

**State of Colorado**  
**Energy & Carbon Management Commission**

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Document Number:  
404081411  
Receive Date:  
02/04/2025

Report taken by:  
Candice (Nikki) Graber

**Site Investigation and Remediation Workplan (Initial Form)**

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock.

This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by ECMC is based on the site conditions accurately described herein; any changes in site conditions identified during or subsequent to the performance of the approved workplan may necessitate additional investigation or remediation which shall be described on a supplemental Form 27. This Form 27 is intended to provide basic information regarding the proposed site investigation and remediation actions, but the workplan may be more fully described in attached documentation.

Closure request is not available for an Initial Site Investigation and Remediation Workplan.

**OPERATOR INFORMATION**

Name of Operator: <u>PRAIRIE OPERATING CO LLC</u>	Operator No: <u>10819</u>	<b>Phone Numbers</b>
Address: <u>50 S STEELE STREET SUITE 450</u>		Phone: <u>(303) 523-7344</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80209</u>		Mobile: <u>( )</u>
Contact Person: <u>Meredith Knauf</u>	Email: <u>mk@prairieopco.com</u>	

**PROJECT, PURPOSE & SITE INFORMATION**

**PROJECT INFORMATION**

Remediation Project #: 39577 Initial Form 27 Document #: 404081411

**PURPOSE INFORMATION**

Rule 913.c.(1): Pit or Cuttings Trench closure.

Rule 913.c.(2): Buried or partially buried vessel closure, which will be by removal.

Rule 913.c.(3): Remediation of Spill and Releases pursuant to Rule 912.

Rule 913.c.(4): Land treatment of Oily Waste pursuant to Rule 905.e.

Rule 913.c.(5): Closure of Centralized E&P Waste Management Facilities pursuant to Rule 907.h.

Rule 913.c.(6): Remediation of impacted Groundwater pursuant to Rule 915.e.(3).D, and the contaminant concentrations in Table 915-1.

Rule 913.c.(7): Investigation and remediation of natural gas in soil or Groundwater.

Rule 913.c.(8): When requested by the Director due to any potential risk to soil, Groundwater, or surface water.

Rule 913.c.(9): Decommissioning of Oil and Gas Facilities.

Rule 913.g: Changes of Operator.

Rule 915.b: Request to leave elevated inorganics in situ.

Other: \_\_\_\_\_

**SITE INFORMATION** Yes  Multiple Facilities

Facility Type: <u>LOCATION</u>	Facility ID: <u>454131</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>NOBLE 3N68W5</u>	Latitude: <u>40.254008</u>	Longitude: <u>-105.033646</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWSW</u>	Sec: <u>5</u>	Twp: <u>3N</u>	Range: <u>68W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>488470</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Noble Tank Battery</u>	Latitude: <u>40.254545</u>	Longitude: <u>-105.033579</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWSW</u>	Sec: <u>5</u>	Twp: <u>3N</u>	Range: <u>68W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

## **SITE CONDITIONS**

General soil type - USCS Classifications SC

Most Sensitive Adjacent Land Use non-crop land

Is domestic water well within 1/4 mile? No

Is surface water within 1/4 mile? Yes

Is groundwater less than 20 feet below ground surface? No

### **Other Potential Receptors within 1/4 mile**

residence 705' SW, CR 3 810' W,

# SITE INVESTIGATION PLAN

## TYPE OF WASTE:

- |  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> E&P Waste      | <input type="checkbox"/> Other E&P Waste             | <input type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids             | _____                                  |
| <input type="checkbox"/> Oil                       | <input type="checkbox"/> Tank Bottoms                |  |
| <input type="checkbox"/> Condensate                | <input type="checkbox"/> Pigging Waste               |  |
| <input type="checkbox"/> Drilling Fluids           | <input type="checkbox"/> Rig Wash                    |  |
| <input type="checkbox"/> Drill Cuttings            | <input type="checkbox"/> Spent Filters               |  |
|  | <input type="checkbox"/> Pit Bottoms                 |  |
|  | <input type="checkbox"/> Other (as described by EPA) | _____                                  |

## DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
No	GROUNDWATER	0	not encountered
Yes	SOILS	TBD	lab analysis

## INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

From 11/11/24 to 11/20/24, multiple round of hydrovac impacted soil removal and confirmation grab soil sampling occurred. All grab confirmation soil samples were submitted to Origins Laboratory in Denver, Colorado for full ECMC Table 915-1 analysis. Horizontal delineation was confirmed completed to the west, north, and east of the release point at the separator cabinet, as well as vertical delineation confirmed complete 13' bgs underneath the release point. All impacted material has been removed by hydrovac down to out and towards the points of compliance. Laboratory results confirm elevated EC and SAR above ECMC Table 915-1 remain in place at EX-SS-03@4' in the south side of the excavation underneath the separator. See attached figures, tables, photo log, and laboratory analytical reports for all work completed to-date.

## PROPOSED SAMPLING PLAN

### Proposed Soil Sampling

Will soil samples be collected as part of this investigation? ( Number, type (grab/composite), analyses, and locations of samples ):

Prairie Operating will have grab horizontal delineation soil samples safely collected using via hydrovac pot hole and hand auger from 4' bgs around the west, south, and east side of the separator as presented on attached Figure 3 to be submitted to Origins for Table 915-1 EC and SAR analysis only to define the horizontal extent per ECMC comment on denied SF19 document number 404062735.

### Proposed Groundwater Sampling

Will groundwater samples be collected as part of this investigation? ( Number, analyses, and locations of samples ):

Vertical delineation is complete at confirmation grab soil sample EX-FS-01@13'. Groundwater was not encountered.

### Proposed Surface Water Sampling

Will surface water samples be collected as part of this investigation? ( Number, analyses, and locations of samples ):

## Additional Investigative Actions

Additional alternative investigative actions described in attached Site Investigation Plan ( summary ):

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

Soil

NA / ND

Number of soil samples collected 9

ND Highest concentration of TPH (mg/kg) \_\_\_\_\_



\_\_\_\_\_ Bioremediation (or enhanced bioremediation)  
\_\_\_\_\_ Chemical oxidation  
\_\_\_\_\_ Other \_\_\_\_\_

**Groundwater Remediation Summary**

\_\_\_\_\_ Bioremediation ( or enhanced bioremediation )  
\_\_\_\_\_ Chemical oxidation  
\_\_\_\_\_ Air sparge / Soil vapor extraction  
\_\_\_\_\_ Natural Attenuation  
\_\_\_\_\_ Other \_\_\_\_\_

**GROUNDWATER MONITORING**

If groundwater has been impacted, describe proposed monitoring plan, including # of wells or sample points, monitoring schedule, analytical methods, points of compliance. Attach a groundwater monitoring location diagram.

# REMEDIATION PROGRESS UPDATE

## PERIODIC REPORTING

### Approved Reporting Schedule:

Quarterly    Semi-Annually    Annually    Other

### Request Alternative Reporting Schedule:

Semi-Annually    Annually    Other

Rule 913.e:

After initial approval of a Form 27, the Operator will provide quarterly update reports in a Supplemental Form 27 to document progress of site investigation and remediation, unless an alternative reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule based on site-specific conditions.

**Report Type:**    Groundwater Monitoring    Land Treatment Progress Report    O&M Report  
 Other \_\_\_\_\_

## Adequacy of Operator's General Liability Insurance and Financial Assurance

Describe the adequacy of the Operator's general liability insurance and Financial Assurance to fully address the anticipated costs of Remediation, including the estimated remaining cost for this project (below).

If this information has been provided on a Form 27 within the last 12 months, provide the Document Number of that form.

Operator anticipates the remaining cost for this project to be: \$ \_\_\_\_\_

## WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? Yes

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

none

Volume of E&P Waste (solid) in cubic yards \_\_\_\_\_ 40

E&P waste (solid) description impacted soil

ECMC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-ECMC Disposal Facility: Pawnee Waste

Volume of E&P Waste (liquid) in barrels \_\_\_\_\_ 0

E&P waste (liquid) description \_\_\_\_\_

ECMC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-ECMC Disposal Facility: \_\_\_\_\_

# RECLAMATION PLAN

## RECLAMATION PLANNING

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing.

The site is an active well pad and production facility. The excavation has been backfilled, compacted, topped with road base, and returned to pad grade.

Is the described reclamation complete? Yes \_\_\_\_\_

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

Interim  Final

Did the Surface Owner provide the seed mix? \_\_\_\_\_

If YES, does the seed mix comply with local soil conservation district recommendations? \_\_\_\_\_

Did the local soil conservation district provide the seed mix? \_\_\_\_\_

## SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. \_\_\_\_\_

Proposed date of completion of Reclamation. \_\_\_\_\_

## IMPLEMENTATION SCHEDULE

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

### PRIOR DATES

Date of Surface Owner notification/consultation, if required. 11/08/2024

Actual Spill or Release date, or date of discovery. 11/07/2024

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 11/11/2024

Proposed site investigation commencement. 11/11/2024

Proposed completion of site investigation. 05/05/2025

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 11/07/2024

Proposed date of completion of Remediation. 05/05/2025

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

\_\_\_\_\_

**OPERATOR COMMENT**

Upon approval of this form, a SF19 will be submitted to close out Spill ID 488470 as moving forward under this new remediation project number.

I hereby certify all statements made in this form are to the best of my knowledge true, correct, and complete.

Signed: David Castro

Title: Senior Project Scientist

Submit Date: 02/04/2025

Email: dcastro@eagle-enviro.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with ECOMC Rules and applicable orders and is hereby approved.

ECMC Approved: Candice (Nikki) Graber

Date: 03/18/2025

Remediation Project Number: 39577

**COA Type****Description**

	This Form 27 Supplemental is being approved as submitted. However, the next Form Supplemental must be populated with the Adequacy of Operator's General Liability Insurance and Financial Assurance data field under the Remediation Progress Update tab as required by Rules 703.b. and 705.b.
	Approval of this Form 27 does not imply approval of pre-abandonment in place notice required by Rule 1105.d.(2). Operator shall provide documentation of proper abandonment prior to requesting closure.
	If Operator proposes to leave material with elevated pH, EC, or SAR in situ, Operator shall define the vertical and lateral extent of exceedances and submit a reclamation plan for Director approval pursuant to Rule 915.b.
	Background samples were collected from areas within the disturbed area and are not representative of background conditions. These samples shall be omitted from future background determination calculations.  Operator shall obtain additional background samples from locations sufficiently away from the impacted area to reflect conditions not impacted by oil and gas activity, from similar depths, and soil horizons or lithologic materials for comparison to confirmation soil samples.
4 COAs	

**ATTACHMENT LIST**

Upon approval, the approved Form 27 and all listed attachments will be indexed to the Remediation Project file. Only the approved Form 27 will also be indexed to the related Facilities.

<b>Att Doc Num</b>	<b>Name</b>
404081411	INVESTIGATION/REMEDATION WORKPLAN (INITIAL)
404081562	ANALYTICAL RESULTS
404081563	ANALYTICAL RESULTS
404081565	ANALYTICAL RESULTS
404081567	ANALYTICAL RESULTS
404081568	ANALYTICAL RESULTS
404081569	ANALYTICAL RESULTS
404081570	MAP
404081571	SOIL SAMPLE LOCATION MAP
404081572	SOIL SAMPLE LOCATION MAP
404081573	PHOTO DOCUMENTATION
404081574	SITE INVESTIGATION REPORT
404081575	ANALYTICAL RESULTS

404081576	ANALYTICAL RESULTS
404081578	ANALYTICAL RESULTS
404131397	FORM 27-INITIAL-SUBMITTED

Total Attach: 16 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
		Stamp Upon Approval

Total: 0 comment(s)