

State of Colorado Oil and Gas Conservation Commission

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Document Number:

403332543

Receive Date:

03/04/2023

Report taken by:

KRIS NEIDEL

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>D90 ENERGY LLC</u>	Operator No: <u>10706</u>	Phone Numbers
Address: <u>952 ECHO LANE SUITE 480</u>		Phone: <u>(970) 896-5665</u>
City: <u>HOUSTON</u>	State: <u>TX</u>	Zip: <u>77024</u>
Contact Person: <u>Rikki Ross</u>	Email: <u>rikki.ross@fulcrumeo.com</u>	Mobile: <u>()</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 28018 Initial Form 27 Document #: 403332543

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>TANK BATTERY</u>	Facility ID: <u>436007</u>	API #: _____	County Name: <u>JACKSON</u>
Facility Name: <u>Grizzly 3-32H</u>	Latitude: <u>40.627697</u>	Longitude: <u>-106.397825</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NENW</u>	Sec: <u>32</u>	Twp: <u>8N</u>	Range: <u>80W</u>
Meridian: <u>6</u>	Sensitive Area? <u>No</u>		

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use Agricultural crop land

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? Yes

Other Potential Receptors within 1/4 mile

Grizzly Creek is within ~750' of the spill area across CO State HWY 14 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
UNDETERMINED	SOILS	Within containment	Visual observation

INITIAL ACTION SUMMARY

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

A Form 19 Initial Report was submitted on 1/25/2023. After the collection system was shut down, a hydro-vac truck was dispatched immediately upon discovery and produced water was removed from containment to the extent that freezing conditions would allow. All of the release was captured within lined secondary containment and has since been fully removed.

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 extent of the impacted area will be delineated using a handheld auger, electrical conductivity (EC) soil probe and photoionization detector (PID). Focus will be given to locations where the liner indicates compromised integrity. Soil samples will be collected as needed to characterize and/or demonstrate confirmation of impacts. All soil samples will be analyzed for all COGCC Table 915-1 parameters to determine regulatory compliance. At least 1 background sample will also be collected in the adjacent undisturbed landscape to the approximate soil depth as site samples.

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 _____ 0
Number of soil samples exceeding 915-1 _____
Was the areal and vertical extent of soil contamination delineated? _____
Approximate areal extent (square feet) _____

NA / ND

_____ 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.

Pending results of the site investigation.

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.

Remediation activities, if required, will likely involve removal of site equipment, excavation of impacted soils and transport to an approved disposal facility. Confirmation sampling will be conducted to confirm successful remediation. Excavated areas will then be backfilled with clean soil and then lined secondary containment will be reconstructed and reestablishment of site equipment.

Soil Remediation Summary

☐ In Situ

☐ Ex Situ

_____ Bioremediation (or enhanced bioremediation)

_____ Excavate and offsite disposal

_____ Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) _____

_____ 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.

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

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.

The facility is presently in use and reclamation activities are not warranted at this time onsite.

Is the described reclamation complete? _____

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. 01/25/2023

Actual Spill or Release date, or date of discovery. 01/24/2023

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/24/2023

Proposed site investigation commencement. 03/08/2023

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:

Further investigations are highly weather dependent and will be adjusted accordingly to facilitate successful delineation and accommodate weather related safety concerns.

OPERATOR COMMENT

As requested by the COGCC, Fulrum is requesting transfer of Spill 483729 to this Form 27 Site Investigation Plan.

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

Signed: Joel Mason

Title: Agent

Submit Date: 03/04/2023

Email: joel.mason@absaroksolutions.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: KRIS NEIDEL

Date: 03/09/2023

Remediation Project Number: 28018

COA Type**Description**

	It was reported in Inspection Doc # 690900233 that a valve was weeping. This and any other mechanical problems causing weeping or leaking shall be fixed.
	The supplemental Form 27 should include documentation of Liner repair or replacement.
	An adequate number of samples shall be collected and analyzed for Table 915-1 to determine if soils are impacted.
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**

403332543	FORM 27-INITIAL-SUBMITTED
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Total Attach: 1 Files

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

Environmental	spill number 483729 compliance with Table 915-1 will be documented in this REM project	03/09/2023
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Total: 1 comment(s)