

State of Colorado Oil and Gas Conservation Commission

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Document Number:

402754247

Receive Date:

07/22/2021

Report taken by:

John Heil

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 COGCC 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>FOUNDATION ENERGY MANAGEMENT LLC</u>	Operator No: <u>10112</u>	Phone Numbers
Address: <u>5057 KELLER SPRINGS RD STE 650</u>		Phone: <u>(303) 244-8114</u>
City: <u>ADDISON</u>	State: <u>TX</u>	Zip: <u>75001</u>
Contact Person: <u>Alyssa Beard</u>	Email: <u>abeard@foundationenergy.com</u>	Mobile: <u>()</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 20084 Initial Form 27 Document #: 402754247

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>SPILL OR RELEASE</u>	Facility ID: <u>441628</u>	API #: _____	County Name: <u>RIO BLANCO</u>
Facility Name: <u>SPILL/RELEASE POINT</u>		Latitude: <u>39.723490</u>	Longitude: <u>-109.031400</u>
		** correct Lat/Long if needed: Latitude: <u>39.723383</u>	Longitude: <u>-109.031290</u>
QtrQtr: <u>NESE</u>	Sec: <u>11</u>	Twp: <u>4S</u>	Range: <u>104W</u>
		Meridian: <u>6</u>	Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications OL

Most Sensitive Adjacent Land Use Rangeland

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

Ephemeral drainage lies approximately 1,150 feet to the east. Nearest water well is a monitoring well notice, which indicates a depth of 100 feet. It can be assumed that groundwater is ~100 feet.

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	SOILS	TBD	sampling and 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.

Collect samples from the spill area as shown in the attached sample location map for COGCC Table 910-1 to determine if any impacts are present from the release.

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):

Two (2) samples will be collected, one near the point of origin and the second at the point of terminus to determine if any exceedances to Table 910-1 are present.

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):

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 2

Number of soil samples exceeding 915-1 0

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

Approximate areal extent (square feet) 0

-- Highest concentration of TPH (mg/kg) 0

-- Highest concentration of SAR 0

BTEX > 915-1 _____

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) 100'

Number of groundwater monitoring wells installed 0

Number of groundwater samples exceeding 915-1 0

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

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?

☐ 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.

TBD

REMEDIAL 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.

TBD

Soil Remediation Summary

☐ In Situ

☐ Ex Situ

Bioremediation (or enhanced bioremediation)

Chemical oxidation

Air sparge / Soil vapor extraction

Natural Attenuation

Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards) _____

Name of Licensed Disposal Facility or COGCC Facility ID # _____

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.

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 _____

WASTE DISPOSAL INFORMATION

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

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 _____

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: _____

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

E&P waste (liquid) description _____

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC 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.

Excavated area will be backfilled and countoured to meet the current grade and layout of the pad as its an active working facility.

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? Yes

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

Did the local soil conservation district provide the seed mix? Yes

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). 08/02/2021

Proposed site investigation commencement. 08/31/2021

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

Please forward onto John Heil

This Initial Form 27 is being submitted for the Foundation CS 8-11-4-104 WDW spill that occurred on 4/28/2015 and reported via Form 19 (Doc# 400834228, Spill ID 441628). Two samples will be collected from a depth of 0-6" below ground surface and submitted to the lab for COGCC Table 910-1.

Foundation is requesting to manage this spill under the previously implemented COGCC Table 910-1 regulations as this release and spill reporting occurred prior to January 115, 2021. Foundation anticipates that any necessary remediation will be completed in 2021.

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

Signed: Alyssa Beard

Title: EHSR Manager

Submit Date: 07/22/2021

Email: regulatory@foundationenergy.com

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

COGCC Approved: John Heil

Date: 09/23/2021

Remediation Project Number: 20084

Condition of Approval**COA Type****Description**

	Assess the nature and extent of contamination with confirmation soil samples. Delineate the horizontal and vertical extent of impacted area and remediate impacts to Table 910-1 standards.
1 COA	

Attachment Check 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**

402754247	FORM 27-INITIAL-SUBMITTED
402754339	SOIL SAMPLE LOCATION MAP

Total Attach: 2 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)