

Corrective Action Plan #35030

Mountain West Coop (Formerly Cenex Supply & Marketing)

229 East Front Street

Drummond, MT 59832

Facility ID# 56-13926 Release# 1584

Work Plan #35030

Prepared for:

Shawna Conroy, CHS

CHS Inc.– Ag Retail

5500 Cenex Drive

Inver Grove Heights, MN 55077

Prepared by:

West Central Environmental Consultants, Inc.

1030 South Ave. W.

Missoula, MT 59801

April 4, 2025

WCEC Project No. 94-865-70

WCEC

West Central Environmental Consultants, Inc.

Nationwide Services

www.wcec.com

Environmental



Emergency Response



Industrial Services

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Site Location	1
1.2	Geologic/ Hydrogeologic Setting	1
2.0	SITE HISTORY	2
2.1	Historical Petroleum Storage	2
2.2	1993 AST Release	2
2.3	1995 Excavation	2
2.4	SVE/AS System Installation	2
2.5	Remedial Excavation 2015	3
2.6	Monitoring Well Installation 2020	3
3.0	SCOPE OF WORK	4
4.0	GROUNDWATER MONITORING	5
4.1	Groundwater Monitoring	5
4.2	Groundwater Monitoring Well Assessment & Repair	5
5.0	REPORT PREPARATION	6
5.1	Interim Data Submittal	6
5.2	Release Closure Plan	6
5.3	Data Validation	6
5.4	Remedial Activities Report	6
6.0	TIMELINE AND COSTS	7

List of Figures

Figure 1: Site Location Maps

Figure 2: Site Details Map

Appendix A – Estimated Costs Spreadsheet In-Situ Remediation Work Plan

Appendix B – PTRCB Groundwater Monitoring Unit Cost Worksheet

Appendix C – WCEC Standard Operating Procedures (SOPs)

1.0 Introduction

This work plan has been prepared in response to an email received on March 3, 2025 from the Montana Department of Environmental Quality (MTDEQ) which requires additional corrective action at the Mountain West Co-op lease property (formerly Cenex Supply & Marketing Bulk Facility (Facility# 56-13926, Release# 1584, WP# 35030)), located at 229 East Front Street, Drummond, Montana. A site location map is included as Figure 1.

1.1 Site Location

Mountain West Co-op lease property (formerly Cenex Supply & Marketing Bulk Facility) is located at 229 East Front Street, Drummond, Montana. This property is owned by BNSF. A site location map is included as Figure 1 and a site details map is included as Figure 2. The Public Land Survey System (PLSS) description for the site is the SE/4, SE/4, NE/4 of Section 32, T11N, R12W. The approximate geographic coordinates are N 46.6661°, W -113.1440°. Township, range, and section information was obtained using the United States Geological Survey (USGS) Drummond, Montana 1:24,000 Quadrangle. The site is located within the Flint-Rock Creek Hydrologic Unit.

1.2 Geologic/ Hydrogeologic Setting

The surficial geology in Drummond consists of Quaternary alluvium material from the Holocene period. Sediments consist of well to moderately sorted gravel, sand, and silt. This layer varies in depth from 0 to 35 feet thick. [Lonn et al., 2010]. The deposits under the site consist primarily of silty sand to a depth of approximately 11 feet. These deposits are underlain by gravel and cobble intermixed with silty sand to the maximum depth of borings completed during remedial activities. The Clark Fork River is the nearest year-round stream to the facility, and it is located approximately 0.35 miles south of the facility.

2.0 Site History

2.1 Historical Petroleum Storage

The petroleum storage facility consisted of four aboveground storage tanks (ASTs). One 14,000 gallon unleaded gasoline tank, one 14,000 gallon diesel #1 tank, one 12,000 gallon regular gasoline, and one 12,000 gallon diesel #1 tank. The ASTs containment consisted of a 32 ft by 32 ft square with 3 ft concrete walls. Prior to being upgraded in 1995, the floor of the containment basin had an unlined dirt floor. The floor of the AST system was upgraded with a concrete floor in Fall 1995. Underground double wall fiberglass piping was used to transfer fuel from the ASTs to the card lock dispenser island. Above ground, galvanized piping runs were used to transfer product to the bulk rack at the facility.

2.2 1993 AST Release

On March 9, 1993, inventory calculations for the regular gas AST indicated an approximate loss of 3,400 gallons of product. The facility manager notified the Montana Department of Health and Environmental Sciences, the predecessor to the MTDEQ. Immediate recovery efforts removed 346 gallons of product from the containment basin. An estimated 3,000 gallons of product released from the tank soaked into the soils beneath the AST basin.

2.3 1995 Excavation

In August 1995, WCEC conducted a remedial excavation of impacted soils in conjunction with AST system and containment upgrades. Soils were excavated from the north and west of the AST containment wall. Additional soils were removed from inside the containment walls after the ASTs were temporarily moved out of the containment. The concrete containment wall was left in place during excavation activities. A concrete floor was poured in the AST containment to create an impermeable barrier for compliance with regulations. The ASTs and site was reconstructed as described above following the remedial excavation.

2.4 SVE/AS System Installation

Following a pilot study in August 1996, WCEC installed a soil vapor extraction/air sparge (SVE/AS) system in November 1996. The SVE system included five vapor extraction wells. The wells were constructed with 4 feet of solid riser and 5 feet of 4 inch diameter 0.010 PVC screen. The AS system included eight air sparge wells. The sparge wells were installed with 16 feet of solid riser and 5 feet of 2 diameter inch 0.020 PVC

screen. The SVE system was operated until August 1999. The AS system operation was discontinued in the Fall 2007.

2.5 Remedial Excavation 2015

Following deconstruction of all facility petroleum storage, piping, and structures a remedial excavation at the site was conducted in February 2015. The scale tickets from the Missoula landfill show that 762.9 tons of soil were removed through excavation. Based on soil disposal samples an estimated 604 gallons of product was removed through excavation. The vertical extent of the excavation was limited by groundwater and the southern extent of the excavation was limited by the railroad spur line. Multiple confirmation samples from the pit bottom and one south side wall sample exceeded MTDEQ RBSLs for soil.

2.6 Monitoring Well Installation 2020

No additional sampling events or remedial activities were requested by the MTDEQ between the issuance of the excavation report and the addition of monitoring wells MW7, MW8, and MW9 in May 2020. Semiannual groundwater monitoring was conducted in 2020 following the installation of these monitoring wells. WCEC sampled for 1,2-Dibromoethane (EDB) and 1,2-Dichloroethane (DCA) in May 2020. All site wells were below the method PQLs for EDB and DCA delineating that no lead scavenger impacts exist at the facility.

3.0 Scope of Work

The scope of the remedial activities requested by the MTDEQ consists of:

- Collect groundwater data for VPH, EPH, and IBI's to assess biodegradation trends and assess natural attenuation vs active remediation options at the facility.
- Analyze samples for petroleum constituents as required by the Montana Risk-Based Corrective Action Guidance for Petroleum Releases.
- Validate all laboratory analytical data using DEQ's Data Validation Summary Form (DVSF).
- 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 an updated Release Closure Plan (RCP), discuss the results with DEQ's project manager.
- Prepare and submit a Cleanup Report detailing the results of the cleanup, monitoring well repairs completed, and all groundwater monitoring events conducted under this work plan. The Report is expected to include all the content, tables, figures, and appendices outlined in the Cleanup Report format.

4.0 Groundwater Monitoring

4.1 Groundwater Monitoring

WCEC will complete two years of semiannual groundwater monitoring from monitoring wells MW7, MW8, and MW9. These sampling events will be conducted during high (April-May) and low (October-November) groundwater periods each year. Depth to water measurements will be recorded from all site monitoring wells to provide potentiometric surface plot data, flow direction, and gradient. All site wells will be sampled following the Montana DEQ's low flow sampling methodologies. Purging will be conducted using a peristaltic pump prior to sampling. Groundwater quality parameters (pH, DO, conductivity, temperature, salinity, ORP, and turbidity) will be obtained using a flow through cell attached to a peristaltic pump. All groundwater samples collected will be submitted for analysis of VPH, EPH screen. If the EPH screening limit of 1000 µg/L is exceeded total extractable hydrocarbon (TEH) fraction analysis will be requested.

WCEC will discuss ongoing WP tasks and results with DEQ's project manager. WCEC will submit written agreed-upon work plan modifications in the event adjustments to the corrective action plan are needed.

4.2 Groundwater Monitoring Well Assessment & Repair

WCEC assessed the monitoring wells in August of 2022. The monuments on monitoring wells MW1, MW2, MW3, MW4, and MW6 need to be replaced to ensure that they remain as viable groundwater monitoring points. Monitoring wells MW1, MW2, MW3, and MW4 are above ground completions. Monitoring well MW6 is a flush mount completion. These wells will all be repaired with the same completion method as they were originally installed. It is anticipated that 5 wells will need to be repaired during the event. If additional wells have deteriorated in condition since the last sampling event WCEC will contact the Montana DEQ and submit a form 8 request for additional repair budget.

5.0 Report Preparation

5.1 Interim Data Submittal

An interim data submittal will be completed following the completion of the first year of high and low groundwater monitoring events. The interim data submittal will include cumulative data tables, figures detailing site structures, utilities, monitoring well locations, groundwater flow direction and gradient, and additional surface infrastructure as described in the DEQ guidance documents. DVSF for the event will be included with the IDS.

5.2 Release Closure Plan

WCEC will complete an RCP outlining basic information pertaining to the release, a conceptual site model, evaluation of cleanup alternatives, and assessment of future compliance monitoring. Any data gaps will be noted in the RCP and discussed in the text of the remedial activities report. The RCP will be included as an appendix of the Groundwater Monitoring Report.

5.3 Data Validation

WCEC will complete the MTDEQ – Waste Management and Remediation Division Data Validation Summary Form (DVSF). The completed data validation form will be included as an appendix to the remedial activities report.

5.4 Remedial Activities Report

A corrective action report will be submitted to the MTDEQ within 60 days of receipt of laboratory analytical results from the final groundwater monitoring event. The report will include all sections detailed in the Montana DEQs Cleanup Report format. This report format includes a brief site history, description of site location and geolithology, and a summary of all remedial actions conducted under the corrective action plan. Cumulative tables for groundwater elevations, groundwater chemistry, and analytical results for all past events will be included in the report. Maps will be provided detailing the site location, former structures, petroleum dispensing equipment and associated piping, iso-concentration maps, and potentiometric surface plots for each sampling event. The location of all current and former site monitoring wells will be depicted on a site orthophoto. The complete laboratory analytical reports with data validation summary forms will be included as appendices of the remedial activities report.

6.0 Timeline and Costs

The attached estimated cost sheet form *Monitoring well Repair & Surveying* (Appendix A) and *PTRCB Groundwater Monitoring and Sampling Unit Cost Worksheet* (Appendix B) covers the anticipated costs to complete the scope of work detailed in this corrective action plan. The scope of work outlined in this work plan is tentatively scheduled to begin in the spring of 2025 pending work plan approval by the MTDEQ.

Event 1: Monitoring well repair and surveying. (Staff scientist & field tech (2 staff, 1 vehicle)

Events 2: Semiannual groundwater monitoring (Staff Scientist, 1 vehicle)

Events 3: Semiannual groundwater monitoring (Staff Scientist, 1 vehicle)

Events 4: Semiannual groundwater monitoring (Staff Scientist, 1 vehicle)

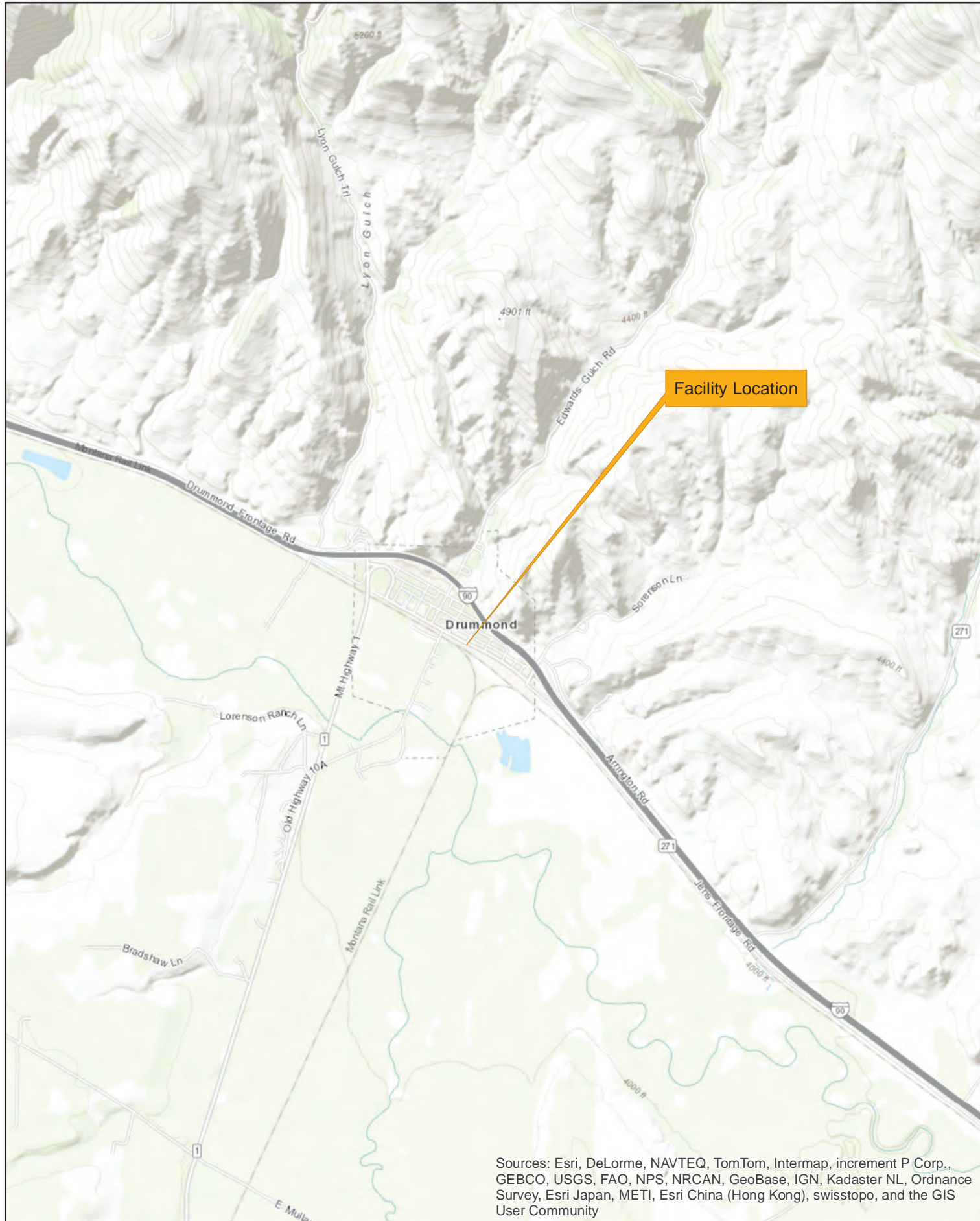
Events 5: Semiannual groundwater monitoring (Staff Scientist, 1 vehicle)

Estimated work plan and reporting completion date July 31, 2027.

List of Figures

Figure 1: Site Location Maps

Figure 2: Site Details Map



Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community



PROJECT # 94-865-70	Site Location Maps	WCEC ENVIRONMENTAL CONSULTANTS
DATE: 11/21/19		
DRAWN BY: NGO	Cenex Supply & Marketing Bulk Facility, 229 East Front Street, Drummond, MT	FIGURE 1
ORTHO PHOTO DATE: 07/10/2011		

