

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:
403913197

Receive Date:
09/09/2024

Report taken by:
Jason Kosola

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>BENSON-MONTIN-GREER DRILLING CORPORATION</u> | | Operator No: <u>7650</u> | Phone Numbers |
| Address: <u>4900 COLLEGE BLVD</u> | | Phone: <u>(505) 325-8874</u> | |
| City: <u>FARMINGTON</u> | State: <u>NM</u> | Zip: <u>87402</u> | Mobile: <u>()</u> |
| Contact Person: <u>Zach Stradling</u> | | Email: <u>zstradling@bmgdrilling.com</u> | |

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 37185 Initial Form 27 Document #: 403913197

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

No Multiple Facilities

| | | | |
|---------------------------------|--------------------|--|---|
| Facility Type: <u>WELL</u> | Facility ID: _____ | API #: <u>067-05063</u> | County Name: <u>LA PLATA</u> |
| Facility Name: <u>STEWARD 1</u> | | Latitude: <u>37.014108</u> | Longitude: <u>-108.197987</u> |
| | | ** correct Lat/Long if needed: Latitude: _____ | Longitude: _____ |
| QtrQtr: <u>NWSW</u> | Sec: <u>3</u> | Twp: <u>32N</u> | Range: <u>13W</u> Meridian: <u>N</u> Sensitive Area? <u>Yes</u> |

SITE CONDITIONS

General soil type - USCS Classifications CH Most Sensitive Adjacent Land Use Agriculture

Is domestic water well within 1/4 mile? No Is surface water within 1/4 mile? No

Is groundwater less than 20 feet below ground surface? No

Other Potential Receptors within 1/4 mile

An intermittent drainage, identified as the Johnny Pond Arroyo, is located approximately 115 feet east of the Steward #1 P&A well. The drainage was dry above the Steward #1 at the time of the site visit on July 9, 2024. An additional intermittent drainage, identified as Morgan Canyon, is located approximately 680 feet south of the Steward #1 P&A well.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- E&P Waste** **Other E&P Waste** **Non-E&P Waste**
- Produced Water Workover Fluids
- Oil Tank Bottoms
- Condensate Pigging Waste
- Drilling Fluids Rig Wash
- Drill Cuttings Spent Filters
- Pit Bottoms
- Other (as described by EPA)

DESCRIPTION OF IMPACT

| Impacted? | Impacted Media | Extent of Impact | How Determined |
|-----------|----------------|------------------|-------------------------------|
| Yes | SOILS | TBD | Laboratory Analytical Results |

INITIAL ACTION SUMMARY

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

BMG was notified via Field Inspection Form (Doc# 716700002-Jim Hughes) of a suspected issue with the Steward #1 (API# 05-067-05063) wellbore, drilled and P&A'd in 1958 (dry hole), in which water and gas were observed bubbling up from the well. BMG and Cottonwood Consulting LLC visited the site on July 9, 2024 to further investigate. One initial soil sample was collected from the release area during the investigation and indicated SAR, boron, and conductivity above ECMC Table 915-1 standards. The attached investigation summary report documents the initial investigation and sampling conducted in the vicinity of the Steward #1 P&A well. Pending approval of access from the landowner, BMG will delineate the extent of the release area. Once a remediation project number is obtained, BMG will close out the associated Form 19 and all work will proceed under the remediation project number.

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):

On July 9, 2024, one initial soil sample was collected downgradient from the point of release. A soil sampling table and laboratory report is provided in the attached investigation summary report.

Additional soil sampling is required to fully define the vertical and horizontal extent of impacts. It is requested that future analysis be limited to the analytes (SAR, conductivity, boron) that failed in the initial soil sample collected.

Proposed Groundwater Sampling

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

Proposed Surface Water Sampling

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

One water sample was collected from the point of release. The total dissolved solids (TDS) concentration was 1,090 milligrams per liter (mg/l) and no hydrocarbons were detected. The intermittent drainage was dry at the time of sampling, if surface water is encountered during additional investigative actions surface water samples will be collected. A water sampling table is provided in the attached investigation summary report.

Additional Investigative Actions

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

Pending approval of access from the landowner, additional soil sampling will occur to fully delineate the extent of impacts.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 1
Number of soil samples exceeding 915-1 1
Was the areal and vertical extent of soil contamination delineated? No
Approximate areal extent (square feet) 0

NA / ND

ND Highest concentration of TPH (mg/kg) _____
-- Highest concentration of SAR 18.6
BTEX > 915-1 No
Vertical Extent > 915-1 (in feet) 0

Groundwater

Number of groundwater samples collected 0
Was extent of groundwater contaminated delineated? No
Depth to groundwater (below ground surface, in feet) _____
Number of groundwater monitoring wells installed _____
Number of groundwater samples exceeding 915-1 _____

Highest concentration of Benzene (µg/l) _____
Highest concentration of Toluene (µg/l) _____
Highest concentration of Ethylbenzene (µg/l) _____
Highest concentration of Xylene (µg/l) _____
Highest concentration of Methane (mg/l) _____

Surface Water

1 Number of surface water samples collected
0 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?

Two background soil samples were collected upgradient from the point of release. Arsenic was elevated above ECMC Table 915-1 standards in both background soil samples collected.

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?

Pending approval of access from the landowner, BMG will delineate the extent of the release area. Once a remediation project number is obtained, BMG will close out the associated Form 19 and all work will proceed under the remediation project number. It is requested that future analysis be limited to the analytes (SAR, conductivity, boron) that failed in the initial sampling event.

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

BMG is currently evaluating remediation options. Any material removed from this location will be disposed of at an approved E&P waste facility.

REMEDIATION 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.

Pending approval of access from the landowner, BMG will delineate the extent of the release area and evaluate remediation options. A remediation action plan will be submitted on a subsequent supplemental form 27.

Soil Remediation Summary

In Situ

Ex Situ

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

_____ Excavate and offsite disposal
_____ If Yes: Estimated Volume (Cubic Yards) _____
_____ Name of Licensed Disposal Facility or ECMC Facility ID # _____
_____ Excavate and onsite remediation
_____ 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.

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? No _____

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

Volume of E&P Waste (solid) in cubic yards _____

E&P waste (solid) description _____

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: _____

Volume of E&P Waste (liquid) in barrels _____

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 will be reclaimed in accordance with ECMC 1000 Series Reclamation 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? No _____

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

Did the local soil conservation district provide the seed mix? No _____

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. 06/11/2024

Actual Spill or Release date, or date of discovery. 06/11/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 06/26/2024

Proposed site investigation commencement. 06/26/2024

Proposed completion of site investigation. 10/31/2024

REMEDIAL ACTION DATES

Proposed start date of Remediation. 05/01/2025

Proposed date of completion of Remediation. 09/01/2025

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

BMG and Cottonwood Consulting LLC conducted a site investigation on July 9, 2024. One initial soil sample was collected during investigation and indicated SAR, boron and conductivity above ECMC table 915-1 standards. The attached investigation summary report documents the initial investigation and sampling conducted in the vicinity of the Steward #1 P&A well.

Pending approval of access from the landowner, BMG will delineate the extent of the release area. Once a remediation project number is obtained, BMG will close out the associated Form 19 and all work will proceed under the remediation project number. It is requested that future analysis be limited to the analytes (SAR, conductivity, boron) that failed in the initial sampling event.

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

Signed: Kyle Siesser

Title: Consultant

Submit Date: 09/09/2024

Email: ksiesser@cottonwoodconsulting.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: Jason Kosola

Date: 10/04/2024

Remediation Project Number: 37185

COA Type

Description

| | |
|--------|---|
| | This Form 27 Supplemental is being approved as submitted. However, the next Form 27 Supplemental must be populated with the Adequacy of Operators General Liability Insurance and Financial Assurance data field under the Remediation Progress Update tab to describe how Operator's Financial Assurance meets the requirements of Rule 703.b. and General Liability Insurance meets the requirements of Rule 705.b. |
| | ECMC approves reduced analyte request as described. Operator shall fully delineate vertical and horizontal extent of spill and report results via Form 27 Supplemental no later than end of 4th quarter 2024. If impacts are discovered, Operator shall also include a remediation plan to remediate impacts from spill. |
| 2 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.

| Att Doc Num | Name |
|--------------------|---|
| 403913197 | INVESTIGATION/REMEDATION WORKPLAN (INITIAL) |
| 403913363 | SITE INVESTIGATION REPORT |
| 403946501 | FORM 27-INITIAL-SUBMITTED |

Total Attach: 3 Files

General Comments

| User Group | Comment | Comment Date |
|-------------------|----------------|---------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)