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October 24, 2025

Mr. Christopher Herman
Environmental Project Officer
Petroleum Tank Cleanup Section
Montana Department of Environmental Quality
P.O. Box 200901
Helena MT 59620-0901

RE: Remedial Investigation Work Plan for the Petroleum Release at the Agland Co-Op, 810 Front Street, Nashua, Valley County, Montana; Facility ID #53-10461 (TID #29360), Petroleum Release #6555, Work Plan #35085

Owner/ Responsible Party: Agland Co-Op 300 U.S. Highway 2 Wolf Point, MT 59201

jason.eggebrecht@agland-coop.com

Consultant/ Work Plan Preparer: Pioneer Technical Services, Inc. Taylor Bienvenue, G.I.T. 2310 Broadwater Ave, Suite 1 Billings, MT 59102

tbienvenue@pioneer-technical.com

Dear Mr. Herman:

On behalf of Agland Co-Op, Pioneer Technical Services, Inc., prepared the following Remedial Investigation Work Plan for the Agland Co-Op facility in Nashua, Montana. As requested in correspondence from the Montana Department of Environmental Quality dated August 21, 2025, our proposed scope of work outlined in the attached work plan.

If you have any questions concerning this project or the proposed scope of work, please contact me at (406) 723-1931 or tbienvenue@pioneer-technical.com.

Sincerely,

cc:

Pioneer Technical Services, Inc.

Taylor Bienvenne

Taylor Bienvenue, GIT Project Scientist

Attachment 1: Figures

Mr. Charles L. Peterson, P.G., Pioneer Technical Services, Inc

Mr. Jason Eggebrecht, Agland Co-Op







EXECUTIVE SUMMARY

The purpose of this document is to provide a Remedial Investigation Work Plan (work plan) for the Agland Co-Op facility (Site), Facility ID #53-10461, as requested in electronic correspondence from Montana Department of Environmental Quality (DEQ) dated August 21, 2025. The purpose of the proposed work activities is to determine the extent and magnitude of petroleum impacts to soil and groundwater at the Site, evaluate the status of petroleum-contaminated media associated with the release via groundwater monitoring, and prepare a Release Closure Plan (RCP) to identify and propose additional work needed to resolve the release.

Discussions between DEQ, the responsible party, and Pioneer Technical Services, Inc. (Pioneer) defined the scope of this work plan, which includes advancing soil borings and installing groundwater monitoring wells and performing semi-annual groundwater monitoring.

These recommended actions are included in this work plan, and upon completion of the relevant tasks, Pioneer will prepare a remedial investigation report detailing the evaluation of existing monitoring wells, advancement of soil borings and construction of monitoring wells, and the initial groundwater monitoring event. Following the remedial investigation, Pioneer will prepare a groundwater monitoring report detailing the results of the second groundwater monitoring event. For each report, an updated RCP will be appended. These activities are detailed in the following work plan.



1 FACILITY SUMMARY AND CURRENT CONDITIONS

1.1 Site Description

The Agland Co-Op facility is located at 810 Front Street, Nashua, Valley County, Montana. The Site is in a commercial area of the town of Nashua. The property is owned by BNSF Railway (BNSF) and leased to Agland Co-Op. The legal description of the property is Nashua Original Townsite, S31, T28N, R42E, 39,780 square feet, BNSF Lease #40226034. The facility is on a level lot with an elevation of approximately 2,070 feet above mean sea level. The Site is bordered by Front Street to the south, across from which are some commercial businesses, by Caldwell Street to the north across from which is the BNSF mainline and some grain elevators, and by vacant lots to the east and west. This area of Nashua is served by public utility city services (e.g., potable water and sanitary and storm sewer systems). The location of the Site is shown on the Location and Vicinity Map (Figure 1) and Site Map (Figure 2) in Attachment 1.

The Site is currently occupied by an agricultural supply business; however, the business is not active. The property no longer stores or sells petroleum fuel products. The central portion of the Site hosts a building and pump island infrastructure associated with the former gas and diesel fuel sale operations. The remaining property consists of gravel-covered equipment storage areas.

Per information available from the Petroleum Release Notification-30 Day Form dated July 21, 2023 (Agland Co-Op, 2023), four underground storage tanks (USTs) and associated supply piping were removed from the Site, including:

- Two 4,000-gallon gasoline USTs, installed in 1990 and removed in 2023.
- One 4,000-gallon diesel UST, installed in 1990 and removed in 2023.
- One 2,000-gallon diesel UST, installed in 1990 and removed in 2023.

The former locations of these USTs and associated dispenser islands are shown on the Site Map (Figure 2).

1.2 Facility History and Release Background

On March 20, 1990, there was a release from the dispenser island at the Site. The release was assigned Release #519 and was resolved on December 7, 1990. No other information regarding Release #519 was readily available at the time of this report (DEQ, 2025a).

According to the Petroleum Release Notification-30 Day Form dated July 21, 2023, the retail store was closed in September 2021, and the four USTs and all associated underground supply piping were removed from the property in June 2023. Petroleum impacted soils (slight odor) were encountered during the removal of the supply piping at the western portion of the



dispenser island (Agland Co-Op, 2023). Per the Site information report dated October 9, 2025, the dark staining and strongest odors were right at the piping level and ranged from 2 to 6 feet below ground surface (bgs) (DEQ, 2025b).

Review of DEQ files and a Sanborn Fire Insurance Map dated 1920 to 1930 indicates that other former petroleum storage sites are located in the vicinity of the Agland Co-Op facility. There is an open LUST site (MDT Nashua Tank Facility (Facility ID #60-15325)) southwest of the Agland Co-Op. There was a former oil storage area to the east of the Agland Co-Op (Continental Oil Co. Substation) and two sites to the west of the Agland Co-Op (H. Earl Clack Co. Substation and Westland Oil Co.). There is also a former auto garage to the southwest of the Agland Co-Op (Sandborn, 1930). The locations of these former petroleum storage and distribution facilities are shown on the Area Map, Figure 3 in Attachment 1.

2 OBJECTIVES OF CORRECTIVE ACTION WORK PLAN

The primary objective of this work plan is to determine the extent and magnitude of petroleum impacts to soil and groundwater and to recommend remediation work required to clean up and resolve the release.

3 Proposed Scope of Services

In summary, this work plan involves installing soil borings and groundwater monitoring wells and conducting two groundwater monitoring events and preparing a remedial investigation report and a groundwater monitoring report appended with a RCP upon completion of all activities. These activities are detailed in this work plan.

Specifically, this work plan proposes the following actions to achieve these goals:

- Install soil borings and monitoring wells to determine the extent and magnitude of petroleum contamination in soil and groundwater.
- Perform semi-annual groundwater monitoring to determine both high and low groundwater conditions.
- Validate all laboratory analytical data using DEQ's Data Validation Summary Form.
- Discuss work plan tasks and results with DEQ's project manager; any modifications required to complete the work plan objectives will be submitted and agreed upon.
- Prepare and submit a remedial investigation report detailing the results of the investigation and first groundwater monitoring event.
- Prepare a RCP and discuss the results with DEQ's project manager.
- Prepare and submit one groundwater monitoring report detailing the methods and results of the second semi-annual groundwater monitoring event completed under this work plan.



• Work plan and reports will be submitted electronically following the Petroleum Tank Cleanup Section submittal requirements.

These investigation activities will be used to delineate the magnitude and extent of the release in order to resolve Release #6555. As requested by DEQ, Pioneer proposes the following scope of work:

- Task 1: Project Management and Planning.
- Task 2: Soil Boring and Groundwater Monitoring Well Installation.
- Task 3: Surveying.
- Task 4: Semi-Annual Groundwater Monitoring.
- Task 5: Reporting.

The following sections describe each task for the proposed work.

3.1 Task 1 – Project Management and Planning

Task 1 Project Management and Planning work will include:

- Preparing a work plan.
- Coordinating utility locates.
- Project scheduling.
- Preparing a Health and Safety Plan.
- Coordinating with subcontractors, owners, and regulators.
- Site work preparation.

Pioneer will notify 811 for utility locates prior to drilling activities. Pioneer field personnel will document the locations of marked underground and aboveground utilities on the figures provided with the final report.

3.2 Task 2 – Soil Boring and Groundwater Monitoring Well Installation

The work plan includes advancing 10 soil borings and constructing six of these soil borings into monitoring wells. Pioneer is proposing advancing two soil borings in the vicinity of the identified source area, four in the footprint of the former dispenser islands, two additional borings downgradient of the source area, and two borings upgradient of the source area. Six of the ten borings will be constructed into monitoring wells based on field data and consultation with the DEQ Site manager. The Site Map (Figure 2 in Attachment 1) shows the location of the proposed soil borings.



The anticipated total depth of the monitoring wells is 14 feet bgs. This is based on groundwater measured at 5 feet bgs at the Site. Pioneer will advance the soil borings using Pioneer's direct-push Geoprobe® drill rig and associated equipment to conduct the soil investigation. Using a direct-push drill rig will minimize Site disturbance, minimize the amount of investigation derived waste (cuttings), and allow access for drilling near and around the existing Site infrastructure.

Final boring locations will be determined in the field after consulting the Montana DEQ project manager and will be based on accessibility, underground utilities, the presence of unforeseen impedances, or other factors.

For the groundwater monitoring well installation phase, the team will use the Geoprobe® drill rig to construct the monitoring wells. The monitoring wells will be constructed with 2-inchdiameter, schedule 40 polyvinyl chloride (PVC) pipe. All well screens and piping will be delivered to the Site factory wrapped. Each well will be constructed using a prepack well screen consisting of 0.010-inch, factory-slotted PVC screen covered with a 65-mesh stainless steel screen and filled with 20/40 mesh silica sand. The wells will be screened from 4 to 14 feet bgs. The remainder of the borehole will be completed with PVC riser pipe to grade. The annular space between the prepack well screen and the borehole will have 0.10- to 0.20-inch sand completion to 1 foot above the screen, and the remaining annular space between the well casing and the borehole will have a bentonite seal. The wells will be secured with flush mount bolt-down covers set in concrete. The newly constructed wells will be developed after construction. Each well will be considered developed once clear of sediment or after being pumped with a submersible pump or surface pump for 1 hour.

A Pioneer geologist will supervise drilling operations and be present to collect, screen, and log soil types. Soil samples will be collected at continuous intervals, and personnel will log the soil type and consistencies and document any visible signs of petroleum impacts. Standard headspace readings will be collected using a photoionization detector (PID) meter. A portion of each soil sample will be placed into an airtight container, labeled, and allowed sufficient time for the hydrocarbons, if present, to volatilize. After the equilibration period, each sample will be scanned with a PID meter by inserting the sampling probe into the headspace of the container. The PID readings from each soil sample collected from each borehole will be reviewed and recorded. The sample with the highest reading or with other signs indicating petroleum impacts will be selected for laboratory analysis. In addition to the sample with highest presumed petroleum impact, analytical samples will also be collected at the groundwater interface for each boring. A maximum of two soil samples from each boring and two duplicate sample will be submitted for laboratory analysis for a total of 22 submitted soil samples. The selected samples will be placed into a laboratory-supplied container, labeled, stored on ice, and submitted to Energy Laboratories, Inc. (Energy) in Billings, Montana, for volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbon (EPH) screen analyses. If the EPH screen result for soil is greater than 200 milligrams per kilogram, the sample will be submitted for EPH fractionation analysis without polycyclic aromatic hydrocarbons (PAHs). For this work plan, we



are assuming that half of the samples will require EPH fractionation. Chain of custody documentation will accompany the samples.

3.3 Task 3 – Surveying

Following well installation and development, the new wells will be surveyed by a licensed surveyor, and the top of casings will be determined to be within 0.01 feet of mean sea level. The survey crew will also survey nearby structures, utilities, Site features, and appurtenances.

3.4 Task 4 – Semi-Annual Groundwater Monitoring

This work plan proposes performing two groundwater monitoring events. The first event will be conducted at least 1 week after the new monitoring wells are developed. The second event will be conducted 6 months after the first monitoring event. During each event, Pioneer will collect groundwater samples from the newly installed monitoring wells. For each event, Pioneer will gauge and purge the wells prior to collecting groundwater samples. Pioneer will attempt to complete the sampling events in conjunction with the typically high and low groundwater conditions.

Prior to groundwater sample collection, Pioneer will gauge each of the six monitoring wells for the presence of light non-aqueous phase liquid (LNAPL). Each well will be gauged using an electronic interface probe capable of detecting water or LNAPL hydrocarbons to within 0.01 feet. If the well does not contain LNAPL, the sampling team will collect groundwater samples. If LNAPL is detected, the team will not collect any samples, will note the conditions on a field data sheet, and notify the DEQ project manager.

The groundwater samples will be collected according to the DEQ's low-flow sampling guidance (DEQ, 2018). To ensure representative groundwater samples are collected, Pioneer will monitor the water quality parameters for the following intrinsic bioremediation indicators and allow them to stabilize during the purging process prior to sample collection: temperature (plus or minus 3%), pH (plus or minus 0.1), dissolved oxygen (plus or minus 10%), specific conductivity (plus or minus 3%), oxidation reduction potential (plus or minus 10 millivolts), and turbidity (plus or minus 10%). The wells will be gauged at each field parameter monitoring interval with a water level meter to ensure that excessive drawdown (plus or minus 0.3 feet) does not occur prior to sampling.

Pioneer will collect the groundwater samples with a peristaltic or bladder pump and disposable tubing and transfer the samples to the appropriate laboratory containers. New, decontaminated containers will be supplied by the laboratory prior to sample collection. Groundwater samples from all six monitoring wells will be submitted for laboratory analyses of VPH, EPH screen, and lead scavengers 1,2-dibromoethane (EDB) or 1,2-dichloroethane (DCA). For the purpose of this work plan, it is assumed that half of the EPH samples will require EPH fractionation without PAHs.



Analysis of groundwater samples will be in accordance with DEQ's *Risk-Based Corrective Action* (*RBCA*) Guidance for Petroleum Releases (DEQ, 2024). One field duplicate sample will be collected during each sampling event. Each sample container will be preserved as directed by the laboratory, labeled, and packaged on ice. The samples will be hand delivered to Energy in Billings, Montana. Chain of custody documentation will accompany the samples.

Purge water generated during the sampling activities will be infiltrated into the grassy areas available at the Site in accordance with Montana DEQ standards.

3.5 Task 5 - Reporting

Following the advancement of the soil borings, construction of the new monitoring wells, and an initial groundwater monitoring event, Pioneer will prepare and submit a remedial investigation report according to DEQ's *Montana Remedial Investigation Guidance for Petroleum Releases* (DEQ, 2017). The report will include:

- Updated Site maps illustrating the locations of the new and existing monitoring wells, underground utilities, and surface features.
- Cumulative tables summarizing field data and laboratory analytical data for both soil and groundwater.
- Laboratory analytical reports for soil and groundwater samples.
- Logs, field data sheets, and related field data.
- Laboratory data validation.
- Recommendations relevant for further investigation or remedial action.
- Data validation forms.
- Newly created RCP.

Following the second semi-annual groundwater sampling event, Pioneer will analyze the results and compile and submit a groundwater monitoring report in accordance with the DEQ's *Montana Groundwater Monitoring Work Plan and Report Guidance for Petroleum Releases* (DEQ, 2021) that will include the following:

- Discussion of the monitoring method results, deviations from the approved work plan, assessment of attenuation rates (on Site and off Site), recommendations, and conclusions.
- Cumulative groundwater data tables.
- Updated Site features and potentiometric surface maps.
- Appended groundwater monitoring field forms, laboratory analytical data, and completed data validation summary forms.
- Updated RCP.



All reports will be submitted electronically following the Petroleum Tank Cleanup Section submittal requirements.

4 SCHEDULES

Pioneer proposes to perform and complete soil boring and groundwater monitoring well installation (Task 2), surveying (Task 3), and first round of groundwater sampling (Task 4), during the spring of 2026. The second groundwater sampling event will be completed 6 months after the initial investigation (Task 5). The remedial investigation and groundwater monitoring reports will be completed and submitted within 45 days of receipt of all laboratory analytical reports for groundwater samples. The full duration of the project is approximately 10 months, and the final report will be issued sometime in the fall of 2026.



5 REFERENCES

- Agland Co-Op, 2023. Petroleum Release Notification-30 Day Form, Agland Co-Op, 810 Front Street, Nashua, Montana 59248. Prepared by Agland Co-Op. July 21, 2023.
- DEQ, 2017. Montana Remedial Investigation Guidance for Petroleum Releases. Montana Department of Environmental Quality. October 2017. Available at https://deq.mt.gov/files/Land/LUST/Documents/downloadables/RI Guidance Draft 3Oct17.pdf.
- DEQ, 2018. Groundwater Sampling Guidance. Montana Department of Environmental Quality. March 2018. Available at https://deq.mt.gov/files/Land/LUST/Documents/downloadables/GWSamplingGuidance-FINAL.pdf.
- DEQ, 2021. Montana Groundwater Monitoring Work Plan and Report Guidance for Petroleum Releases. Montana Department of Environmental Quality. March 2021. Available at https://deq.mt.gov/files/Land/LUST/Documents/downloadables/GWM WP Rpt-Guidance 24Mar21.pdf.
- DEQ, 2024. Montana Risk-Based Corrective Action Guidance for Petroleum Releases. Montana Department of Environmental Quality. February 2024. Available at https://deq.mt.gov/files/Land/LUST/Documents/RBCA/2024 Update/Final%202024%20RBCA%20Guide/Final%20RBCA%202024%20Update Compiled%20PDF.pdf.
- DEQ, 2025a. PTC Site Info Report. AGLAND COOP NASHUA, Information Report. Release #519. Montana Department of Environmental Quality. October 2025. Available at https://gis.mtdeq.us/hosting/rest/services/Hosted/Montana Tank Substance Releases/FeatureServer/0/44608/attachments/44772.
- DEQ, 2025b. PTC Site Info Report. AGLAND COOP NASHUA, Information Report. Release #6555. Montana Department of Environmental Quality. October 2025. Available at https://gis.mtdeq.us/hosting/rest/services/Hosted/Montana Tank Substance Releases/FeatureServer/0/44608/attachments/44772.
- Sanborn, 1930. Sanborn Fire Insurance Map from Nashua, Valley County, Montana. Sanborn Map Company, Oct Nov 1930, 1930. Map. https://www.loc.gov/item/sanborn05059_002/.



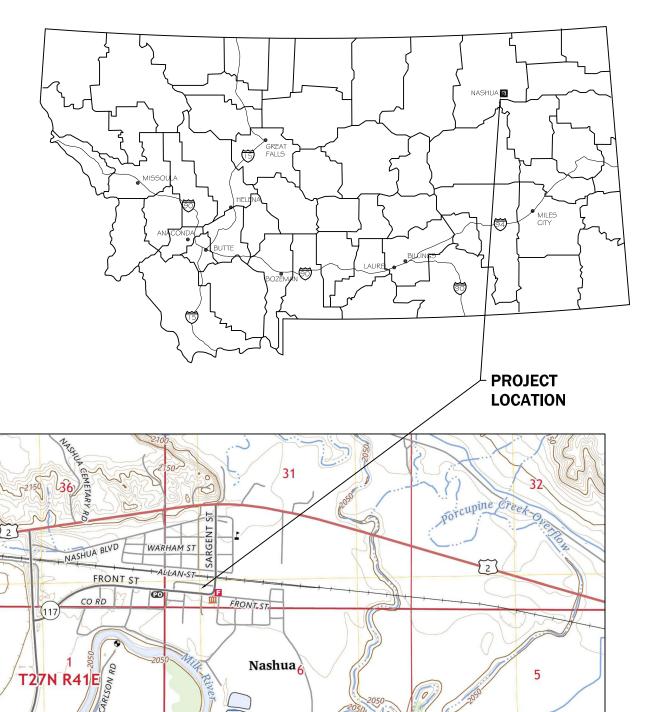
Attachment 1 Figures

Figure 1. Location and Vicinity Map

Figure 2. Site Map

Figure 3. Area Map

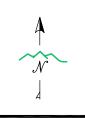
MONTANA



SITE VICINITY MAP

DEQ FACILITY ID: 53-10461 RELEASE NUMBER: 6555 WORK PLAN NUMBER: 35085

AGLAND CO-OP 810 FRONT STREET NASHUA, MONTANA 59248



i		
DISPLAYED AS:		
COORD SYS/ZONE: NAD83, NAVD88		NAVD88
DATUM:	MSP	
UNITS:	INT. FEET	
SOURCE:	USGS	
l	SCALE IN FEET	
0	1000	2000



FIGURE 1

AGLAND CO-OP SITE VICINITY AND LOCATION MAP

DATE: OCTOBER 2025





PROPOSED BORING LOCATION

DEQ FACILITY ID: 53-10461 RELEASE NUMBER: 6555 WORK PLAN NUMBER: 35085

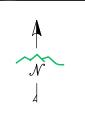






FIGURE 2

AGLAND CO-OP SITE MAP

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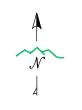




AREA OF CONCERN

APPROXIMATE LOCATION OF AREA OF CONCERN

DEQ FACILITY ID: 53-10461 RELEASE NUMBER: 6555 WORK PLAN NUMBER: 35085



COORD SYS/ZONE: NAD83, NAVD88		
SCALE IN FEET		

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FIGURE 3

AGLAND CO-OP **AREA MAP**

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DATE: OCTOBER 2025