



Resource Technologies, Inc.

1050 East Main Street Suite 4, Bozeman, MT 59715
Internet: mail@rtimt.com • Voice: (406) 585-8005 • Telefax: (406) 585-0069

April 17, 2024

Mr. Jonathan Love
Montana Department of Environmental Quality
Petroleum Technical Section
Airport Business Park IP-9
1371 Rintop Drive
Billings, MT 59105-1978

Subject: Corrective Action Work Plan; COSTCO Gasoline Facility #69; 2290 King Ave West; Billings, Montana; Facility ID 56-13953, Release (Pending)

Responsible Party: COSTCO Wholesale
730 Lake Drive
Issaquah, WA 98027

Contact: John Shaw
(425) 313-6280
johnshaw@costco.com

Dear Mr. Love,

On behalf of COSTCO Wholesale (COSTCO); Resource Technologies, Inc. (RTI), is submitting the following work plan for corrective action, and groundwater monitoring associated with a petroleum release at the COSTCO Gasoline Facility #69 located at 2290 King Avenue West in Billings, Montana (Figure 1).

BACKGROUND

UST system removal activities were conducted on November 2 and 3, 2023. During UST removal, staining and odors indicative of a release were not evident. The UST excavation encountered groundwater and a “grab” groundwater sample was collected using the excavator bucket on November 2, 2023. Water sample results were received on November 7, 2023 and indicated elevated concentrations of ethylbenzene and xylenes that exceeded Montana numeric water quality standards (WQB-7). RTI reported the suspected release to DEQ at 4:06 PM on November 7, 2023.

Due to the method of sample collection (backhoe bucket), the analytical result was considered suspect. RTI collected a second water sample from the excavation on November 8, 2023 using a clean bailer. Analytical results indicated concentrations of benzene and C5-C8 aliphatics that exceeded WQB-7 standards or Montana Tier 1 Risk

Based Screening Levels (RBSLs) for groundwater. Although the profile of contaminants in the November 2 and November 8 samples were different from each other, the November 8 sample results confirmed groundwater impacts in the UST basin area. Site layout is shown in Figure 2.

During UST-basin backfilling, RTI installed two injection lateral pipes for introduction of soil or groundwater amendments consisting of 4-inch diameter, 0.020 inch slot PVC well screen laid horizontally at the soil groundwater interface (depth approximately nine feet) and connected to the surface by a 4-inch PVC riser pipe. Injection-lateral locations are shown in Figure 2.

RTI completed a remedial investigation (RI) that included installation of five groundwater monitoring wells, collection of soil samples from monitoring-well boreholes, and collection of groundwater samples from the new wells. Soil sampling results for all boreholes did not exhibit any exceedances of applicable soil Risk Based Screening Levels (RBSLs) in samples collected from the soil groundwater interface or from the bottoms of the boreholes.

Only one monitoring-well sample (MW-1) exhibited exceedances of groundwater RBSLs. Concentrations of ethylbenzene, naphthalene, and C9-C12 aliphatics exceeded groundwater RBSLs in the sample. On the basis of soil and groundwater data generated during the RI, RTI recommended injecting Oxygen Releasing Compound into the former UST basin via the injection laterals.

SCOPE OF WORK

Work tasks proposed in this plan are intended to mitigate residual groundwater impacts in the former UST basin and provide groundwater sampling data to bring the release to closure. The scope of this work plan includes the following tasks:

- Inject slurry containing 320 pounds of RegenesiS ORC Advanced (oxygen releasing compound) into the injection lateral at the upgradient edge (northwest corner) of the former UST basin.
- Conduct two rounds of groundwater monitoring: pre injection and approximately three to four months after injection;
- Submit groundwater samples for Volatile Petroleum Hydrocarbons (VPH) analysis;
- Validate all laboratory data;
- After first sampling event, prepare an Interim Data Submittal;
- Update Release Closure Plan if necessary; and
- Following second sampling event, prepare a Groundwater Monitoring Report.

Amendment Application

RTI will inject a slurry containing 320 pounds of RegenesiS ORC Advanced™ oxygen releasing compound. The slurry will be introduced via the injection lateral emplaced at the northwest corner of the former UST basin excavation prior to backfilling. Injection-

lateral location is shown in Figure 2. The product will be mixed with water according to manufacturer instructions and will be pumped into the injection lateral.

Groundwater Monitoring

Groundwater samples will be collected from monitoring wells MW-1 through MW-5 prior to amendment injection and approximately three to four months after amendment injection.

Prior to purging, water-level measurements will be obtained from wells using an electronic water level indicator. Water levels in wells suspected of containing free product will be measured with an oil-water interface probe. After each measurement, the probes will be decontaminated using a detergent wash followed by a distilled water rinse.

Groundwater samples will be collected from monitoring wells with a variable-speed stainless-steel submersible pump and low-flow sampling methods. During purging, groundwater stabilization parameters including pH, water temperature, specific conductance, dissolved oxygen, oxidation/reduction potential, and turbidity will be monitored and recorded on a groundwater sampling log. Once groundwater parameters have stabilized in accordance with MDEQ groundwater sampling guidance, groundwater samples will be collected in laboratory provided containers and appropriately preserved as specified by each analytical method. Following sample collection at each location, sampling pumps, cables, and flow-through cell with probes, will be decontaminated.

Laboratory Analysis. The sample containers will be placed in iced coolers to maintain a temperature of $\pm 4^{\circ}$ C, and transported under chain-of-custody procedures to the Energy Laboratories for VPH analysis.

Data Validation. Following receipt of the analytical reports from the laboratory, RTI will validate all analytical data using MDEQ's Data Validation Summary Form.

Disposal of Investigation-Derived Waste

Development and purge water will be handled and disposed in accordance with the MDEQ Purgewater Disposal Flow Chart.

Release Closure Plan

If, following the second groundwater sampling event, sampling data indicate the necessity for further corrective action, RTI will update the existing site Release Closure Plan (RCP) in the format provided by MDEQ to evaluate potential corrective action alternatives to bring the release to closure. The alternatives will be evaluated for cost effectiveness, performance effectiveness (protectiveness and compliance), reliability, ease of implementation, and public safety.

Evaluation and Reporting

Following the first groundwater sampling event and amendment injection, RTI will prepare an Interim Data Submittal that will include:

- Description of amendment injection activities,
- Tabulated groundwater analytical and elevation data,
- Potentiometric surface maps,
- Contaminant distribution maps, and,
- Field data sheets, laboratory analytical reports, and data validation summary forms.

Upon completion of the second groundwater sampling event and receipt of analytical data, RTI will prepare and submit a Groundwater Monitoring Report that will incorporate data generated under this work plan. The report will include the following:

- Facility map(s) showing site layout, locations of monitoring wells, potentiometric surface, dissolved contaminant distribution, and dissolved contaminant plumes,
- Tabulated summaries of the new and cumulative groundwater sampling data (laboratory analytical results and data validation checklists will be appended to the report),
- RCP will be updated if necessary and a copy of the RCP will be appended to the report,
- If warranted, recommendations for additional remediation work required to resolve the Release.

The original reports (hard copy) will be submitted to the Responsible Party. Electronic versions will be submitted as required by MDEQ.

SCHEDULE

Following approval of this work plan by the MDEQ, we anticipate that the first groundwater sampling event and amendment injection will be completed during the week of April 22, 2024. We anticipate that each groundwater sampling event will be completed in one day.

If you have any questions or comments regarding this workplan, please do not hesitate to call.

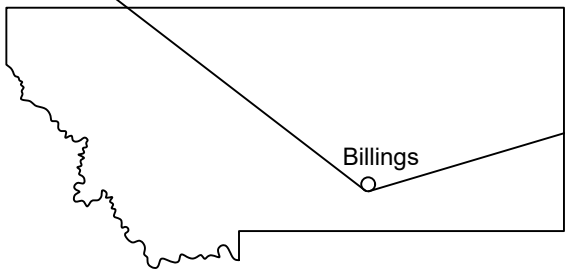
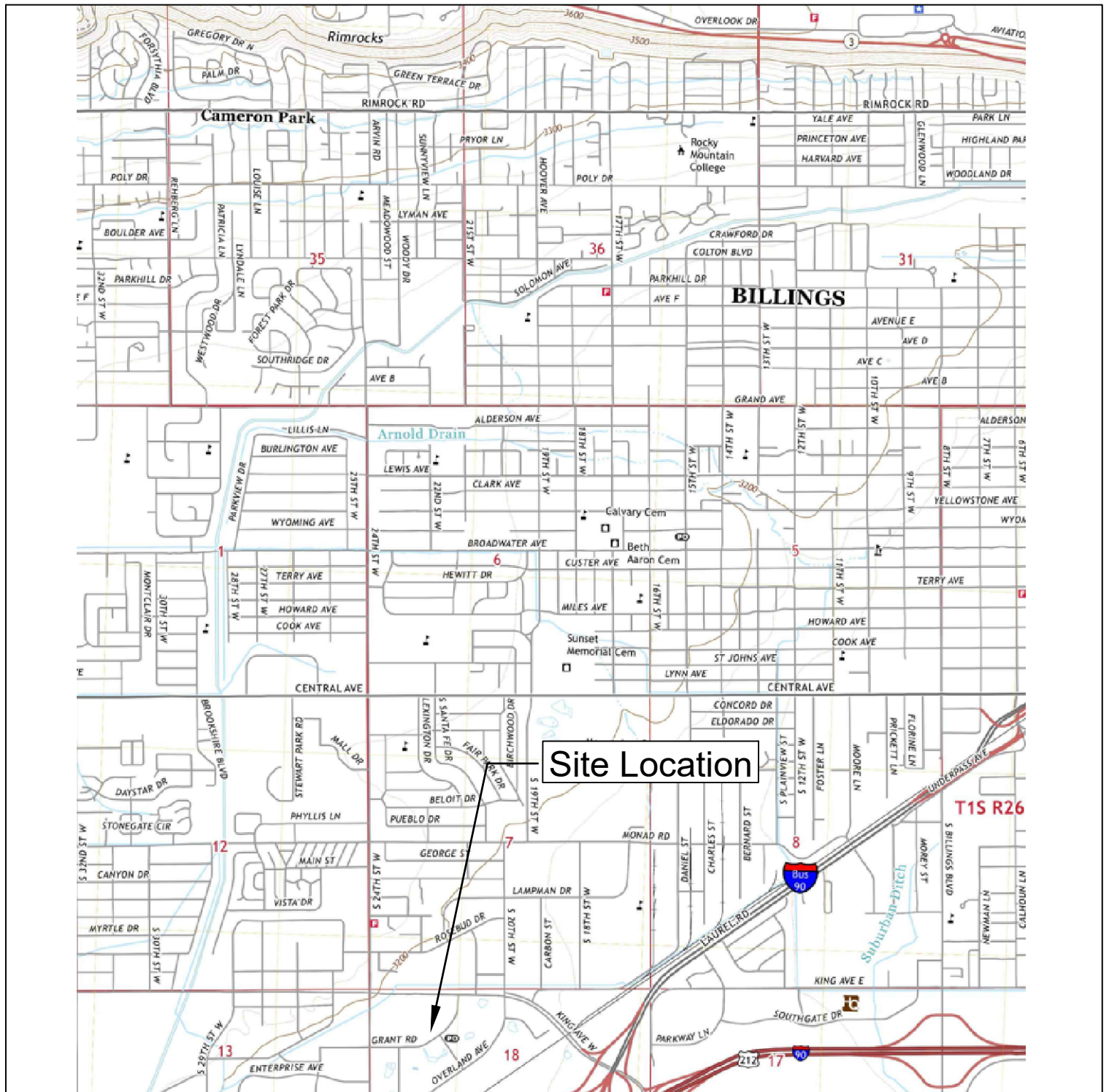
Respectfully Submitted,
Resource Technologies, Inc.



Joe Laudon
Hydrogeologist

Attachments

cc: Corey Park; Kleinfelder
Andy Franks; Kleinfelder

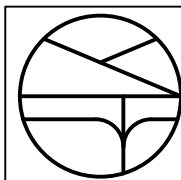


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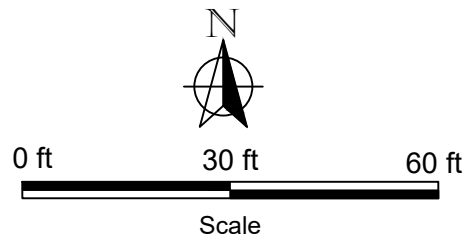
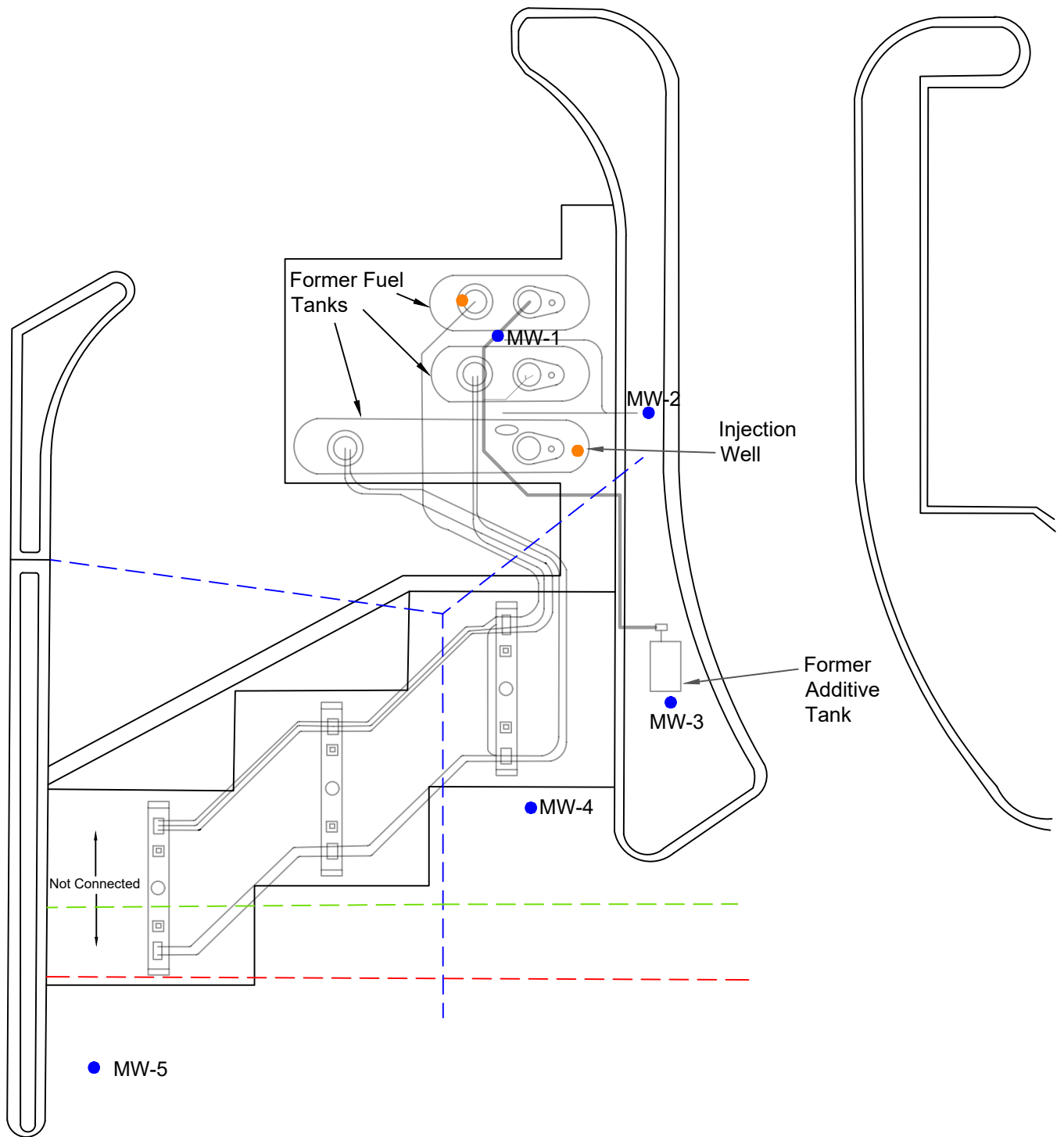


Scale

Figure 1
 Site Location
 2290 King Ave. West
 Billings, MT 59102
 Costco Gasoline Facility 69



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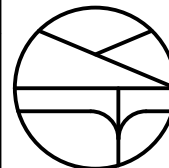


Legend

- MW-5 ● Monitoring Well ● Injection Well
- Storm Drain Line --- Sewer Line
- Fire Line

Figure 2

Site Map
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