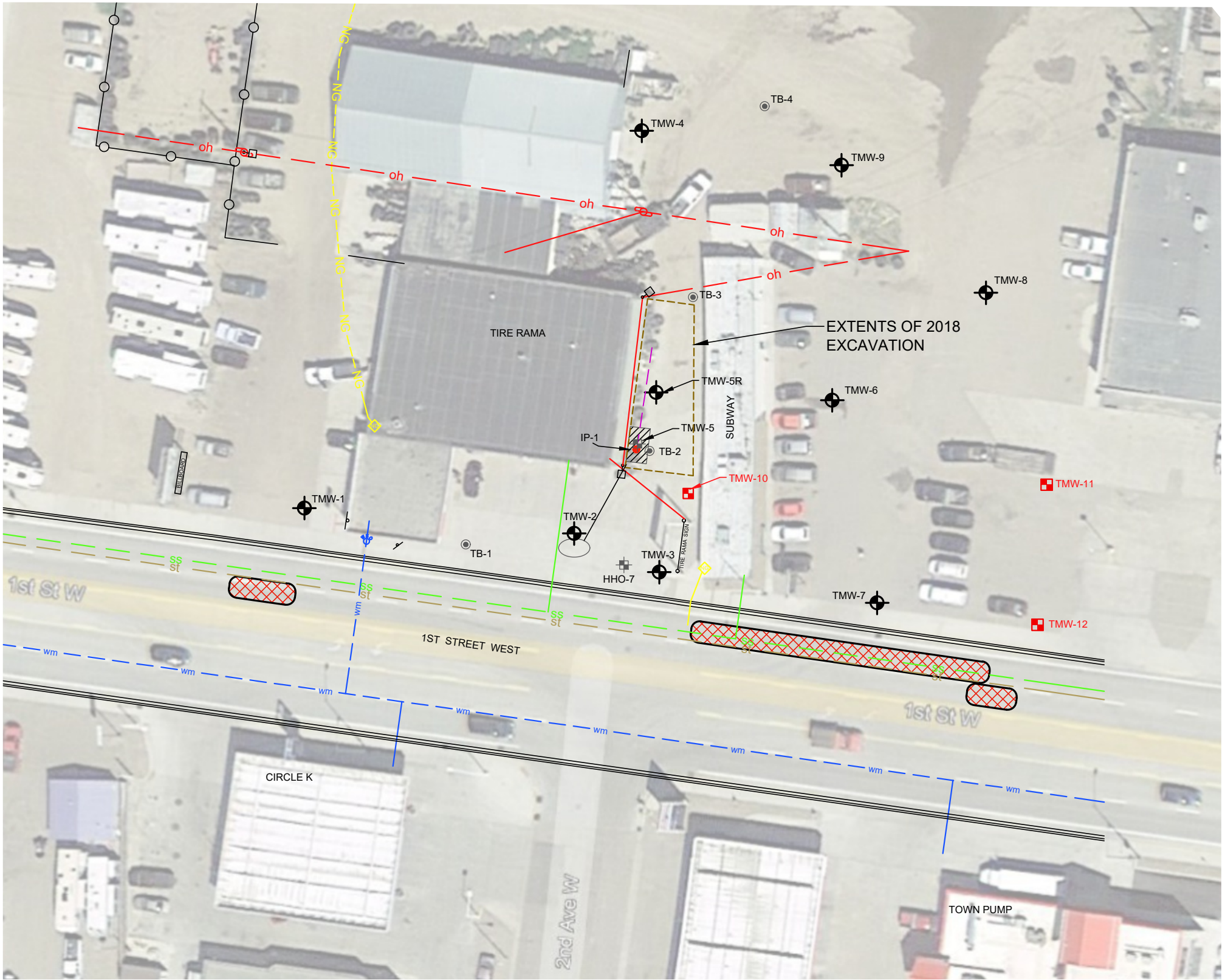
DRAWN BY
DRESCH
CHECKED BY
JSV

SITE VICINITY
MAP

FIGURE
1

LEGEND

- UTILITY POLE
- LIGHT POLE - ONE LIGHT AND DIRECTION
- STORM DRAIN OPEN GRATE
- WATER SHUTOFF
- NATURAL GAS METER
- oh OVERHEAD UTILITY LINE
- NG UNDERGROUND NATURAL GAS
- ss SANITARY SEWER LINE
- st STORM SEWER LINE
- wm WATER LINE
- FENCE LINE - CHAIN LINK
- APPROXIMATE LOCATION OF FORMER UNDERGROUND STORAGE TANK (UST) BASIN, SUPPLY PIPING, AND DISPENSER ISLAND.
- APPROXIMATE LOCATION OF PETROLEUM-IMPACTED SOIL EXCAVATION COMPLETED BY MONTANA DEPARTMENT OF TRANSPORTATION DURING 2007/2008 ROADWAY RECONSTRUCTION.
- TMW-1 EXISTING MONITORING WELL
- HORIZONTAL INJECTION LINE AND INJECTION POINT IP-1.
- FORMER MONITORING WELLS (TMW-5; HHO-7).
- FORMER SOIL BORING LOCATION (NOT COMPLETED AS MONITORING WELL).
- TMW-10 2025 PROPOSED ADDITIONAL MONITORING WELL LOCATION.



1
FIG 2 SITE DIAGRAM





ATTACHMENT B

AWS Standard Operating Procedures



STANDARD OPERATING PROCEDURE

Field Sampling Equipment Decontamination

AWS SOP-01

EQUIPMENT:

- Disposable gloves (e.g., latex, nitrile)
- Eye protection
- Phosphorus-free detergent concentrate (e.g., Alconox®, Liquinox®)
- Concentrated alcohol (e.g., isopropyl, methanol) to make 10% solution
- Concentrated nitric acid to make 10% solution
- Deionized (DI), distilled, or potable tap water
- Spray bottles, collapsible dispensers, buckets, basins
- Scrub brushes
- Disposable wet-wipes
- Paper towels
- HEPA-filtered vacuum
- Garbage bags

PROCEDURE:

Decontamination of asbestos sampling tools and equipment is generally accomplished using HEPA-filtered vacuums, disposable wet-wipes, or water and paper towels. Cleaning is continued until visible contaminants are removed to prevent cross contamination between samples, and to prevent potential fiber exposure.

Decontamination of petroleum investigation sampling equipment generally includes a 3-step process: 1) detergent scrub; 2) alcohol/acid rinse; and 3) water rinse.

Prepare detergent solution by mixing detergent concentrate with potable water in a large cooler or basin. Keep this mixture free from contaminants; draw small portions out into smaller basins/buckets as needed. Prepare 10% alcohol-in-water and 10% nitric acid-in-water solutions in collapsible containers and/or spray bottles. Methanol and nitric acid solutions should be prepared using DI or distilled water.

Decontamination should be performed in an area upwind of the contamination zone or otherwise reasonably free from contaminants of concern. Gross contaminants/debris should be removed from equipment and left in the sampling area(s) if practicable. Remove remaining gross contamination by scrubbing equipment with detergent solution in a small basin. Empty basin and refill with fresh detergent solution as necessary. Rinse with alcohol solution, nitric acid solution (when sampling for metals), and DI/distilled water.

Dry decontaminated equipment using paper towels or place in an area as free from contaminants of concern as practicable and allow to air dry.

Caution should be used to avoid direct contact with contaminated materials; gloves and eye protection should be worn during preparation of decontamination fluids and during decontamination of sampling equipment. Decontamination fluids should be prepared in a location as free from contamination as practicable.



STANDARD OPERATING PROCEDURE

Field Sampling Equipment Decontamination

AWS SOP-01

DISPOSAL:

All disposable items (soiled wipes, used paper towels, vacuum filters, etc.) should be deposited into a garbage bag and properly disposed. Decontamination waste from asbestos decontamination may require disposal as asbestos waste.

Decontamination fluids for petroleum investigations do not need to be collected under most circumstances. Spread decontamination fluids over a paved surface, if practicable.



STANDARD OPERATING PROCEDURE

Soil Sample Collection

AWS SOP-02

EQUIPMENT:

- Shovels, spades, hoes, trowels, etc.
- Stainless steel mixing bowl
- Stainless steel hand auger
- Excavation equipment (e.g., backhoe, trackhoe)
- Drill rig sample equipment (e.g., steel split spoons, MacroCore® tubes)
- Field forms
- Disposable gloves and decontamination fluids (per AWS SOP-01)
- Leak-tight cooler with ice

GENERAL:

Soil samples should be described according to the procedures outlined in the Unified Soil Classification System (USCS – method ASTM D2487) or the Soil Conservation Service (SCS) classification system. Soil texture should be classified by either the USCS or USDA classification.

Pertinent soil sample information should be recorded on sampling forms or on specific documents identified in the SAP. Information should be recorded in a way to facilitate preparation of an overall soil sample summary. Information to be recorded for individual soil samples typically includes the following:

- Sample name/I.D.
- Collection date and time
- Sample type (grab/composite; natural/duplicate)
- Sample location, including diagram reference, if applicable
- Sample preservation, if applicable
- Analysis(es) to be performed
- Notation of deviations from SOP, if applicable

Decisions regarding sample collection and analyses will be guided by project-specific parameters and conditions. Collection and analysis of soil samples for evaluation of suspected or confirmed petroleum releases will generally be completed in accordance with the Montana Department of Environmental Quality (DEQ) *Final February 2024 Montana Risk-Based Corrective Action Guidance for Petroleum Releases (RBCA)*. Sampling requirements stipulated in the RBCA are shown in *Table B – Testing Procedures for Soils and Water* from the RBCA, which is presented on the following page of this SOP.

Decontamination will be completed following procedures outlined in AWS SOP-01.



STANDARD OPERATING PROCEDURE

Soil Sample Collection

AWS SOP-02

Petroleum Product	VPH	EPH Screen	EPH Fractionation	EPH for PAHs	RCRA Metals + Zinc	EPA Method 8260B – Oxygenates /VOCs	Lead Scavengers
Gasoline/Aviation Gasoline	R						SS
Diesel (#1 & #2)	R	R	X	SS			
#1 - #2 Heating Oils	R	R	X	SS			
#3 - #6 Fuel Oils		R	X	X			
Used/Waste Oil	R	R	X	X	SS	R	SS
Kerosene, Jet Fuel (Jet-A, JP-4, JP-5, JP-8, etc.)	R	R	X	SS			
Mineral/Dielectric Oils		R	X				
Heavier Wastes		R	X	X			
Crude Oil	R	R	X	X			
Unknown Oils/Sources	R	R	X	X	SS	R	SS

Table B - Testing Procedures for Soils and Water

R - required analysis

X - analysis to be run if the EPH screen concentration in is >200 mg/kg TEH or >1,000 µg/L TEH in soil and water, respectively.

SS - Site-specific determination.

SURFACE SAMPLING:

Surface soil samples are collected from the surface to depths of approximately 6 inches below ground surface (bgs), unless otherwise specified in the project specific SAP. Sufficient sample will be collected for the analysis that will be performed, but generally, this will be less than 1 quart. Soil samples will be collected in either wide mouth glass jars or re-sealable polyethylene bags (Ziploc® or equivalent).

Samples should be collected from an area of approximately 1 square foot or less using shovels, trowels, etc., as appropriate. Where composite samples are desired for petroleum samples, care should be taken to minimize volatilization while mixing. Field mixing may be accomplished in the mixing bowl or in a sealed Ziploc bag for EPH and metals samples. Field compositing should not be completed for VPH or VOC samples. Aliquots may be containerized individually and submitted for laboratory compositing, if necessary.

If a sod or duff layer is present, this layer should be peeled back to the top of the mineral soil. Likewise, larger aggregate (e.g. > ¾" diameter) should generally be removed from the sample.

The sample must be well mixed, with a representative portion placed in the sample container. Quarter the sample in the bowl/bag and place an equal volume of soil from each quarter in the sample container(s) provided by the laboratory. Label sample containers (location, depths, etc.) and place on ice as quickly as practicable and keep cool until receipt by laboratory. Transfer to laboratory using chain-of-custody (COC) protocol and overnight shipping or direct delivery, if applicable.



STANDARD OPERATING PROCEDURE

Soil Sample Collection

AWS SOP-02

SUBSURFACE SAMPLING:

Ensure subsurface utilities, including any private utilities (e.g., electrical for signs, water & controls for irrigation, etc.) have been surface-marked prior to initiation of subsurface sampling activities. Consider utilizing “daylighting” techniques where utility locations are unknown.

Arrange for disposal of cuttings/waste material prior to initiation of sampling (e.g., return to boring/excavation; transport/dispose at a landfill; etc.), including waste manifesting, if appropriate. Where waste materials must be temporarily left on site, arrange for storage in drums, lined berms, etc., as appropriate.

Ensure equipment (drill rigs, backhoes, trackhoes, etc.) can safely access the areas to be sampled. Minimize damage to the surface (landscaping, pavement, etc.) as feasible, or arrange for repair prior to on-site activities.

Subsurface sampling will generally be completed using a hand auger, excavator, or drill rig. Sampling procedures for each type of equipment are described below. Sample collection, homogenization, compositing, transfer to sampling containers, and transmittal to the laboratory should follow the same procedures as outlined for collection of surface samples.

Hand auger: Auger holes can be drilled at a consistent diameter or in a telescoping manner, if contamination between sample intervals is a concern. The telescoping method includes advancing the largest auger to an approximate depth of 3 feet bgs, collecting specified depth increment samples as the auger is advanced. Install temporary casing (e.g., new or decontaminated PVC) with a diameter slightly smaller than the borehole to keep the hole open and reduce possible cross-contamination between depth intervals. Using the next size smaller bucket auger, repeat the process. Record lithology from recovered cuttings throughout. Select sample intervals for field screening and packaging for laboratory analysis in accordance with procedures described in the SAP. Return cuttings to the boring as feasible, or abandon the boring with hydrated bentonite chips. Restore the site in accordance with the project plan.

Drill Rig: Retrieve sampler from driller. Split spoon samplers are generally utilized by advancing alternating larger samplers (~3-inch diameter) and small samplers (~1.5-inch diameter), both being approximately 2.5-feet long, using hollow-stem auger drilling methods. MacroCore® samples are generally obtained by advancing 4-foot-long sample tubes of approximately 1.5-inch diameter using a direct-push drilling method. In either case, record lithology and percent recovery from cores retrieved. Collect at least 1 sample interval from each recovered interval for field screening, and select sample intervals for packaging for laboratory analysis in accordance with procedures described in the SAP. Return cuttings to the boring as feasible, or abandon the boring with hydrated bentonite chips. Restore the site in accordance with the project plan.

Excavations: Excavate to the prescribed depth. If the excavation depth exceeds 5 feet, OSHA construction standards for shoring or sloping must be followed to prevent accidental injury. Sampling personnel should enter the excavation only as necessary, and always with care, during and after excavation. Soil profile descriptions shall be made from a freshly



STANDARD OPERATING PROCEDURE

Soil Sample Collection

AWS SOP-02

scraped surface along the excavation wall or base, as feasible. Soil samples shall be collected from depth intervals specified in the SAP.

After sampling is completed, the excavation should be backfilled with excavation material in the reverse order that it was excavated so topsoil material is returned to the surface. Alternatively, if excavated material is being disposed, backfill with imported fill material. Backfill material should be mechanically compacted to extents feasible, or in accordance with project-specific requirements in the SAP. Restore the site in accordance with the project plan.

PREPARATION AND PRESERVATION:

All soil samples will be packaged and preserved in accordance with the respective analytical method(s), using containers and preservatives provided by the analytical laboratory, where applicable. Samples will be placed in coolers with ice (or refrigerators) as soon as practicable following collection and will be kept cool until received by the laboratory, as required for the respective method(s).

Samples will be containerized and shipped using chain-of-custody protocol, as outlined in AWS SOP-08. This includes placement of custody seals on coolers (or on individual sample containers).

Standard analytical methods, sample container and preservation requirements, and analytical hold times are presented in *Table A – Soil Sampling and Preservation Protocol* on the following page of this SOP. The provided *Table A* has been taken from DEQ's *Final February 2024 RBCA*.



STANDARD OPERATING PROCEDURE

Soil Sample Collection

AWS SOP-02

Parameter	Analytical Method	Sample Container/ Preservation	Holding Time
Soil Samples			
VPH	Montana Method VPH	60 mL or 40 mL VOA vials or 4 oz wide mouth jar. Collect at least 10 g of soil, cool to $4 \pm 2^{\circ}$ C. Must be preserved at the lab in methanol within 48 hours of collection. or Methanol preservation in the field. 1 mL methanol for every g soil, +/- 25%; lab can provide appropriate vials with methanol for easy collection; cool to $4 \pm 2^{\circ}$ C. If preserving with methanol in the field, a sample containing no methanol must also be submitted for determining moisture percentage.	28 Days to analysis from collection. If collecting in the field without methanol, lab preservation in methanol w/in 48 hours and 28 days to analysis from collection.
EPH Screen	Montana Method EPH	4-oz wide-mouth amber glass jar, cool to $4 \pm 2^{\circ}$ C	Extracted within 14 days of collection. Analyzed within 40 days of extraction.
EPH Fractionation with or without PAH's	Montana Method EPH (PAHs: 8270))	One 4-oz glass jar, cool to $(4 \pm 2)^{\circ}$ C	Following EPH Screen 14-day to extraction, 40 days to analysis.
VOCs/Oxygenates/ 1,2 DCA/lead scavengers EDB	EPA Method 8260 /SW-846-5035A	One 4-oz. glass jar, cool to $(4 \pm 2)^{\circ}$ C Preserve in methanol in field or at lab within 48 hours of collection.	48 hours to lab extraction. 14-day hold time from collection MeOH preservation: 14 days to extraction and analysis from collection.
RCRA Metals plus zinc (Except Hg)	EPA Method 6010 or 6020	One 4-oz. plastic or glass jar, no preservation	6 months
Mercury (Hg)	EPA Method 7471 B	One 4-oz. plastic or glass jar, no preservation	28 days
% Moisture-required for all soil samples	USDA Handbook 60 method 26 (or equivalent)		

Table A - Soil Sampling and Preservation Protocol

Alternate approved versions of the methods are allowed.



STANDARD OPERATING PROCEDURE

Field Measurement of Total Volatile Organic Compounds

AWS SOP-03

EQUIPMENT:

AWS measures total volatile organic compounds (VOC) using a photoionization detector (PID) with a 10.6 electron volt (eV) lamp, following a “heated headspace” method. The PID should be fully charged the day prior to field usage, and extra batteries or field chargers should be available, as feasible. Calibration equipment and supplies should be included in the field kit based on the recommendations of the manufacturer. These generally include a cylinder of compressed calibration gas, a pressure/flow regulator, and an activated carbon “zero” filter.

Field screening sample containers may consist of either heavy zip-top plastic bags (e.g., Ziploc® Freezer bags or equivalent) or glass canning jars fitted with aluminum foil under the metal lid rings. Plastic bags and aluminum foil should never be reused. When using canning jars, the jars and rings should be decontaminated between sample analyses (see AWS SOP-01). Whether plastic bags or glass jars are used, sample vessels and sample amounts should be consistent in composition and volume for all field total VOC samples collected for a given project. This will facilitate consistent sample headspace for all field screening samples, increasing data reliability.

Use of personal protective equipment (e.g., disposable latex or nitrile gloves, eye protection, etc.) and decontamination fluids and equipment should be consistent with AWS SOP-01 and AWS SOP-02.

CALIBRATION:

The PID should be field calibrated prior to use at least once per day, at a minimum. Bump testing and/or recalibration should be completed if the accuracy of field data are questioned by the operator, or if the duration of field activities following initial calibration exceeds 8 hours.

In an upwind or otherwise vapor-free atmosphere, turn the instrument on and initiate the calibration procedure per the manufacturer’s instructions. Ensure the calibration span setting in the instrument matches that of the calibration gas. The calibration span gas utilized for field screening of total VOCs at petroleum release investigation projects is 100 parts per million (ppm) isobutylene in air.

PROCEDURE:

Collect soil samples following AWS SOP-02, including labeling of field screening sample containers with the appropriate sample name/identification (ID). Field screening samples are often collected from the same locations as laboratory samples. In such instances, the portions to be containerized for field screening are referred to as field “split” samples.

Ensure field split samples are kept out of direct sunlight, allowing them to warm to approximately 70-80 degrees Fahrenheit (°F) as determined by feel (approximately room temperature). This may be accomplished by placing the sample vessel on the floor board of a running vehicle with the heater turned on. In this scenario, caution should be used to avoid exposing vehicle occupants to VOCs (roll-down windows to provide cross-ventilation). To ensure data precision, warm all samples for a given project to approximately the same temperature over approximately the same amount of time, if practicable.



STANDARD OPERATING PROCEDURE

Field Measurement of Total Volatile Organic Compounds

AWS SOP-03

Attach the sample probe to the PID and allow the instrument to complete its warm-up cycle, if necessary. Opening the sample vessel as little as possible, insert the probe into the “headspace” of the sample vessel. This can be accomplished by opening the zip-top plastic bag enclosure approximately ¼-inch or by poking the probe through the foil jar cover. In either instance, avoid inserting the sample probe directly into the soil. Samples should be analyzed in order of assumed impacts, beginning with the samples inferred to be least impacted and finishing with the samples inferred to be most-impacted.

Continually observe the instrument readout and record the highest concentration (or use the instrument’s “Max” function, if available, taking care to reset the instrument’s “Max” value after each sample reading). Sample name/ID and observed total VOC concentrations should be recorded in a way to facilitate preparation of an overall soil sample and field screening data summary for the project.

Heated and analyzed soil samples must never be containerized for laboratory analysis. Laboratory samples must be split from the original sample and containerized and preserved separately, immediately following collection. Alternatively, laboratory samples may be collected and containerized separately following completion of field analyses.

MAINTENANCE:

The instrument should always be stored in the case provided by the manufacturer when not in use. Maintenance and storage of the instrument and batteries should be conducted in accordance with the manufacturer’s recommendations.

Periodic instrument maintenance should be completed as recommended by the manufacturer, including occasional partial disassembly and removal, cleaning, or replacement of in-line filters and or lamps. Other failed components should be replaced as necessary as well. Some maintenance may need to be completed by the manufacturer or authorized service center.



STANDARD OPERATING PROCEDURE

Field Measurement of Depth to Groundwater

AWS SOP-04

EQUIPMENT:

- Electric Water Level Indicator (well probe)
- Electronic Oil-Water Interface Probe (interface probe)
- Extra batteries
- Field sampling forms
- Decontamination equipment

CALIBRATION:

The well probe and interface probe should be checked annually at a minimum, or more frequently as needed, for proper operation prior to completing field activities. The well probe should be checked by lowering the probe into a cup of clean water and confirming the probe's proper response. The interface probe should be checked by lowering the probe into a cup containing both vegetable oil and clean water, and where the oil and water have had time to separate into two distinct layers, and confirming the probe's proper response to each layer.

GENERAL:

Measure the depth to water in all wells, using the well probe, from the north quadrant of the top of the well casing or from a designated measuring point, as appropriate. Measure and record vertical distance from measuring point to ground level (unless measuring point has been surveyed for elevation). Make sure the measuring point is labeled or marked on the well casing so future measurements can be made from the same location. Obtain a depth to water from the established measuring point to the nearest hundredth of a foot. Record data on appropriate field forms.

Decontaminate the well probe between each well in accordance with AWS SOP-01 and/or the project-specific SAP.

If free-product petroleum is known or suspected to be present in a well, an interface probe should be used to measure the depth to water and thickness of free product in the well.

Using the interface probe, measure the depth to the top of free-product below the designated measuring point. Continue to lower the probe until the bottom of the product/top of groundwater interface is reached. Record both measurements on field forms. Product thickness can be calculated by subtracting the depth to the top of free-product measurement from the depth to groundwater/free-product interface measurement.

Decontaminate the interface probe between each well in accordance with the AWS SOP-01 and/or the project-specific SAP.



STANDARD OPERATING PROCEDURE

Monitoring Well Development

AWS SOP-05

EQUIPMENT:

- 5-gallon bucket graduated in quarter gallons
- Electric Oil-Water Interface Probe (interface probe)
- Bailer(s)
- Disposable bailer rope or reusable Teflon cable on a reel
- Field forms
- Decontamination equipment

GENERAL:

Groundwater will be allowed to equilibrate in the new monitoring well for several days before development. Immediately prior to initiation of development activities, depth to water (DTW) will be measured relative to the previously established measuring point using an interface probe, in accordance with AWS SOP-04 and/or the project-specific SAP. DTW data will be recorded on field forms and will be used to calculate the casing water volume for well development purposes.

A new, disposable, polyethylene bailer will be used to develop the new well. A surge and bail technique will be used to remove sediment from the filter pack. Bailed water and sediment will be contained in a graduated 5-gallon bucket and DTW measurements will be intermittently collected after bailing events to monitor infiltration of groundwater into the well. If sufficient groundwater infiltration to the well occurs, development will continue until purge water turbidity is visibly decreased, or until 10 casing volumes of water have been evacuated. Following development of the well, the post-development DTW will be measured. DTW measurements, purge volumes, and visual observations (qualitative turbidity descriptions) will be recorded on a field form.

If free product petroleum is present in the new well, it will not be developed. In this instance, the thickness of the free product layer would be measured with the interface probe and the measurement recorded on a field form. If the interface probe measurement is inconsistent or if the interface probe is unavailable, an approximate measurement of visible product thickness will be determined using a bailer and tape measure. Recovery, sampling, and analysis of free product petroleum will not be performed under this scope of work.

If specified in the SAP to be completed during the evacuation process, collect water samples for field determinations of temperature, specific conductivity, and pH. Continue developing the well until field parameters stabilize to within $\pm 5\%$ on 3 consecutive measurements. Report field observations and volume of water removed on the field forms.

Dispose purge water in accordance with AWS SOP-56.



STANDARD OPERATING PROCEDURE

Groundwater Sampling

AWS SOP-06

EQUIPMENT:

- 5-gallon bucket graduated in gallons
- Low-flow cell or 12-ounce glass jar
- Hydrogen potential (pH) and temperature meter
- Specific conductance (SC) meter
- Dissolved oxygen (DO) meter
- Oxidation/reduction potential (ORP) meter
- Turbidity meter
- Coolers and ice
- Sample bottles
- Sampling pump – Peristaltic or Bladder-type with controller and compressor
- Disposable bladders (if using bladder pump)
- Disposable tubing
- Bailer(s)
- Bailer rope or Teflon cable reel
- Preservatives
- Disposable in-line filters or filter apparatus with filter media
- Field sampling forms
- Decontamination equipment and indelible marker
- Fluids
- Stopwatch
- Electronic Oil-Water Interface Probe (interface probe)
- Graduated vessel

MAINTENANCE:

All equipment should be inspected for damage and proper functionality (including battery charge) prior to use in the field. Unstable or “drifting” measurement readouts may be indicative of damaged probes/sensors, especially if the problem persists following recalibration. Damaged or improperly functioning equipment should be repaired or replaced as appropriate.

All meters, probes, pumps, sampling equipment, and sample vessels should be decontaminated in accordance with AWS SOP- 01 and following completion of sampling.

CALIBRATION:

Instruction manuals should always be kept with meters, especially sections pertaining to calibration and trouble shooting. Keep spare batteries with each meter. Calibration fluids appropriate for the anticipated sample ranges (pH 4.01 buffer solutions for acidic samples) should be kept with meters and should not be used if marked expiration dates have been exceeded. Several small sample vessels should be kept with meters for calibration and sample analyses.

Calibration of individual meters will vary; calibration should always be performed in accordance with the manufacturer’s recommendations. In general, most meters should be calibrated at the beginning of each field day, at a minimum. Additional calibrations may be necessary if meter readings become questionable. Performance of “bump testing” to



STANDARD OPERATING PROCEDURE

Groundwater Sampling

AWS SOP-06

determine whether meters are within acceptable calibration ranges is advisable for sampling events longer than approximately 6 hours.

DO meters calibrate with barometric pressure. ORP and SC meters may only require periodic calibration using calibration solutions appropriate for the anticipated sample ranges. Two or three-point calibration is advisable for most pH meters; for two-point calibrations, consideration should be given to the anticipated sample range. Turbidity meters use four standards for calibration (800 NTU, 100 NTU, 20 NTU, and 0.02 NTU), if 20, 100, or 800 NTU drifts more than 10% the solution needs to be replaced. Temperature sensors for most meters do not require calibration.

PROCEDURE:

AWS will complete groundwater sampling in accordance with the procedures presented below. Where applicable, groundwater sampling procedures will also be completed in accordance with the current version of DEQ's *Groundwater Sampling Guidance*.

Initial Measurements - Begin by determining the depth-to-water (DTW) in accordance with the AWS SOP-04, and/or the project-specific SAP. If DO is a desired field analysis, gently lower the DO meter's probe, calibrated per manufacturer's guidelines, to just beyond the DTW observed in the previous step. Once submerged, readings will begin trending in a consistent increasing or decreasing manner, until a transitional point is reached and the initial trend is reversed. This transitional point should be recorded on the appropriate sampling form as the pre-purge DO.

Well Purging - Purging must be performed on all wells prior to sample collection. Well purging will be accomplished using a peristaltic pump, bladder pump, or with a disposable polyethylene bailer. The specific purging method shall be chosen based on the following: DTW; diameter of well; existing well configuration; contaminant(s) of concern; and/or, the project-specific SAP. Sampling is generally not conducted when free product (e.g., light non-aqueous phase liquid, or LNAPL) is present.

Where pumping methods are used, field water quality indicators (WQIs) will be observed and recorded in approximate five-minute intervals. Evacuation of fluids will continue until DO, pH, SC, ORP, and turbidity readings stabilize. Stabilized readings will include changes of no more than 0.1 standard unit (su) for pH and no more than 3 percent (%) for SC, no more than 10 percent (%) for DO and turbidity, and 10 millivolts (mV) for ORP.

Where bailer methods are used, purging should remove at least three (3) casing volumes of fluid from the well and until stabilized WQIs are achieved. The following equation is used to calculate well casing volume in gallons:

$$V = 3.14 \times (r^2) \times h \times 7.48$$

Where: V = volume (gallons)
r = well radius (feet)
h = height of water column in well (feet)



STANDARD OPERATING PROCEDURE

Groundwater Sampling

AWS SOP-06

The radius of the well pack will be used for the well radius (r) for calculating volumes. For example, a 2-inch diameter PVC monitoring well installed in a 6-inch diameter borehole with sand filter pack would use a well radius of 3 inches or 0.25 feet.

The height of the water column (h) is calculated as the total well depth minus the DTW measurement for the well.

WQIs will be observed during bailing of each well, if feasible. Stabilized readings will include changes of no more than 0.1 su for pH, no more than 3% for SC, no more than 10% for DO or turbidity, and no more than 10 mV for ORP. If WQIs have not stabilized after five (5) casing volumes have been evacuated, it is at the discretion of the AWS field technician whether to collect a sample or to continue purging.

The actual pumping duration and/or volume of water purged from the well, along with the WQI readings, must be recorded on appropriate sampling forms for all methods of purging.

Wells with documented or expected low yield/slow recovery may require sample collection without prior purging due to limited available water volume.

If the recovery of a low-yield well exceeds 2 hours after purging, a sample shall be extracted as soon as sufficient volume is available in the well. At no time will a monitoring well be pumped dry if the recharge rate causes formation water to cascade down interior portions of the well casing, causing an accelerated loss of volatile organics and change in pH.

General Well Sampling - Wells must be sampled from the least contaminated to the most contaminated, if known. Open well and measure DTW in accordance with the AWS SOP-04. Decontaminate all sampling/down-well equipment in accordance with the AWS SOP-01. Use disposable nitrile gloves throughout decontamination and sampling procedures and use new gloves for each sampling point.

The actual pumping duration and/or volume of water removed from the well, along with all WQI readings, must be recorded on appropriate sampling forms for all methods of sampling.

Low-Flow Method - The goal of low flow purging and sampling is to collect water samples that reflect the total mobile organic and inorganic loads transported through the subsurface under ambient flow conditions, with minimal physical and chemical alterations from sampling operations. During this procedure, emphasis is placed on minimizing hydraulic stress at the well-aquifer interface by maintaining low water-level drawdowns, and by using low pumping rates during purging and sampling operations.

WQIs are monitored during purging to identify stabilized conditions to determine when sample collection may begin. Stabilized readings will include changes of no more than 0.1 su for pH, no more than 3% for SC, no more than 10% for DO or turbidity, and no more than 10 mV for ORP.



STANDARD OPERATING PROCEDURE

Groundwater Sampling

AWS SOP-06

The low-flow method should be implemented with a positive-lift pump (e.g., peristaltic or bladder pump). The pump intake should be located within the well-screen interval and at a depth that will remain under water at all times. It is recommended that the intake depth and pumping rate remain the same for all sampling events. The following equation is used to calculate the pump intake depth or sampling depth:

$$SD = DTW + [(TD - DTW) \div 3]$$

Where: SD = Sampling depth (feet)
DTW = Depth to water (feet)
TD = Total well depth (feet)

Note this equation places the pump intake in the upper one-third of the water column and should be modified to sample from deeper depths, accordingly (e.g., if wanting to sample from the middle of the water column, replace the value of 3 with 2 in the equation).

The low-flow cell should be set up over the 5-gallon bucket so that the pump tubing discharge flows into the cell and overflows into the bucket. The pH, temperature, SC, and ORP (if used) meters should be set up to monitor water quality in the low-flow cell during purging and sampling.

Disposable tubing should be cut to a length that extends from the down-well bladder pump, or sampling depth for peristaltic pump, to the low-flow cell discharge point.

DTW should be measured before installing the pump and continuously recorded during purging at consistent intervals (e.g., 5 or 10 minutes). Pumping rates should, as needed, be reduced to the minimum capabilities of the pump to ensure drawdown of less than 0.3 foot or stabilization of the water level. If the minimal drawdown that can be achieved exceeds 0.3 foot, but remains stable, continue purging until the three (3) casing volumes are removed and/or water quality parameters stabilize.

The final purge volume must be greater than the stabilized drawdown volume plus the pump's tubing volume. If the drawdown has exceeded 0.3 foot and WQIs have stabilized, calculate the volume of water between the initial water level and the stabilized water level. Add the volume of the water which occupies the pump's tubing to this calculation. This combined volume of water needs to be purged from the well after the water level has stabilized before samples are collected.

Bailer Method – Removal of water from the well by bailing will be accomplished using a new, disposable, polypropylene (or other material specified in the SAP), bailer and a spool of polypropylene rope or equivalent bailer cord (e.g., Teflon-coated stainless-steel cable). The length of the bailer and cord should be sufficient for the bailer intake to reach the middle of the well-screen section, and to allow evacuation of water from the lower one-third of the well casing, if needed.



STANDARD OPERATING PROCEDURE

Groundwater Sampling

AWS SOP-06

Bailing should be a semi-continuous procedure of removing water from the upper one-half of the water column. Care should be taken not to disturb sediment in the bottom of the well.

Bailed water should be gently poured into a decontaminated, 12-ounce glass jar equipped with pH, temperature, SC, and ORP (if used) meters to monitor water quality. Bailing will continue until the purging requirements stated previously are achieved.

Domestic Well Sampling – If an active domestic or irrigation well needs to be sampled, then the water needs to be initially purged. First, the total volume of water in the well casing is calculated using equation provided on Page 2 of this SOP. Thereafter, a minimum of three (3) casing volumes of water should be evacuated from the well prior to sampling.

Well purging should be accomplished by opening a faucet connected to the well pump. A faucet location should be selected as close to the well pump as possible. The faucet shall not be located after water treatment systems such as softeners or filtration units.

Flow from the faucet should be measured using a graduated vessel and stopwatch. Several measurements should be taken to monitor possible changing flows during the purging procedure.

If desired, WQIs may be monitored in the discharged fluid during the well purging.

Collecting Water Samples - Label each sample container with project number, sample location, well owner, date, time, sampler's initials, preservative, and analysis required. Wear new disposable nitrile gloves immediately prior to obtaining the sample.

For low-flow samples, several inches should be cut from the end of the sample effluent tubing (i.e., removing the portion in contact with the flow-through monitoring cell) before collecting water samples. A disposable in-line filter should be attached to the cut end of the tubing, as needed, prior to collection of filtered samples.

For domestic well sampling, pump flow should be reduced so that a constant minimal flow is achieved from the faucet. Samples should be collected directly from the faucet and not through rubber hoses. Filtered samples may be obtained by using a filter apparatus fitted with new filter media.

When using a bailer, take care to minimize degassing or contamination of the sample by submerging and withdrawing the bailer slowly to avoid splashing. Do not place the bailer on the ground. Filtered samples may be obtained by using a filter apparatus fitted with new filter media.

Add preservatives to the sample container prior to sample collection. Remove water from the well and transfer sample water directly into sample bottles (using an in-line filter or filter apparatus, as necessary), maintaining a slow linear flow with as little agitation as possible.



STANDARD OPERATING PROCEDURE

Groundwater Sampling

AWS SOP-06

For volatile analyses, fill vials at the rate of about 100 milliliters per minute (24 seconds for 40 mL vial) or less. Fill each sample vial completely so the water forms a convex meniscus at the top to ensure no air space exists in the vial after it has been capped. After filling, immediately cap, invert, and gently tap the vial to check for trapped air. If air bubbles are present, un-cap vial, add more sample water and repeat procedure. If air bubbles continue to be present after repeated filling attempts, cap the vial, keep for laboratory analyses, and note the condition on the field form.

For inorganics samples not requiring preservatives, rinse sample containers three (3) times with sample water before final collection. Do not rinse containers for organics analysis.

Water samples should be preserved as described in the following table, or in accordance with instructions from the analytical laboratory, if different:

PARAMETER	NUMBER	CONTAINER	PRESERVATION	MAXIMUM HOLDING TIME UNTIL EXTRACTION / ANALYSIS
VOCs	3	40 mL glass VOA	6°C and HCL	14 days
VPH	2	40 mL glass VOA	6°C and HCL	14 days for extraction/ 28 days for analysis
EPH	2	1000 mL glass bottle	6°C	14 days for extraction/ 28 days for analysis
SVOCs	2	1000 mL glass bottle	6°C	7 days for extraction/ 40 days for analysis
Metals	1-2*	250 mL plastic bottle	6°C and HNO ₃	6 months 28 days for mercury
Inorganics	1	Varies	varies	Varies – contact laboratory

Notes: VOCs – Volatile Organic Compounds; VPH – Volatile Petroleum Hydrocarbons; EPH – Extractable Petroleum Hydrocarbons; SVOCs – Synthetic Volatile Organic Compounds; mL – milliliter; °C – degrees Celsius; HCL – hydrochloric acid; HNO₃ – nitric acid. *Filtered and/or unfiltered.

Dispose purge water in accordance with AWS SOP-56.

Replace well cap and lock (if present) when sampling is complete, and replace all appurtenances on domestic wells (if present prior to work), when sampling is complete.

Prepare all necessary chain-of-custody forms, sampling forms, and other documentation. Package and ship samples in accordance with AWS SOP-08.



STANDARD OPERATING PROCEDURE

Sample Packaging and Shipping

AWS SOP-08

CHAIN-OF-CUSTODY PROCEDURES:

A chain-of-custody (COC) form must be prepared for all samples collected in the field for laboratory analysis. Multiple samples from the same sampling event, relating to a specific single project, may be included on a COC form. Samples from more than one project should not be included on the same COC form. The sampler should use a COC form provided by the laboratory performing sample analyses.

Completed COC forms must be maintained from the time of sample collection until the time of sample delivery to the analytical laboratory. The completed COC form should accompany the samples through analysis and final disposition. A copy(ies) of the COC form(s) should be maintained in the project file.

Information to be included on the COC form will include, but is not limited to:

- Project number / name
- Sampler's name and signature
- Date and time of sample collection, per sample
- Unique sample name/identification (ID)
- Number of containers per sample
- Sample media (e.g., soil, water, vapor)
- Sample preservative (if applicable)
- Requested analysis(es)
- Comments or special instructions to the laboratory

All samples must be assigned unique sample names/IDs. The information on the COC form, including the ID for a specific sample, must correspond to the information recorded by the sampler on the field forms, and the sample ID label on the sample container, for the respective sample.

A sample is considered under a person's control when it is in their possession. When custody of a sample is relinquished by the sampler, the sampler will sign and date the COC form and note the time that custody was relinquished. The person receiving custody of the sample will also sign and date the form and note the time that the sample was accepted into custody. The goal is to provide a complete record of control of the samples. Should the chain be broken (signed by the relinquisher, but not receiver, or vice versa), the integrity of the sample is lost and the reliability of the resulting analytical data may be degraded.

Samples must be packaged and shipped (or directly transported) to the laboratory following the procedures described below. If an overnight shipping service is used to transport the samples to the laboratory, custody of the samples must be relinquished to the shipping service. If possible, have the shipping service sign the COC form prior to placing the COC form in the sample cooler. If this is not possible (i.e., form placed in sealed cooler), a note should be included on the COC that the shipping company will receive the samples with the COC form inside the sample container.

PACKAGING:

All environmental samples should be packaged and shipped using the following procedures:



STANDARD OPERATING PROCEDURE

Sample Packaging and Shipping

AWS SOP-08

- Label all sample containers with indelible ink (on the side of the container, not on the cap or lid).
- Place labeled sample containers in a sturdy outer shipping box or cooler. When samples must remain refrigerated, use a well-insulated cooler containing an adequate amount of ice, making sure the cooler drain plug is taped shut (if applicable). Water ice should be used whenever feasible. Use of dry ice is more likely to result in freezing of samples, and use of reusable (e.g., “blue”) ice packs is likely to result in samples exceeding the allowable temperature range.
- Place soil and water sample containers in an upright position and wrap the containers with cushioning material for stability during transport. Samples should not be loose; the cooler and packed samples should be able to withstand rough handling during shipment without sample container breakage. If feasible, all sample containers and ice bags should be placed inside at least 1 heavy plastic bag, inside the cooler. The top of the outer bag should be twisted and taped in a “goose neck” fashion to help prevent leaks. It is advisable to place absorbent materials in the outer bag when liquids (including water ice) will be shipped.
- Fill out the appropriate shipping forms and place the paperwork in a Ziploc® bag (or equivalent) and tape it to the inside lid of the shipping container. Shipping forms usually include: 1) a COC form, documenting the samples included in the shipment; 2) an analysis request form, specifying the laboratory analyses for each sample (these are usually on the same form but may be separate).
- If more than one cooler is used per COC, put a photocopy in each of the additional coolers and mark them as a copy. Clearly identify on the COC (and copies) the total number of coolers included in the sample group.
- Complete and apply a custody seal to the exterior of each cooler where the lid meets the cooler container. Close and seal the cooler using clear packing tape. Secure the shipment label with address, phone number and return address clearly visible.

SHIPPING HAZARDOUS MATERIALS / WASTE:

Hazardous materials need to be shipped using procedures specified under Federal Law.

Transportation regulations for shipping of hazardous substances and dangerous goods are defined by the U.S. DOT in 49 CFR, Subchapter C, Part 171 (October 1, 1988); IATA and ICAO. These regulations are accepted by Federal Express and other ground and air carriers.

According to U.S. DOT regulations, environmental samples are classified as Other Regulated Substances (ORS). ORS are articles, samples, or materials that are suspected or known to contain contaminants and/or are capable of posing a risk to health, safety, or property when transported by ground or air. Samples, substances, or materials from sources other than material drums, leachate streams, and sludges should be considered as ORS or environmental samples. Materials shipped under the classification of ORS must not meet any of the following definitions:

- Class 1: explosives
- Class 2: gases (compressed, liquefied, dissolved under pressure, or refrigerated)
- Class 3: flammable liquids
- Class 4: substances susceptible to spontaneous combustion



STANDARD OPERATING PROCEDURE

Sample Packaging and Shipping

AWS SOP-08

- Class 5: oxidizing substances
- Class 6: poisonous (toxic and infectious)
- Class 7: radioactive materials
- Class 8: corrosives.

Coordinate special shipping or direct-delivery arrangements with the Project Manager for samples meeting any of the definitions above.



STANDARD OPERATING PROCEDURE

Disposal of Investigation-Derived Waste

AWS SOP-56

EQUIPMENT:

- Disposal drums (typically steel)
- Adjustable wrench, end wrench, or ratchet/socket for drum lids
- Buckets
- Funnels
- Plastic sheeting (typically 6-mil or heavier)
- Utility knife or scissors
- Shovels (flat, spade, etc.)
- Plastic garbage bags

SOLID WASTE:

Solid investigation-derived waste (IDW) generally includes small quantities of soil generated from drilling or test pit excavations. Larger quantities of waste generated from remedial actions are excluded from this SOP.

Soil cuttings are typically placed back in the holes from which they originated, thereby negating the need for disposal. Similarly, if drill or test pit cuttings do not demonstrate evidence of contamination, as determined through visual or olfactory observations, or through field analysis of total volatile organic compounds (VOC; see AWS SOP-03), the cuttings may instead be spread on unpaved areas of the site. In such instances, coordinate with project stakeholders (e.g., the client, site owner, regulatory personnel, etc.) to determine acceptable areas for placement.

Cuttings which demonstrate evidence of contamination must be transported to an appropriate solid waste disposal facility, such as a licensed landfill or permitted land farm. Characterization of cuttings waste should be completed in accordance with the requirements of the disposal facility selected for the project, as requirements often vary by facility.

Contaminated cuttings may be temporarily stored at the site in steel drums, or stockpiled on paved surfaces or plastic sheeting, when characterization has been completed in advance. Care should be taken to limit the potential for runoff of contaminant from uncovered stockpiles in the event of a precipitation event. For example, berms under plastic sheeting around the perimeter of the stockpile will help prevent runoff. In any case, stockpiled cuttings should be loaded and transported for disposal as quickly as feasible.

Alternatively, when advanced characterization is not feasible, the cuttings may be placed in steel drums and temporarily stored at the site. In some cases, temporary storage of stockpiled soil may be required, in which case stockpiles should be placed on and covered by plastic sheeting, with covered berms utilized as appropriate to limit the potential for runoff of contaminant. Coordinate the temporary storage approach and locations with project



STANDARD OPERATING PROCEDURE

Disposal of Investigation-Derived Waste

AWS SOP-56

stakeholders, and complete waste characterization, transport, and disposal as promptly as feasible.

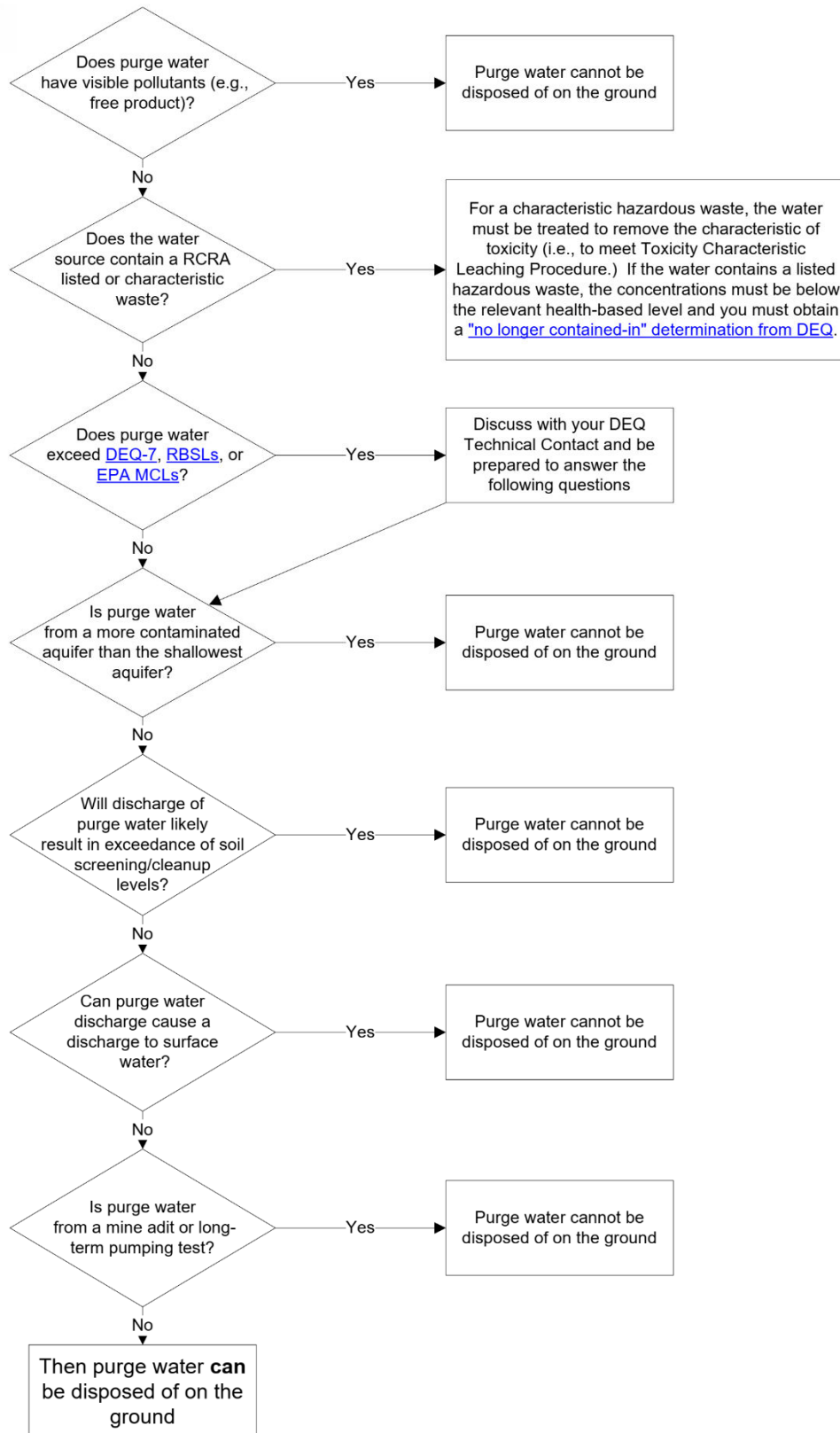
General trash and personal protective equipment waste shall be cleansed of any gross contaminated soil accumulation and shall be placed in plastic garbage bags and properly disposed at a licensed solid waste disposal facility.

LIQUIDS:

Liquid IDW includes purge water generated during well development and groundwater monitoring activities. Purge water shall be assessed in accordance with the Montana Department of Environmental Quality (DEQ) flow chart provided below.

Purge water assessed via the DEQ flow chart and determined not to contain known contaminants may be spread on the ground surface near the source well or boring. Where feasible, such purge water will be surface applied on paved surfaces. Purge water shall not be poured into storm water inlets, sewer manholes, natural drainages, or surface water bodies.

Purge water which is assessed via the DEQ flow chart and is determined to be contaminated shall be contained in drums and disposed at a licensed liquid waste disposal facility in accordance with that facility's disposal requirements. Alternatively, options for disposal of contaminated purge water may be discussed with DEQ in accordance with the flow chart on the following page. Temporary on-site storage of liquid waste in drums should be coordinated with project stakeholders. Characterization of liquid waste should be completed in accordance with the requirements of the disposal facility selected for the project, as requirements often vary by facility. Waste characterization and disposal should be completed as quickly as feasible.





ATTACHMENT C

Groundwater Monitoring Analytical Plan

Work Plan for 2025 Remedial Investigation

Tire-Rama Havre

DEQ Facility 60-15135 (TID 30879); Release 4723; WPID 34944

Wells	Depth to Water (DTW)	Volatile Petroleum Hydrocarbons (VPH) (MT VPH Method)	Extractable Petroleum Hydrocarbons (EPH) Screen (MT EPH Method)	EPH Fractions (MT EPH Method)	1,2-dichloroethane (DCA) (Method 8260B)	Ethylene Dibromide (EDB) (Method 8011)	Alkalinity (Method A2320B)	Dissolved Methane (Method SW8015M)	Sulfates (Method E300.0)	Sulfides (Method A4500-SF)	Nitrogen, Nitrate + Nitrite (Method E353.2)	Dissolved + Total Iron and Manganese (Methods E200.7/E200.8)
Event #1: Pre-Injection. Schedule TBD, pending well installation and development.												
TMW-1	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-2	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-3	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-4	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-5R	✓	✓	✓	✓	--	--	✓	✓	✓	✓	✓	✓
TMW-6	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-7	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-8	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-9	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
<i>TMW-10</i>	✓	✓	✓	✓	--	--	✓	✓	✓	✓	✓	✓
<i>TMW-11</i>	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
<i>TMW-12</i>	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
Duplicate	--	✓	--	--	--	--	--	--	--	--	--	--

Notes:

TMW-## Existing monitoring wells are shown in black text.

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EPH EPH screen and fraction analyses have been removed from this groundwater monitoring plan for most wells based on available historic and recent soil and groundwater analytical data for the site.

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Work Plan for 2025 Remedial Investigation

Tire-Rama Havre

DEQ Facility 60-15135 (TID 30879); Release 4723; WPID 34944

Wells	Depth to Water (DTW)	Volatile Petroleum Hydrocarbons (VPH) (MT VPH Method)	Extractable Petroleum Hydrocarbons (EPH) Screen (MT EPH Method)	EPH Fractions (MT EPH Method)	1,2-dichloroethane (DCA) (Method 8260B)	Ethylene Dibromide (EDB) (Method 8011)	Alkalinity (Method A2320B)	Dissolved Methane (Method SW8015M)	Sulfates (Method E300.0)	Sulfides (Method A4500-SF)	Nitrogen, Nitrate + Nitrite (Method E353.2)	Dissolved + Total Iron and Manganese (Methods E200.7/E200.8)
Event #2: Post-Injection (1 month)												
TMW-1	--	--	--	--	--	--	--	--	--	--	--	--
TMW-2	✓	--	--	--	--	--	--	--	--	--	--	--
TMW-3	✓	--	--	--	--	--	--	--	--	--	--	--
TMW-4	--	--	--	--	--	--	--	--	--	--	--	--
TMW-5R	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-6	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-7	✓	--	--	--	--	--	--	--	--	--	--	--
TMW-8	--	--	--	--	--	--	--	--	--	--	--	--
TMW-9	--	--	--	--	--	--	--	--	--	--	--	--
<i>TMW-10</i>	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
<i>TMW-11</i>	--	--	--	--	--	--	--	--	--	--	--	--
<i>TMW-12</i>	--	--	--	--	--	--	--	--	--	--	--	--
Duplicate	--	✓	--	--	--	--	--	--	--	--	--	--

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Work Plan for 2025 Remedial Investigation

Tire-Rama Havre

DEQ Facility 60-15135 (TID 30879); Release 4723; WPID 34944

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Event #3: Post-Injection (2 months)												
TMW-1	--	--	--	--	--	--	--	--	--	--	--	--
TMW-2	✓	--	--	--	--	--	--	--	--	--	--	--
TMW-3	✓	--	--	--	--	--	--	--	--	--	--	--
TMW-4	--	--	--	--	--	--	--	--	--	--	--	--
TMW-5R	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-6	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-7	✓	--	--	--	--	--	--	--	--	--	--	--
TMW-8	--	--	--	--	--	--	--	--	--	--	--	--
TMW-9	--	--	--	--	--	--	--	--	--	--	--	--
<i>TMW-10</i>	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
<i>TMW-11</i>	--	--	--	--	--	--	--	--	--	--	--	--
<i>TMW-12</i>	--	--	--	--	--	--	--	--	--	--	--	--
Duplicate	--	✓	--	--	--	--	--	--	--	--	--	--

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Work Plan for 2025 Remedial Investigation

Tire-Rama Havre

DEQ Facility 60-15135 (TID 30879); Release 4723; WPID 34944

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Event #4: Post-Injection (6 to 9 months)												
TMW-1	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-2	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-3	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-4	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-5R	✓	✓	✓	✓	--	--	✓	✓	✓	✓	✓	✓
TMW-6	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-7	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-8	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
TMW-9	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
<i>TMW-10</i>	✓	✓	✓	✓	--	--	✓	✓	✓	✓	✓	✓
<i>TMW-11</i>	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
<i>TMW-12</i>	✓	✓	--	--	--	--	✓	✓	✓	✓	✓	✓
Duplicate	--	✓	--	--	--	--	--	--	--	--	--	--

Notes:

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ATTACHMENT D

Cost Estimate

Petroleum Tank Release Compensation Board

Soil Boring/Monitoring Well Installation Unit Cost Worksheet

Contractor Information

Company Name: Boland Drilling

Address: 4701 N Star Blvd

City, State, Zip: Great Falls, MT 59405

Cost Estimator: Chris Boland

Signature: 

Phone: 406-761-1063

Date: mo/day/year 4/25/2025

Project Information and Specifications

Tire Rama

205 First Street West

Havre, MT 59501

Facility ID # 60-15135 TID 30879

Release # 4723

WP ID # 34944

Type of Drilling Equipment

Hollow-Stem Augers

Air Rotary

Direct Push

Other (please specify)

x

Soil Boring

Number of Borings

Boring Diameter (inches)

Depth (per boring - ft)

3
8
20

Surface: Concrete Asphalt Barren

Soil Disposal: Onsite Stockpile Drums

Abandonment: Bentonite Soil Cuttings

Soil Sampling

Continuous Soil Sampling

Interval Soil Sampling (specify interval)

No Sampling

x

Cost Estimate Explanation:

- (1) Mobilization/Demobilization: Includes all costs and mileage to transport equipment, materials, and personnel to and from the site location. More than one mobilization event of either the drilling rig or support vehicle will require justification and pre-approval by the DEQ-PRS and Board staffs. This item should be estimated on a per mile unit rate
- (2) Soil Boring Installation: Includes all costs (labor, equipment, and materials) to drill, collect soil samples and abandon soil borings, as well as decontaminate equipment. Drilling costs should be estimated using a per foot unit rate. Unit cost should include handling of contaminated soil by stockpiling or placing in drums. Assume level "C" personal protective equipment.
- (3) Monitoring Well Installation: Includes all costs (labor, equipment, and materials) to drill, collect soil samples, and complete monitoring well to specifications and according to Montana Well Drillers Board rules, as well as decontaminate equipment. Drilling costs should be estimated using a per foot unit rate. Unit cost should include handling of contaminated soil by stockpiling or placing in drums. Assume level "C" personal protective equipment.
- (4) Drilling Standby: Drilling standby should be estimated on an hourly basis. Prior approval and justification for accumulating standby time is needed prior to billing.
- (5) Well Development: Includes all costs (labor, equipment, and materials) to develop monitoring wells. This task should be estimated using a per well unit rate.
- (6) Monitoring Well Abandonment: Includes all costs (labor, equipment, and materials) to properly abandon a well location according to the Montana Well Drillers Board rules. Abandonment costs should be estimated using a per well unit rate.

Monitoring Well Specifications

Number of Wells

Surface: Concrete Asphalt Barren

Depth (per well)

Estimated Depth to Groundwater (ft)

Boring Diameter (inches)

Casing Diameter and type (inches)

Surface Completion: Flush Mount Aboveground

3

20

8

2" pvc

Soil Boring/Monitoring Well Installation Unit Cost Worksheet

TASK		UNIT COST	NUMBER OF UNITS	TOTAL COST
Mobilization/Demobilization (1)				
Mobilization/Demobilization: Drilling Rig	\$	3.00 /mile	230	\$ 690.00
Mobilization/Demobilization: Support Vehicle	\$	2.00 /mile	230	\$ 460.00
Soil Boring Installation (2)				
Drilling (0'-50' range per boring)	\$	60.00 /foot	48	\$ 2,880.00
Drilling (50'-100' range per boring)		/foot		\$ -
Other (please specify) _____				\$ -
Monitoring Well Installation (3)				
Drilling (0'-50' range per well)	\$	60.00 /foot	46	\$ 2,760.00
Drilling (50'-100' range per well)		/foot		\$ -
Other (please specify) _____				\$ -
Drilling Standby (4)				
-prior approval needed	\$	/hour		#VALUE!
Well Development (5)				
Well Development	\$150	/hour		\$ -
Monitoring Well Abandonment (6)				
Abandonment	\$	/well		#VALUE!
Lodging may only be paid at actual costs when documented by receipts.				
<u>Per Diem</u>				
Lodging: number of individuals =	2	\$ 225.00 /person per day	1	\$ 450.00
Food: number of individuals =	2	\$ 30.50 /person per day	1	\$ 61.00

TOTAL PROJECT EXPENSE

\$7,301.00

D.O.T. Drums

\$120

4

\$480.00

Additional Conditions/Comments/Costs:

Drill and construct 3 monitor wells to 20' each at Tire Rama in Havre, MT. Core concrete (if necessary) \$250.00 each.

If you require assistance, call 406-841-5090.

Submit completed form to:

Petroleum Tank Release Compensation Board PO Box 200902, Helena MT 59620-0902

Scott Vosen

From: Stephen Hansen <hansenps@nemont.net>
Sent: Tuesday, April 22, 2025 5:20 AM
To: Scott Vosen
Subject: Re: Request for Proposal - Havre Tire-Rama

Scott:

Hansen Env. Drilling submits a No Bid.
Please keep us in mind for other projects.

Thanks,

Steve Hansen

On 04/21/2025 5:35 PM MDT Scott Vosen <scott@airwatersoil.com> wrote:

All:

Please find the attached *Request for Proposal* for environmental drilling and monitoring well installation, relating to the ***Tire-Rama*** petroleum release property in Havre, Montana.

The RFP is intended to include sufficient information to facilitate your preparation of a proposal, but please feel free to give me a call if you have any questions or concerns after reviewing the RFP and attachments.

*** If you do not plan to submit a proposal for this work, please let me know that at your earliest convenience. ***

I appreciate your time in reviewing and considering this RFP.

Thank you!



J. Scott Vosen

Principal

406.315.2201 office

406.217.3774 mobile

airwatersoil.com

Scott Vosen

From: mthaztech@gmail.com
Sent: Friday, April 25, 2025 9:38 AM
To: Scott Vosen
Subject: RE: Request for Proposal - Havre Tire-Rama

Scott,
At this time I am going to decline to bid on this project.
Thanks,
Paul

From: Scott Vosen <scott@airwatersoil.com>
Sent: Monday, April 21, 2025 5:36 PM
Subject: Request for Proposal - Havre Tire-Rama

All:

Please find the attached *Request for Proposal* for environmental drilling and monitoring well installation, relating to the ***Tire-Rama*** petroleum release property in Havre, Montana.

The RFP is intended to include sufficient information to facilitate your preparation of a proposal, but please feel free to give me a call if you have any questions or concerns after reviewing the RFP and attachments.

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Thank you!



J. Scott Vosen

Principal

406.315.2201 office

406.217.3774 mobile

airwatersoil.com



Virus-free. www.avast.com

Scott Vosen

From: Tyler Smith <tyler@lakesideexcavation.com>
Sent: Tuesday, April 22, 2025 4:59 PM
To: Scott Vosen
Subject: RE: Request for proposal - Tire-Rama drill cuttings disposal

Scott

We can take care of this for 400.00 will you need something more formal or will this work?

Thank you

Tyler Smith
Owner-Estimator
Lakeside Excavation Inc.
220 22nd Ave W.
Havre, MT 59501
Office 406-265-9401
Cell 406-262-3178
Fax 406-265-5693

www.lakesideexcavation.com

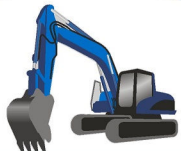


<https://www.facebook.com/Lakesideexcavation/>



<https://www.linkedin.com/company/lakeside-excavation-inc/>

LAKESIDE



EXCAVATION
HAVRE MONTANA



MONTANA CONTRACTORS ASSN.
Quality People. Quality Projects.



From: Scott Vosen <scott@airwatersoil.com>
Sent: Tuesday, April 22, 2025 12:33 PM
To: Tyler Smith <tyler@lakesideexcavation.com>
Subject: Request for proposal - Tire-Rama drill cuttings disposal

Tyler,

I'm preparing a work plan and cost estimate for environmental drilling at the Tire-Rama property in Havre (205 First Street West). I anticipated drilling up to 3 soil borings, each of which may generate approximately 1 drum (55-gallons) of petroleum-impacted drill cuttings.

Assuming you are interested in assisting with this work, please provide a proposed fixed-fee to load, transport, and dispose the drums at the Hill County Unified Disposal landfill east of Havre. The schedule will be contingent on approvals from our client, DEQ, and the PTRCB, but I anticipate the work may be completed this fall or early winter.

Please give me a call if you have any questions or would like to discuss, and please let me know if you are not interested in providing a fee proposal.

Thank you.



J. Scott Vosen

Principal

406.315.2201 office

406.217.3774 mobile

airwatersoil.com