

State of Colorado
Energy & Carbon Management Commission

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Jason Kosola

Site Investigation and Remediation Workplan (Supplemental 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 ECOM 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: RED MESA HOLDINGS/O&G LLC	Operator No: 10254	Phone Numbers Phone: (970) 946 3761 Mobile: ()
Address: 5619 DTC PARKWAY - STE 800		
City: GREENWOOD VILLAGE	State: CO	Zip: 80111
Contact Person: Jacob Harter	Email: jharter@cottonwoodconsulting.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 27453 Initial Form 27 Document #: 403254761

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: WELL	Facility ID: _____	API #: 067-09773	County Name: LA PLATA
Facility Name: TURNER (OWP) 4	Latitude: 37.080440	Longitude: -108.129930	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NENE	Sec: 27	Twp: 33N	Range: 12W Meridian: N Sensitive Area? Yes

SITE CONDITIONS

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

Third Canyon to the west.

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.

The ECMC Orphan Well Program plugged the Turner (OWP) #4 well and decommissioned the well site in fall 2023. Soil samples were collected in accordance with the initial form 27 (DOC#403254761) and ECMC Rule 915.e(2)B. Samples were collected from the plugged and abandoned (P&A) wellhead excavation, flow line path(s), as well as any other areas likely to have been impacted. Samples were submitted for laboratory analysis of Table 915-1 constituents. Initial assessment and sampling occurred on September 14, 2023, and November 15, 2023, and indicated soil impacts of pH slightly outside the range of ECMC Table 915-1 standards as described in the Site Investigation Report section below.

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):

Soil samples were collected for laboratory analysis of ECMC Table 915-1 constituents. Two discrete soil samples were collected; one sample from the P&A wellhead excavation and one sample from the former flowline excavation from wellhead to meter house. Prior to collecting soil samples, soil was field screened using a PID and visual/olfactory observations. The attached project map provides the location of all samples.

Proposed Groundwater Sampling

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

No obvious pathways to groundwater were observed and no groundwater was encountered during the initial assessment and sampling conducted on September 14, 2023, and November 15, 2023.

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):

Field personnel performed a visual/olfactory inspection of the site. Additional investigation may be needed to fully define the extent of E&P impacts that extend from the wellhead across the location and beyond.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 2
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 3
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

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?

Background soil samples were collected from nearby, non-impacted native soil to establish background concentrations. Background samples were analyzed for Table 915-1 constituents. Background soil samples were collected in the Red Mesa area. A background soil sampling tables is provided in the attachments. Background samples indicated arsenic values above the ECMC Table 915-1 standards. It is requested that background concentration be considered when evaluating this site for final closure.

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?

Initial assessment and sampling occurred on September 14, 2023, and November 15, 2023, and indicated minor soil impacts slightly above ECMC Table 915-1 standards. Field personnel visually inspected and field screened the areas of greatest concern surrounding each piece of equipment and the area surrounding each flowline. If signs of impact were observed a soil sample was collected from the area of greatest impact. If no signs of impacts were observed one discrete soil sample was collected from the removed equipment and/or flowline. Soil surrounding the former meter house location was field screened and had no stain, no odor, and a photoionization detector (PID) reading of 2.2 parts per million (ppm).

Laboratory results of sample SS02 (flowline) indicated levels of pH (8.60) slightly outside the range of ECMC table 915-1 standards. Given that all other analytes were below ECMC Table 915-1 standards, it appears that slightly elevated pH concentrations are not necessarily associated with exploration and production (E+P) operations. Additionally, since SS02 (flowline) was collected at a depth of 2.5 feet below ground surface, it is unlikely that the slightly elevated pH concentration will affect final reclamation success at the site. It is requested that sample depth be considered when evaluating this site and that the site be approved for final closure.

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? No

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

If approved, no material will be removed from this site.

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.

If approved, no remediation is anticipated at this site.

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 # _____ 0
- _____ 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.

[Empty rectangular box for monitoring plan details]

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 Plug and abandon well and decommission on site production equipment and flow line(s). _____

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.

The scope of work described in this Initial Site Investigation and Remediation Workplan will be completed by the COGCC Orphaned Well Program. The COGCC is not an oil and gas operator. This document will be used, in part, to bid out various phases of this facility closure.

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: _____

REMEDIATION COMPLETION REPORT

REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? Yes

If YES:

Compliant with Rule 913.h.(1).

Compliant with Rule 913.h.(2).

Compliant with Rule 913.h.(3).

Do all soils meet Table 915-1 standards? Yes

Does the previous reply indicate consideration of background concentrations? Yes

Does Groundwater meet Table 915-1 standards? Yes

Is additional groundwater monitoring to be conducted? _____

Operator shall comply with the ECMC 1000-Series Reclamation Requirements for all impacted and disturbed areas.

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, and will be addressed during a separate phase of the OWP work.

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. _____

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

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). _____

Proposed site investigation commencement. 07/18/2023

Proposed completion of site investigation. 01/01/2024

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

Final closure requested.

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

Signed: Jacob HarterTitle: ConsultantSubmit Date: 01/11/2024Email: jharter@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 KosolaDate: 11/25/2024Remediation Project Number: 27453**COA Type****Description**

	<p>NO FURTHER ACTION Based on the information presented, it appears that no further action is necessary at this time and the ECMC approves the closure request. However, if future conditions at the site indicate contaminant concentrations in soils exceeding ECMC standards or if groundwater is found to be impacted, then further investigation and/or remediation activities may be required. The surface area disturbed by the remediation activity shall be reclaimed in accordance with the 1000 Series Reclamation Rules. For locations with active ongoing oil and gas operations, comply with Rule 1003 interim reclamation requirements and for locations that will no longer have active oil and gas operations, comply with Rule 1004 Final Reclamation requirements.</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
403636031	FORM 27-SUPPLEMENTAL-SUBMITTED
403647821	ANALYTICAL RESULTS
403647822	PHOTO DOCUMENTATION
403647823	PHOTO DOCUMENTATION
403647824	SOIL SAMPLE LOCATION MAP
403647825	ANALYTICAL RESULTS
403647828	ANALYTICAL RESULTS
403647829	ANALYTICAL RESULTS

Total Attach: 8 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)