

State of Colorado
Energy & Carbon Management Commission1120 Lincoln Street, Suite 801, Denver, Colorado 80203
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Document Number:

403974196

Receive Date:

12/11/2024

Report taken by:

Chris Sanchez

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: MYSTIQUE RESOURCES COMPANY	Operator No: 10348	Phone Numbers
Address: 27242 E EUCLID DR		Phone: (308) 430-0337
City: AURORA	State: CO	Zip: 80016
Contact Person: Dennis Staal	Email: dstaal@msn.com	Mobile: ()

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: Initial Form 27 Document #: 403974196

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: WELL	Facility ID:	API #: 017-07666	County Name: CHEYENNE
Facility Name: SHIRLEY ROTHER 1	Latitude: 38.785900	Longitude: -102.122480	
** correct Lat/Long if needed: Latitude:		Longitude:	
QtrQtr: SESW	Sec: 33	Twp: 14S	Range: 42W Meridian: 6 Sensitive Area? No

Facility Type: FLOWLINE	Facility ID: 321974	API #:	County Name: CHEYENNE
Facility Name: SHIRLEY ROTHER-614S42W 33SESW	Latitude: 38.785900	Longitude: -102.122480	
** correct Lat/Long if needed: Latitude:		Longitude:	
QtrQtr: SESW	Sec: 33	Twp: 14S	Range: 42W Meridian: 6 Sensitive Area? No

SITE CONDITIONS

General soil type - USCS Classifications SW

Most Sensitive Adjacent Land Use Farming Center
Pivot

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

There is 2 water wells within 1/4 mile. First well is 934 ft west (WDID - 4950051/Permit #15490), Second well is 851 ft Southwest (Receipt #3685133/No Permit #). The closest HPH area is 270 miles north of the location.

DENIED

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
UNDETERMINED	GROUNDWATER	No known impacts / None anticipated	Visual Inspection
UNDETERMINED	SOILS	No known impacts / None anticipated	Visual Inspection
UNDETERMINED	SURFACE WATER	No known impacts / None anticipated	Visual Inspection

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 proposed plugging and abandonment of the Shirley Rother 1 (API #05-017-07666) well will be plugged and abandoned per the Form 6 (doc # 403060191). There are no soil, groundwater, or surface water impacts that are known to be associated with the operations of the Shirley Rother 1 well.

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):

The proposed plugging and abandonment of the Shirley Rother 1 (API #05-017-07666) is not part of an emergency action. This is a routine, planned P&A operation. The Shirley Rother 1 (API #05-017-07666) well will be plugged and abandoned per the Form 6 (doc # 403060191). There are no soil, groundwater, or surface water impacts that are known to be associated with the operations of the Shirley Rother 1 well.

Proposed Groundwater Sampling

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

Groundwater samples are not planned to be collected. Groundwater contamination is not known to exist, nor is it expected at this time. If groundwater contamination occurs or is encountered during P&A operations, ECMC staff will be notified / consulted, and appropriate samples will be collected and submitted to determine compliance with applicable ECMC 915-1 cleanup standards

Proposed Surface Water Sampling

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

Surface water samples are not planned to be collected. Surface water contamination is not known to exist, nor is it expected at this time. If surface water contamination occurs or is encountered during P&A operations, ECMC staff will be notified / consulted, and appropriate samples will be collected and submitted to determine compliance with applicable ECMC cleanup standards.

Additional Investigative Actions

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

Visual inspection of the flowline areas will occur during abandonment activities. Field personnel will field screen all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling is required. The ECMC Flowline Closure and Wellhead Closure Checklists will be utilized and filled out during the abandonment 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

Number of soil samples exceeding 915-1

Was the areal and vertical extent of soil contamination delineated?

Approximate areal extent (square feet)

Highest concentration of TPH (mg/kg)

Highest concentration of SAR

BTEX > 915-1

Vertical Extent > 915-1 (in feet)

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?

☐ 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.

The Shirley Rother 1 well is to be plugged and abandoned per the details and procedures described in the Form 6 (doc #403060191). Any contaminated soils encountered during abandonment activities will be excavated using the appropriate type of equipment deemed appropriate for site conditions (i.e., hydro-vac truck, mini-excavator, etc.). All underground utilities, pipelines, and infrastructure will be located and identified prior to initiating P&A activities.

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.

This is a routine P&A operation being performed for a single well. No impacts to soil, groundwater, or surface water resources are known or anticipated at this time. However, should any contamination (related to the oil and gas operations associated with this specific well location) be encountered while performing P&A activities, the impacted media will be immediately assessed for compliance with ECMC Table 915-1 cleanup standards. Any E&P waste materials found to exceed these cleanup standards will be investigated and remediated per ECMC Rule 913 (Site Investigation, Remediation, and Closure), and subsequently managed per ECMC Rule 905 (Management of E&P Waste).

Soil Remediation Summary

☐ In Situ

☐ Ex Situ

Bioremediation (or enhanced bioremediation)

Chemical oxidation

Air sparge / Soil vapor extraction

Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards)

Name of Licensed Disposal Facility or ECMC Facility ID #

_____ Natural Attenuation

_____ Other _____

_____ 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 Shirley Rother 1 well is to be plugged and abandoned per the details and procedures described in the Form 6 (doc #403060191). The Shirley Rother 1 well is located on an inactive well pad with no other producing wells. Upon successfully completing the plugging and abandonment of this well, the well cellar will be reclaimed and backfilled with clean fill as described in the abandonment procedures and covered with gravel / road base materials to match the surrounding surface of the working well pad.

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? 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. 01/10/2023

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

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 08/28/2023

Proposed site investigation commencement. 08/28/2023

Proposed completion of site investigation. 08/28/2023

REMEDIAL ACTION DATES

Proposed start date of Remediation. 08/23/2023

Proposed date of completion of Remediation. 08/25/2023

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

Per Rule 913.c.(9), Mystique Resources Company did provide notification and requested approval to plug and abandonment (P&A) the Shirley Rother 1 well. The Form 6 (doc #403060191) was submitted and approved.

Due to several compliance issues with the Shirley Rother 1 well, Mystique Resources Company has decided to plug and abandon the well, facility, and reclaim the well pad. Conversations with the surface owner regarding reclamation and seeding of the area have taken place. The surface owner has requested to leave the land as-is, as they plan to incorporate the well pad area into their crops.

Visual inspections were conducted during the initial site visit, and it was determined that no soil samples were necessary.

The facility equipment, which included two (2) tanks and one (1) separator, was removed and hauled to the Eastern Colorado Well Service yard. No fluids were hauled offsite; all fluid present was utilized during the plugging and abandonment of the well.

The proposed P&A activities were carried out in accordance with Form 6 (doc #403060191). This operation pertains to a single well. No known or anticipated impacts to soils, groundwater, or surface water exist.

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

Signed: Dennis Staal

Title: President

Submit Date: 12/11/2024

Email: dstaal@msn.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: _____

Date: _____

Remediation Project Number: _____

COA Type

Description

0 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

403974196	FORM 27 DENIED
404039779	FORM 27-INITIAL-SUBMITTED

Total Attach: 2 Files

General Comments

User Group

Comment

Comment Date

Environmental	Operator shall propose a Sampling Pan in accordance with Rule 913 and Rule 915	12/24/2024
Environmental	In the Operator Comments and Submittal, the Operator states, "Visual inspections were conducted during the initial site visit, and it was determined that no soil samples were necessary"...	12/24/2024
	Investigation was not conducted in accordance with Rule 911 and Rule 913.	
Environmental	Form 27 Denied, Site Investigation Plan states, "The proposed plugging and abandonment of the Shirley Rother 1 (API #05-017-07666)"...	12/24/2024
	Per Form 6s Document # 403244339 and Document # 403829889, the Cut and Cap date for the well was 8/27/2022.	
	The Operator shall re-submit a Form 27 Initial in accordance with Rule 911 and Rule 913.	

Total: 3 comment(s)