

January 24, 2025

Mr. Jim Alford CHS Inc, dba Zip Trip 4407 N. Division Street, Suite 300 Spokane, Washington 99207

Delivered via email: jim.alford@chsinc.com

SUBJECT: Remedial Investigation Work Plan Former Zip Trip #42 3100 North Montana Ave. Helena, Montana DEQ Facility ID 25-12353; TID 23889 Release 6677, Work Plan 34984 Tetra Tech Project Number 117-001036-25003A

Dear Mr. Alford:

Tetra Tech, Inc. (Tetra Tech) is pleased to submit this work plan to conduct a remedial investigation (RI) to investigate the release at the former Zip Trip #42, 3100 North Montana Ave. Helena Montana (Figure 1). This work plan has been prepared in response to a request from Mr. Donnie McCurry of the Montana Department of Environmental Quality (DEQ) in correspondence dated December 19, 2024 (DEQ, 2024). In this correspondence, Mr. McCurry made the following requests:

• Validate all laboratory analytical data using DEQ's Data Validation Summary Form found online under the Guidance dropdown at the PTCS webpage.

• Discuss ongoing WP tasks and results with DEQ's project manager; submit written agreed-upon WP modifications as required to complete the WP objectives.

• Prepare a Release Closure Plan (RCP); discuss results with DEQ's project manager. Use the RCP format found online under the Guidance dropdown at the PTCS webpage.

• Prepare and submit a Remedial Investigation Report detailing the results of the investigation. The RI report must include all format sections outlined in the RI Guidance document.

• Use standardized DEQ WP and report formats found under the Guidance dropdown at the PTCS webpage.

• Submit WP and reports electronically following the PTCS submittal requirements found under the Guidance dropdown at the PTCS webpage.

The following work plan presents a brief discussion of the site's history and the proposed scope of work to meet the DEQ request.



BACKGROUND

The site is at 3100 North Montana Ave., Helena, Montana (Figure 1). During October 2024, Energisystems removed the petroleum distribution system from the site. The system was comprised of three underground storage tanks (USTs) and six dispensers under a single canopy. They encountered a gasoline odor once they reached groundwater at a depth of approximately 10 feet below ground surface (Tetra Tech, 2024).

Seventeen soil samples and two groundwater sample were collected from below the UST basin, distribution system and dispensers. Five of the six soil samples collected from the UST basin at a depth of approximately 10 feet below ground surface (bgs) contained petroleum hydrocarbon concentrations at levels below the MDEQ Risk Based Screening Levels (RBSL, MDEQ, 2024). One soil sample collected from beneath the southeast most dispenser also contained a total Extractable Hydrocarbon (TEH) concentration of 12 milligrams per kilogram (mg/Kg). Two groundwater samples collected within the UST basin indicated multiple RBSL exceedances. While the water samples were analyzed for different analyses it appeared diesel was the primary contaminant.

SCOPE OF WORK

The general scope of work for this project includes installing up to four soil borings and completing these borings as groundwater monitoring wells. After the monitoring well installation task, static water levels will be measured, and groundwater samples will be collected from all monitoring wells on site. A Remedial Investigation Report (RIR) will be prepared.

Due to the upcoming sale of the property to a third party we intend on waiting for the new party to complete the demolition of the existing structures and re-paving prior to conducting the installation of the monitor wells. The following details describe the methods to be used for this investigation:

SUBSURFACE INVESTIGATION

- Prepare this work plan outlining the on-site activities' objectives that comply with the MDEQ requirement for a Remedial Investigation Work Plan, which must include all format sections in the Montana RI Guidance.
- Complete a site-specific health and safety plan prior to initiating any on-site activities.
- Conduct an underground utility locate using the Montana 24-hour Utility Notification Center. Zip Trip will be responsible for locating on-property underground utilities. Due to the planned locations of the soil borings and the potential presence of underground utility lines, some borehole locations may need to be cleared for underground utilities to a depth of six feet using an air-knife or hydro-vac daylighting procedure. This task has not been included for cost estimating purposes but will be included should the underground utility locates indicate potential issues with the proposed boring locations.



- Drill up to four soil borings using hollowstem drill rig in the areas indicated in Figure 2. Exact locations will be determined after on-site an assessment of site-specific access, underground utility locates, and safety. To assess petroleum hydrocarbon impacts, soil borings will be executed to a depth of approximately 20 feet below ground surface (bgs). Drilling bids are presented in Attachment A.
- Collect soil samples from each borehole continuously and log each sample for soil type, density, moisture content, color, and evidence of petroleum hydrocarbon staining and odor.
- Each sample will be screened for petroleum hydrocarbon impacts using visual observations of staining, odor, and standard headspace screening techniques with a photo-ionization detector (PID).
- Up to two soil samples will be collected from each boring for laboratory analysis. One soil sample will be collected from the top of the saturated zone. A second sample may be collected in the zone of greatest petroleum impacts (as identified during field screening). Each soil sample will be placed in clean laboratory-supplied containers and submitted to Energy Laboratories in Billings, Montana. The soil samples will be analyzed for volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) screen using the Montana Method for VPH and EPH (MDEQ, 2024). By MDEQ guidance, if the EPH concentration in the soil exceeds 200 milligrams per kilogram (mg/Kg), then an EPH fractionation analysis is required (MDEQ, 2024). For cost-estimating purposes, it will be assumed that four soil samples will also be analyzed for EPH fractionation.
- Impacted drill cuttings, as identified by field screening, will be containerized on-site within 55gallon drums. A soil sample will be collected from the containerized soil and submitted for laboratory analysis of VPH, EPH, and Resource and Conservation and Recovery Act (RCRA) metals per landfill disposal requirements. Non-impacted soils will be thin spread onsite

MONITORING WELL INSTALLATION

- Each soil boring will be completed as a monitor well with two-inch diameter Schedule 40 PVC materials (Figure 2). The well screen piping will be 0.010 slot size well screen and installed from 10 to approximately 20 feet bgs. A sand pack of 10-20 silica sand will be placed adjacent to the well screen from the total depth of the boring to approximately two feet above the well screen. A threaded cap will be installed on the bottom of the screen casing. Bentonite chips will be placed from the sand pack to approximately two-feet bgs. The monitoring wells will be completed with an eight-inch diameter flush-mount steel protector casing concreted in place. The top of the PVC casings will be fitted with two-inch diameter water-tight locking plugs. The subcontractor bids for monitoring well installation are provided in Attachment A.
- Each monitoring well will be developed using a surge block and water pumping technique. The well will be surged and pumped until the pumped water is sediment free and clear. Development water will be containerized by the Disposal of Untreated Water from the Monitoring Wells Flow Chart and disposed of appropriately following receipt of laboratory results (MDEQ, 2015).



 The vertical elevation of each new and existing monitoring well PVC casing will be surveyed by and overseen by a licensed engineer or conducted by a licensed surveyor to an accuracy of 0.01 feet and mean sea level datum.

GROUNDWATER MONITORING

- Depth to groundwater will be measured for each monitoring well (new and existing) using an electronic oil/water interface meter. The meter will be decontaminated between each well measurement using Liquinox® soap solution and clean potable water rinse.
- Each monitoring well will be purged with low-flow slow-purge pumping method using a submersible bladder pump and dedicated polyethylene tubing. During purging, field instruments will analyze the water for pH, temperature, dissolved oxygen, specific conductivity, oxidation-reduction potential, and turbidity. Purge water will be containerized in accordance with the Disposal of Untreated Water from Monitoring Wells Flow Chart and disposed of appropriately following receipt of laboratory results (MDEQ, 2015). The pump will be decontaminated between wells using a Liquinox solution followed by a triple rinse technique. Additionally, a new bladder will be installed between each well.
- A groundwater sample will be collected from each monitoring well using a submersible bladder pump and dedicated polyethylene tubing. Groundwater samples will be analyzed for VPH and EPH via the methods listed above. By MDEQ guidance, if the EPH concentration in water exceeds 1,000 micrograms per liter (µg/L), then an EPH fractionation analysis is required (MDEQ, 2024). For cost-estimating purposes, it will be assumed that three water samples will also be analyzed for EPH fractions.
- A groundwater sample will also be collected from each well for analysis of lead scavengers ethylene dibromide (EDB) and 1,2-dichloroethane (DCA).

RECEPTOR SURVEY

- Document the use and occupancy of on-site and adjacent buildings.
- Utility drawings for the City of Helena will be reviewed to identify construction material and approximate depth of each underground utility line at the site and on the adjoining properties.
- A to-scale map of the facility with locations of all identified underground utilities, wells, and surface water bodies will be produced.
- Research wells downgradient of the site using the Montana Bureau of Mines and Geology (MBMG) website for potential at-risk wells in the vicinity of the site.

DATA VALIDATION

Each analytical data package will include a summary report that cross-references the sample identification with the laboratory identification and identifies variations from standard operating procedures; laboratory analytical results; quality control data, which may include but is not limited to: surrogate recoveries, initial and continuing calibration blanks and spikes, method



blanks, laboratory control blanks, and spikes, and matrix spike and matrix spike duplicates; FID chromatograms; chain of custody form(s); and a sample receipt checklist.

Additionally, data validation will be included with the investigation report and will follow DEQ's data validation guideline as per

https//deq.mt.gov/Portals/112/Land/StateSuperfund/Documents/DataValidationReport.pdf. It is anticipated that two separate data validations will need to be completed for this project.

REMEDIAL INVESTIGATION REPORT PREPARATION

Tetra Tech will prepare a Remedial Investigation Report (RIR) presenting findings and conclusions, soil and groundwater investigations, and groundwater monitoring activities. The report will include results from field screening activities, figures depicting site features, underground utilities, well locations, well completion details and logs, a summary of soil sampling results, groundwater elevations, groundwater potentiometric surface map, groundwater flow direction and gradient, a summary of groundwater analytical results, discussion on the vertical and aerial extent of impacts based on the investigation data.

SCHEDULE AND BUDGET

Tetra Tech will initiate this work upon receiving authorization from Zip Trip, approval from the MDEQ, and the obligation letter from the Montana Petroleum Tank Release Compensation Board (MPTRCB). The work described above will be conducted on a unit cost basis per the attached Montana Remedial Investigation Guidance for Petroleum Releases Workplan & Report Preparation Cost Considerations, Groundwater Monitoring, and Sampling Unit Cost Worksheets, and Cost Estimate Breakdown included in Attachment B.



Remedial Investigation Work Plan Former Zip Trip #42 Helena, Montana January 24, 2025

AUTHORIZATION

The work described in this plan will be conducted per the terms and conditions in the Master Services Agreement between CHS Inc. and Tetra Tech, dated June 1, 2009. Should you find this work plan acceptable, please sign the Work Authorization #2025-10 included in Attachment C and return a signed copy to our Billings, Montana office. If you have questions or comments regarding this work plan, don't hesitate to call us at (406) 248-9161. For your convenience, we have forwarded a copy of this work plan to DEQ for their review. We appreciate the opportunity to provide you with environmental consulting services.

Sincerely,

Tetra Tech, Inc.

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Jeff Rice Sr. Project Scientist

Steva Main

Steven Marie Sr. Engineer

Cc: Donnie McCurry, MDEQ, <u>dmccurry@mt.gov</u>

I/A-G/CHS Inc/117-001036-25003A- Zip Trip42 Helena Remed Inv/Deliverables/Draft/January 2025 Work Plan/Zip Trip 42 RI Work Plan 2025.docx

Enclosures

Figures Attachment A: Cost Estimates Attachment B: Drilling Bids Attachment C: Work Authorization #2025-10



REFERENCES

Montana Department of Environmental Quality (MDEQ), 2024. Montana Tier 1 Risk-Based Corrective Action Guidance for Petroleum Releases. February.

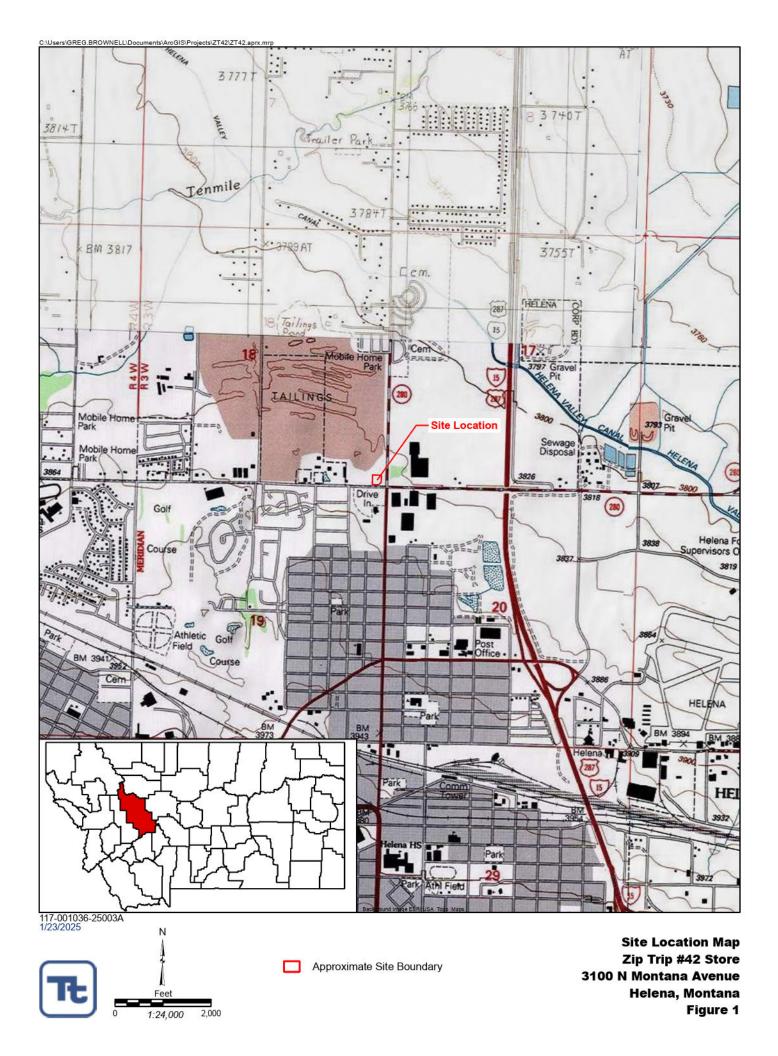
MDEQ, 2015. Disposal of Untreated Purge Water From Monitoring Wells. July 27.

MDEQ, 2022. Remedial Investigation Work Plan Required for the Petroleum Release at Zip Trip 42, 3100 N. Montana Avenue, Helena, Lewis & Clark County, Montana: Facility 25-12353, (TID 23889), Release 6677, Work Plan ID 34984. December 19.

Tetra Tech, 2024. Petroleum Release Notification – 30-Day Form. August.



FIGURES







ATTACHMENT B

Drilling Bids



January 16, 2025

- Attn: Jeff Rice Tetra Tech 7100 Commercial Ave., Suite 4 Billings, MT 59101
- RE: Project: WD-250116 Environmental Soil Borings & Wells Helena, MT 59602

Dear Mr. Rice:

Wiley Drilling has developed this Proposal for Tetra Tech to provide Subsurface Exploration Services for the above referenced project. This Proposal was developed based on information provided by Tetra Tech which included site location and general scope of work. The purpose of this project is to provide well installation services for an environmental investigation in Helena, MT.

Scope of Services

Wiley has developed this proposal to include scope, costs and assumptions based on the information provided by Tetra Tech. The Scope of Services is broken down into the tasks listed below.

Task 1: Project Preparation and Mobilization

Wiley will call in utility locations in accordance with Montana State law within 3 days prior to the start of drilling. Tetra Tech is responsible for staking out the borehole locations and providing Wiley with a site map identifying the locations. Wiley will mobilize the drill rig, materials, and crew from their drill shop in Belgrade, MT to the project site.

Task 3: Groundwater Monitoring Well Installation

Four (4) groundwater monitoring wells will be installed using a track mounted Mobile B-57 drill rig using 4.25-inch hollow stem augers. For costing purposes, we have assumed that a total of 4 wells will be installed to 20-feet below ground surface, with continuous SPT sampling, totaling 80 linear feet of auger drilling. It is our understanding that each well will consist of 2-inch diameter, sch. 40, PVC, flush threaded well casing and 10-feet of 0.010" factory milled well screen. The bottom of the well will be completed with a well cap and a J-plug will be installed on the top of the well. The annulus of the boreholes will be backfilled with 10/20 filter sand from the bottom of the borehole to approximately 2-feet above the top of the screened interval. Medium bentonite chips will be placed on top of the sand to ground surface. The well will be completed at surface with an 8-inch diameter flush mounted well vault set in a concrete pad. Well development and sampling will be the responsibility of others. Wiley will submit well logs to the state upon completion.

Cost Estimate and Assumptions

The not to exceed cost estimate for this project is **\$8,797.02**. A breakdown of these costs is provided in Table 1 attached to this Proposal. These costs are based on our project understanding, schedule, and the following assumptions:

- Wiley will call in public utility locations in accordance with Montana state law. Additional locate services are not included in this proposal.
- Access to the borehole locations for a track mounted drill rig and support equipment is available.
- We will do our best to minimize impacts to curbs and lawns, however, any damage to landscaping associated with borehole access will be the responsibility of others.
- Drill cuttings will be spread on ground surface at the Site. Wiley can provide a 55-gallon drum to store cuttings upon request for an additional \$150 per drum. Wiley will not be responsible for the storage, waste characterization, or transportation of the drill cuttings.
- IDW waste, including soil liners and sampling materials, will be considered nonhazardous waste for disposal.
- Work can be performed in Level-D Personal Protective Equipment including hard hat, safety toe boots, safety glasses, hearing protection, and hand protection.
- No air space monitoring is required.
- Soil logging, soil sampling, groundwater sampling, and reporting will be provided by others.
- Any delays that are not the responsibility of Wiley will be charged to the project at a Standby Rate of \$250/hour.

Schedule

Wiley will be available after January 27, 2025. Wiley anticipates the work will be completed in 2 8-hour business days. Wiley will reach out to you to schedule this project upon receiving this signed Proposal.

Closing

We appreciate the opportunity to provide Tetra Tech with this Proposal. Your authorization for Wiley to proceed in accordance with this Proposal can be issued by signing and returning this Proposal (Project: WD-250116). The costs associated with this Proposal are valid for 90-days.

AGREED TO:

CLIENT

TITLE

DATE



ATTACHMENT C

Work Authorization #2025-10



WORK AUTHORIZATION

TO: CHS Inc. dba Zip Trip

FROM: Tetra Tech, Inc.

WORK AUTHORIZATION NO.: 2025-10

PROJECT TITLE: Remedial Investigation Work Plan Zip Trip 42

PROJECT LOCATION: 3100 North Montana Ave. Helena, Montana

Pursuant to the terms and conditions of the Consulting Services Agreement dated *January 1, 2009*, this Work Authorization hereby authorizes *Tetra Tech, Inc.* to perform the specific services and under the particular conditions set forth herein:

- 1. SCOPE OF WORK: Per the Scope of Work attachment hereto.
- 2. COMPENSATION: Time and material not to exceed the attached estimate.
- 3. BILLING SCHEDULE: Monthly
- 4. TIME FOR COMMENCEMENT: January 25, 2025
- 5. TIME FOR COMPLETION:. September 2025
- 6. **REPORTING REQUIREMENTS:** Report in electronic format only.
- 7. OTHER PROVISIONS: None.

Upon execution of this Work Authorization, Client and Tetra Tech agree to be bound by and comply with all the terms and conditions contained in the above-referenced Consulting Services Agreement, except as modified by the specific terms and conditions, if any, contained herein.

APPROVED AND ACCEPTED BY:

CHS Inc. (Client)

Tetra Tech, Inc. (Consultant)

"O LO lie Signed: _____ Signed: Name: Name: _____ Jeff Rice Sr. Project Manager Title: Title: Date: January 24, 2024 Date: Phone: _____

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