

State of Colorado Oil and Gas Conservation Commission

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



Document Number:

403336020

Receive Date:

04/27/2023

Report taken by:

Krystal Heibel

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>FUNDARE RESOURCES OPERATING COMPANY LLC</u>	Operator No: <u>10773</u>	Phone Numbers Phone: <u>(303) 910-4511</u> Mobile: <u>()</u>
Address: <u>5251 DTC PKWY STE 950</u>		
City: <u>GREENWOOD VILLAGE</u>	State: <u>CO</u> Zip: <u>80111</u>	
Contact Person: <u>Sydney Smith</u>	Email: <u>ssmith@fundareresources.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 29346 Initial Form 27 Document #: 403336020

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>481754</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Razor 26 CPB</u>		Latitude: <u>40.809358</u>	Longitude: <u>-103.837000</u>
		** correct Lat/Long if needed: Latitude: _____	Longitude: _____
QtrQtr: <u>NESW</u>	Sec: <u>26</u>	Twp: <u>10N</u>	Range: <u>58W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SM 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

There are no residents or habitable structures within a quarter mile of the release. There are no marked county roads, however there is a lease road 122' North of the release location. There is no marked surface water within a quarter mile of the release, but there is a dry ravine 917' to the South of the release. There are 2 Monitoring wells 1311' East of the release location. The release is within the buffer of the Mule Deer Severe winter range, CPW has been notified of this.

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	1050 SQ FT	Sampling

INITIAL ACTION SUMMARY

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

Upon discovery of the release on the produced water line at the tank battery, all wells were shut in to the battery, and treater lines were drained. A crew was dispatched to the location to begin Hydrovacing, and excavation to remove the source and to eliminate impacts from migrating on-site.

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):

After completion of the initial excavation, On August 5, 2022, MarCom LLC conducted field screening at the site to identify if impacts remain. Screening results conducted utilizing a PID indicated that additional excavation was necessary. Following multiple excavation events final excavation extent soil confirmation samples were collected following the COGCC table 915- guidance. Analytical results indicated that all impacts had been removed except for SAR from SW-5, SW-7, BH-6, and BH-7 at depth greater than the 4-foot reclamation root zone. Due to the remaining impacts being below the reclamation root zone, Fundare is requesting conditional closure of the release following the attached reclamation plan. Additionally soil analytical was compared to residential limits as the pathway to groundwater is incomplete at this site. A Groundwater Monitoring well at a neighboring location, indicated groundwater in this area is 38' below ground surface (bgs).

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

Number of soil samples collected 35
Number of soil samples exceeding 915-1 10
Was the areal and vertical extent of soil contamination delineated? Yes
Approximate areal extent (square feet) 1050

NA / ND

ND Highest concentration of TPH (mg/kg) _____
-- Highest concentration of SAR 16.4
BTEX > 915-1 No
Vertical Extent > 915-1 (in feet) 10

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?

Yes, A total of 11 site specific backgrounds were 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?

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Upon discovery of the release on the produced water line at the tank battery, all wells were shut in to the battery, and treater lines were drained. A crew was dispatched to the location to begin Hydrovacing, and excavation to remove the source and to eliminate impacts from migrating on-site.

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.

Confirmation soil samples were collected in accordance with the Table 915-1 guidance. Final excavation extent analytical results indicated that all impacts have been removed except for SAR in a few locations greater than the 4-foot reclamation root zone. Fundare is requesting conditional closure and backfill of the site with NFA following the interim reclamation plan attached.

Soil Remediation Summary

☐ In Situ

☒ Ex Situ

____ Bioremediation (or enhanced bioremediation)

Yes Excavate and offsite disposal

____ Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) 388

_____ Air sparge / Soil vapor extraction
_____ Natural Attenuation
_____ Other _____

_____ Name of Licensed Disposal Facility or COGCC 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.

Fundare has the required sufficient insurance to fully address the anticipated costs of Remediation, including the remaining estimated costs for this project. Fundare has general liability insurance and financial assurance as required by COGCC rules.

Operator anticipates the remaining cost for this project to be: \$ 5000

WASTE DISPOSAL INFORMATION

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

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

There is no beneficial use of the E&P waste generated.

Volume of E&P Waste (solid) in cubic yards 388

E&P waste (solid) description Hydrocarbon Impacted soil

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility: Pawnee waste

Volume of E&P Waste (liquid) in barrels 0

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.

The site will be backfilled and reclaimed and reclaimed following the interim reclamation plan, to its pre-excavation condition, and production will continue.

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. 05/15/2023

Proposed date of completion of Reclamation. 06/02/2023

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. 03/12/2022

Actual Spill or Release date, or date of discovery. 03/11/2022

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/11/2022

Proposed site investigation commencement. 03/12/2022

Proposed completion of site investigation. 08/05/2022

REMEDIAL ACTION DATES

Proposed start date of Remediation. 04/01/2022

Proposed date of completion of Remediation. 11/14/2023

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

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

Signed: Sydney Smith

Title: Director EHSR

Submit Date: 04/27/2023

Email: ssmith@fundareresources.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: Krystal Heibel

Date: 05/18/2023

Remediation Project Number: 29346

COA Type**Description**

	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.
	On the supplemental Form 27, Operator shall provide justification for use the Residential SSLs.
	The soil suitability plan cannot be reviewed until the soil suitability impacts are horizontally and vertically delineated.

3 COAs

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**

403336020	FORM 27-INITIAL-SUBMITTED
403363480	SITE MAP
403363481	SITE MAP
403363484	SOIL SAMPLE LOCATION MAP
403363485	SOIL SAMPLE LOCATION MAP
403363486	ANALYTICAL RESULTS
403363497	ANALYTICAL RESULTS
403363498	ANALYTICAL RESULTS
403363499	ANALYTICAL RESULTS
403363501	ANALYTICAL RESULTS
403363502	ANALYTICAL RESULTS
403363511	REMEDATION PROGRESS REPORT
403363603	RECLAMATION PLAN

Total Attach: 13 Files

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

Environmental	Soil confirmation sample data indicate that EC and SAR at the site exceeds the Table 915 -1 soil suitability levels for reclamation. Therefore the remediation project cannot be closed at this time.	04/28/2023
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Total: 1 comment(s)