

State of Colorado
Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:
404031289
Receive Date:
12/19/2024
Report taken by:
RICK ALLISON

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>EXTRACTION OIL & GAS INC</u> | Operator No: <u>10459</u> | Phone Numbers Phone: <u>(303) 294-7864</u> Mobile: <u>()</u> |
| Address: <u>555 17TH STREET SUITE 3700</u> | | |
| City: <u>DENVER</u> | State: <u>CO</u> | Zip: <u>80202</u> |
| Contact Person: <u>Jacob Evans</u> | Email: <u>jevans@civiresources.com</u> | |

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 38279 Initial Form 27 Document #: 404031289

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>419650</u> | API #: _____ | County Name: <u>WELD</u> |
| Facility Name: <u>MORO FARMS SE/4 SEC 29 TANK BATTERY 34-29, CSE-29</u> | | Latitude: <u>40.451240</u> | Longitude: <u>-104.683370</u> |
| ** correct Lat/Long if needed: Latitude: _____ | | Longitude: _____ | |
| QtrQtr: <u>SWSE</u> | Sec: <u>29</u> | Twp: <u>6N</u> | Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <input type="checkbox"/> Yes |

SITE CONDITIONS

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use Cropland
Is domestic water well within 1/4 mile? Yes 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

Eaton Draw is 995-ft to the E.

The Domestic Well (DWR Receipt 0383543; Permit 187104-) approx. 190-ft to the E is the nearest permitted water well. This well was constructed to 100-ft; static water level was not recorded. The Monitoring Well (DWR Receipt 10002602; Permit 316949-) approx. 650-ft to the SW. This well was constructed to 54-ft; static water level recorded at 44-ft. The Monitoring Well (DWR Receipt 005844A; Permit 315238-) is approx. 830-ft to the SW. This well was constructed to 54-ft; static water level recorded at 48-ft.

Groundwater less than 20 ft is not expected at the disturbance location.

This location is not within a HPH area. CPW consultation not required.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- | | | |
|--|--|---|
| <input type="checkbox"/> E&P Waste | <input type="checkbox"/> Other E&P Waste | <input checked="" type="checkbox"/> Non-E&P Waste |
| <input type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | No waste has been generated to date |
| <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 |
|--------------|----------------|------------------|-----------------------|
| UNDETERMINED | SOILS | N/A | Laboratory Analytical |

INITIAL ACTION SUMMARY

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

A site investigation will be conducted pursuant to COGCC rule 911 at the MORO FARMS SE/4 SEC 29 TANK BATTERY/34-29, CSE-29 (419650) oil and gas location pertaining to decommission of production facilities and decommission of associated/all on-location flowlines. See site map exhibit for details.

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):

Grab confirmation soil samples will be collected from beneath the above ground oil tanks, water vault, separator and flowline start/end points. Potholes will be dug every 250 feet along the flowline path. These observation points will be photographed and field screened. Additional soil samples will be collected when flowline repairs are observed, changes in flow direction, or when there is a change in the flowline material type. A grab confirmation soil sample will be collected from the center of the produced water vault footprint, or areas of observed impact based on visual and olfactory observation. A minimum of four sidewalls and the base will be field screened. Soil samples will be analyzed by a certified laboratory for TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons), organic compounds in soil per COGCC Table 915-1, and EC, SAR, pH, metals, and boron. All samples collected will be analyzed by a certified laboratory using approved COGCC laboratory analysis meth

Proposed Groundwater Sampling

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

If groundwater is encountered during the site investigation a grab groundwater sample will be collected and analyzed for all organic and inorganic compounds per ECOM Table 915-1.

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):

Visual inspection of the location will occur during decommission activities. Field personnel will field screen all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling is required. The COGCC Tank Battery Closure will be utilized and filled out during the decommission process. A photolog will be submitted on the Subsequent Form 27.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

NA / ND

Number of soil samples collected 0

Highest concentration of TPH (mg/kg) _____

Number of soil samples exceeding 915-1 _____

Highest concentration of SAR _____

Was the areal and vertical extent of soil contamination delineated? _____

BTEX > 915-1 _____

Approximate areal extent (square feet) _____

Vertical Extent > 915-1 (in feet) _____

Groundwater

Number of groundwater samples collected _____ 0

Highest concentration of Benzene (µg/l) _____

Was extent of groundwater contaminated delineated? No _____

Highest concentration of Toluene (µg/l) _____

Depth to groundwater (below ground surface, in feet) _____

Highest concentration of Ethylbenzene (µg/l) _____

Number of groundwater monitoring wells installed _____

Highest concentration of Xylene (µg/l) _____

Number of groundwater samples exceeding 915-1 _____

Highest concentration of Methane (mg/l) _____

Surface Water

_____ 0 Number of surface water samples collected

_____ Number of surface water samples exceeding 915-1

If surface water is impacted, other agency notification may be required.

OTHER INVESTIGATION INFORMATION

Were impacts to adjacent property or offsite impacts identified?

Were background samples collected as part of this site investigation?

Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) _____

Volume of liquid waste (barrels) _____

Is further site investigation required?

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

N/A

REMEDICATION SUMMARY

Describe how remediation of existing impacts to soil and groundwater is to be accomplished (i.e. summarize remedial action plan). Provide a brief narrative description including: technical justification, schedule for implementation, estimated time to attain NFA status, plus plans and specifications for the selected remedial action technology.

N/A

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

_____ Excavate and offsite disposal

_____ Chemical oxidation

_____ If Yes: Estimated Volume (Cubic Yards) _____

_____ Air sparge / Soil vapor extraction

_____ Name of Licensed Disposal Facility or ECMC Facility ID # _____

_____ Natural Attenuation

_____ Excavate and onsite remediation

_____ Other _____

_____ Land Treatment

_____ 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.

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.

Reclamation will be in accordance with COGCC 1000 Series Rules.

Is the described reclamation complete? No _____

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. 11/21/2024

Actual Spill or Release date, or date of discovery. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/18/2025

Proposed site investigation commencement. 01/21/2025

Proposed completion of site investigation. _____

REMEDIAL ACTION DATES

Proposed start date of Remediation. _____

Proposed date of completion of Remediation. _____

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

This Form 27 Intent is submitted prior to decommissioning the following assets:
 - MORO FARMS SE/4 SEC 29 TANK BATTERY/34-29, CSE-29 (419650) oil and gas location
 - Decommission of all on-location flowlines at MORO FARMS SE/4 SEC 29 TANK BATTERY/34-29, CSE-29 (419650)
 Please see related flowline pre-abandonment notice for specifics on planned field operations
 See attached Site Map for details.

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

Signed: Stephany Olsen

Title: Sr Regulatory Analyst

Submit Date: 12/19/2024

Email: regulatory@civiresources.com

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

ECMC Approved: RICK ALLISON

Date: 12/20/2024

Remediation Project Number: 38279

COA Type**Description**

| | |
|-------|---|
| | <p>Operator shall collect soil samples for analysis of Table 915-1 Contaminants of Concern from the flowline riser(s) and dumpline riser(s) at the separator.</p> <p>Operator shall collect soil samples for analysis of Table 915-1 Contaminants of Concern from the dumpline riser(s) at the at the produced water vessel and the ASTs.</p> |
| 1 COA | |

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.

Att Doc Num**Name**

| | |
|-----------|---|
| 404031289 | INVESTIGATION/REMEDATION WORKPLAN (INITIAL) |
| 404034811 | SITE MAP |
| 404037403 | FORM 27-INITIAL-SUBMITTED |

Total Attach: 3 Files

General Comments**User Group****Comment****Comment Date**

| | | |
|--|--|---------------------|
| | | Stamp Upon Approval |
|--|--|---------------------|

Total: 0 comment(s)