July 17, 2020 RMEA 20-0013

Montana Department of Environmental Quality
318 County Road
1520 E. 6th Ave.
P.O. Box 200901
Helena, MT 59620-0901
Attention: Latysha Pankratz, Environmental Science Specialist, PTCS

Re: Abbreviated Corrective Action Plan and Budget for Pintler Station, Wisdom, MT

Dear Ms. Pankratz,

As requested by Montana Department of Environmental Quality (DEQ), Rocky Mountain Environmental Associates, Inc. (RMEA) has prepared this Abbreviated Corrective Action Plan and Budget (CAP) for the Pintler Station gas station and convenience store located in Wisdom, Montana. This CAP has been prepared following the CAP AC-07 format and numbering system, as directed by DEQ in its January 24, 2020 letter.

1.0 CORRECTIVE ACTION PLAN

1.1 Date

July 17, 2020

1.2 Responsible Parties

Chancy & Sheila Campbell
Pintler Station
318 County Road
P.O. Box 267
Wisdom, MT 59761

1.3 Contact Person Name

Chancy or Sheila Campbell
Pintler Station
P.O. Box 267
Wisdom, MT 59761

1.4 Project

Additional Corrective Action Work Plan for the Petroleum Release at **Pintler Station, 318 MT Highway 43, Wisdom, Beaverhead County, Montana; Facility ID 01-02173 (TID 17490), Release 5349, Work Plan 34027**.

1.5 Introduction

In a January 24, 2020 letter from MT DEQ to the Responsible Parties (DEQ Letter), DEQ requested an Abbreviated Corrective Action Plan and Budget to address the Project referenced in Section 1.4 above. The intent of the CAP is to fully investigate the petroleum release associated with the Project and determine a pathway to remediation and closure. The intent of the budget is to estimate costs for the purposes of facilitating costs for the Petroleum Storage Tank Fund (PSTF) program.

Scope of Work and Schedule

Task 1: Mobilize to and demobilize from site.

Task 2: Drill six boreholes by the hollow-stem auger method at the locations shown in Figure 1 (attached). The locations of the boreholes shown in Figure 1 are based on the results of a Limited Phase II Environmental Site Assessment performed by RMEA and documented in a July 19, 2019 report (RMEA, Limited Phase II Environmental Site Assessment, Pintler Station, Wisdom MT, July 19, 2019). Each borehole will be advanced to a depth of approximately 20 ft below ground surface (bgs), or approximately five feet below the depth at which saturation is encountered. A 1.5 foot long split-spoon sampler will be used to collect soil samples beginning at the surface and continuing at 5-ft intervals. Soil samples will be logged using the Unified Soil Classification System.

Task 3: Field-screen soil samples. Collect soil samples directly from the split-spoon sampler to screen for petroleum vapors using a photo-ionization detector (PID). Samples will be screened at the surface and at 5-ft intervals, and whenever visual staining or odors suggest the presence of petroleum contamination. Soils will be screened by placing a representative sample in a zip-lock bag and inserting the PID probe through a small opening at the top of the bag. The highest PID response will be logged in a field notebook.

Task 4: Collect soil samples based on results of PID screening. One soil sample will be collected from each borehole, from soils for which PID screening indicates the highest probability of petroleum contamination. Additional samples may be collected from each borehole if PID screening suggests more than one zone of contamination in the borehole. If PID screening does not indicate the presence of soil contamination, one sample will be collected from within two feet of the surface. One additional duplicate sample will be collected from one borehole for quality assurance, and one sample will be collected from one borehole for a matrix spike and matrix spike duplicate (MS/MSD). Samples will be

labeled and immediately stored in an 4º C cooler. Soil samples will be collected for the parameters shown in Table 1 of the Montana DEQ Tier 1 Risk-Based Corrective Action (RCBA) Guidance for Petroleum Releases (2018). Soil from boreholes where by PID screening indicates the potential for petroleum contamination will be collected in 55-gallon drums

Task 5: Construct six groundwater monitoring wells in the boreholes. Two-inch diameter PVC groundwater monitoring wells will be constructed in each of the boreholes. Wells will be screened across a 5-ft interval within the saturated zone. Screened intervals will be determined based on field conditions; in most instances, it is anticipated that this will be approximately from 15 to 20 ft bgs. A filter pack will be installed across the screened interval, and a bentonite seal will be installed in the annular space above the filter pack to the surface. Each well will be developed prior to sampling to help repair formation damage caused by drilling. Well surface completions will be flush-mount with traffic-rated covers.

Task 6: Collect groundwater samples from each monitoring well. Each well will be purged prior to sampling, and purge water will be monitored for field parameters (pH, electrical conductivity, temperature). Groundwater samples will be collected from each well when a minimum of three saturated borehole volumes have been purged and when field parameters have stabilized (three consecutive measurements with no more than 10 percent variability). If a monitoring well is purged dry, the well will be allowed to recover, and the sample will be collected after recovery. One additional duplicate sample will be collected from one monitoring well for quality assurance, and one sample will be collected from one monitoring well for a matrix spike and matrix spike duplicate (MS/MSD). Samples will be labeled and immediately stored in an ice chest. Groundwater samples will be collected for the parameters shown in Table 3 of the Montana DEQ Tier 1 Risk-Based Corrective Action (RCBA) Guidance for Petroleum Releases (2018).

Task 7: Collect and dispose of purge water. All purge water will be collected and disposed of in accordance with DEQ guidance.

Task 8: Collect a tap water sample from the Pintler Station potable water supply system. The sample will be collected from the nearest tap and analyzed using EPA Method 524.2.

Task 9: Collect static water level measurements. Depth to static water level will be measured in each monitoring well to facilitate determination of groundwater flow direction and gradient across the site. Relative elevations of the tops of monitoring well casings will be measured using a hand-held level and survey rod. A more in-depth survey may be required to determine accurate groundwater flow conditions.

Task 10: Submit soil and groundwater samples for laboratory analysis. Samples will be prepared for shipping and packed in ice chests with regular and dry ice. A Chain of Custody form will be completed for each ice chest and accompany the samples. The

samples will be shipped via overnight carrier to an environmental laboratory for analysis for the parameters identified in Tables 1 and 2.

Task 11: Evaluate laboratory analytical results. Laboratory analytical data will be evaluated based on Montana RBCA Guidance for Petroleum Release. All laboratory analytical data will be validated using DEQ's Data Validation Summary Form (DVSF).

Task 12: Prepare a Release Closure Plan (RCP). The RCP will be prepared using an approved DEQ format and in consultation with the DEQ Project Manager.

Task 13. Prepare and submit a report indicating actions and results of the investigation. The report will be prepared following the format indicated in the Standard Generic Actions Report (Form AR-07). The report will identify the results of the executed work plan, provide conclusions that identifies any remaining data gaps; present results of soil and groundwater sampling; water level measurements; groundwater flow direction; soil boring logs; a scaled map or maps showing: groundwater flow direction and iso-concentration contours, sampling points and concentrations to date, former and existing tank systems, utilities, and current on-site structures. Laboratory reports, field data, borehole logs, and DVSF and RCP will be appended. The report will be submitted electronically using Petroleum Tank Cleanup Section submittal requirements.

Task 14: Coordinate with DEQ Project Manager. The field investigation, results, RCP and report will be discussed and coordinated with the DEQ Project Manager. Regular communications will be established and maintained throughout the project.

Task 15: Monitor groundwater semi-annually for one year. This will include collecting the suite of groundwater samples on three sampling events, including the initial sampling event, and two additional monitoring events at approximate 6-month intervals, which roughly correspond to the seasonal groundwater high and low periods.

Schedule: The field investigation will be initiated within four weeks of approval of this CAP by DEQ, depending on availability of a drilling contractor and other potential delays related to the current Covid-19 pandemic. It is anticipated that performance of the field investigation will take 2-3 days. Standard analytical laboratory turnaround time is two weeks. Evaluation of results and preparation of the RCP and report will require approximately four weeks. Assuming DEQ review of this CAP is completed within 30 days, the anticipated start of the field investigation would be about mid- to late-August, with submittal of the investigation report and RCP to follow about 4-6 weeks later.

1.6 Disposal of Investigation-Derived Waste

Soil from boreholes where PID screening indicates the potential for petroleum contamination will be collected in 55-gallon drums. Soil from these drums will be sampled for laboratory analysis using EPA Method 8015C. Soils determined to be contaminated above Tier 1 Risk-Based Soil Levels (RBSLs) will be disposed of at a

lined-landfill permitted to accept petroleum contaminated soils. Soils determined to be below Tier 1 RBSLs will be spread in a thin lift at driveways at the site.

Similarly, purge water from wells will be collected in a 55-gallon drum and will be sampled for petroleum hydrocarbons using EPA Method 8015C. Purge water that is determined to be contaminated above Montana Maximum Contaminant Levels (MCLs) will be disposed of at a Montana-approved hazardous waste landfill. Purge water found to be below MCLs will be discharged to the ground at the site.

1.8 Consultant Contact Information

Rocky Mountain Environmental Associates, Inc. (RMEA)
Mike Hagen, Sr. Geologist
482 Constitution Way, Suite 303
Idaho Falls, ID 83402
208-524-2353
mike.rmea@gmail.com

2.0 Budget Estimate

The estimated budget to prepare and execute the CAP is provided in Table 1.

ASSUMPTIONS

RMEA will request utility marking at the subject property, but the property owner will be responsible for providing information on the precise location of all private utility lines at the Pintler Station property. RMEA and its subcontractors cannot be responsible for damages to any unmarked utilities. RMEA assumes that the entire site will be accessible when the field work is scheduled, and that there are no mechanical, weather or laboratory delays.

Sincerely,

Patrick N. Naylor
Vice President

CC: Mike Hagen, RMEA
Chancy & Shiela Campbell, Pintler Station

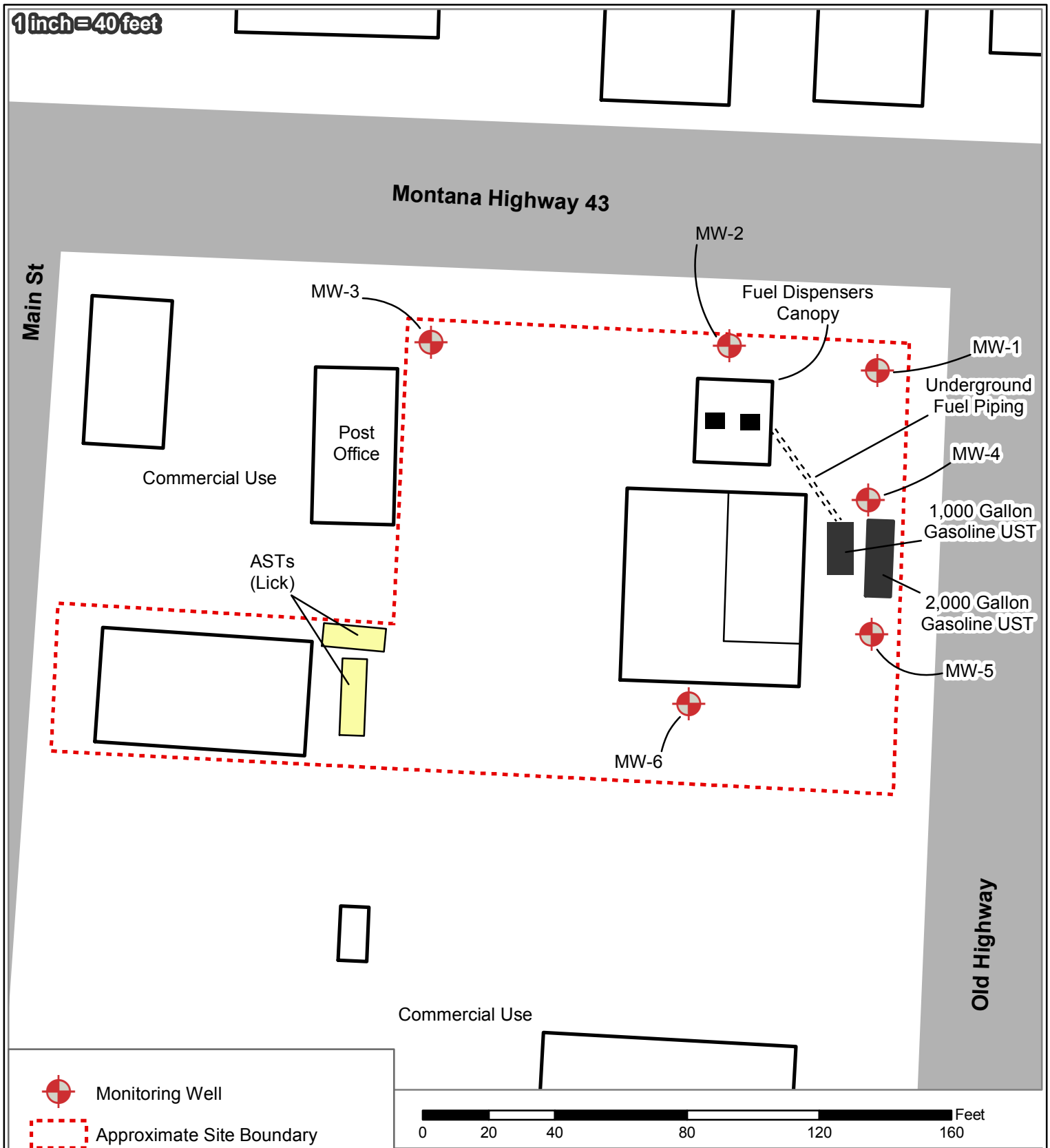

Figure 1: Proposed Monitoring Well Location Map

318 Montana Highway 43
Wisdom, Montana

Rocky Mountain ENVIRONMENTAL ASSOCIATES, INC.

Pintler Station Gas Station
Corrective Actin Plan

Date: 7/13/2020
Project #: 20-0013
Drawn by: JP

TABLE 1
ESTIMATED COSTS FOR CORRECTIVE ACTION PLAN
PINTLER STATION, WISDOM, MT

Labor Hours by Task		Prepare CAP and Budget	Task 1: Mob/Demob	Task 2: Drill Boreholes	Task 3: Field Screening	Task 4: Collect Soil Samples	Task 5: Construct Monitoring Wells	Task 6: Collect Groundwater Samples	Task 7: Manage Purge Water	Task 8: Collect Tap Sample	Task 9: Collect SWL Measure-ments	Task 10: Laboratory	Task 11: Evaluate Lab Data	Task 12: Prepare RCP	Task 13: Prepare Report	Task 14: Coordinate with DEQ	Task 15: Semi-Annual Groundwater Sampling	Total Quantity	Cost
Principal Geologist/Hydrogeologist	$140	8											1		2		3	14	$1,960
Senior Geologist	$125	2	4										6	8	8	6	4	38	$4,750
Staff Geologist 2	$100		18	10	2	4	12	8	4	2	2	10	6		12		48	138	$13,800
Geoscience Technician	$70	4												2	4		4	14	$980
Total Labor																			$21,490
Other Direct Costs																			
Drilling Contractor			$2,000	$6,000			$4,500												$12,500
Field Vehicle Cost/Mile	$0.65		420															420	$273
Equipment Rental (PID)	$100.00				2													2	
Sampling and Decon Equip	$25.00							2										2	$50
YSI	$150.00							2										2	$300
Portable DC Submersible Pump	$100.00							2										2	$200
Disposable vinyl tubing	$50.00							2										2	$100
Electronic Water Level Meter	$50.00							2										2	$100
Turbidity Meter	$50.00							2										2	$100
IDW Disposal (per 55-gal drum)	$500.00			4														4	$2,000
Miscellaneous & Administrative	$400.00		1															1	$400
Laboratory - Soil Samples	$371.00					10												10	$3,710
Laboratory - Groundwater Samples	$418.00																	24	$10,032
Laboratory - Tap Sample	$200.00																	1	$200
Shipping (per cooler)	$150.00											3						3	$450
Travel/Lodging/Meals (per diem)	$150.00		1	1			1										3	6	$900
Markup	15%																		$2,781.30
Total Estimated Costs																			**$55,586**