

State of Colorado
Oil and Gas Conservation Commission

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Document Number:
402673506
Receive Date:
04/29/2021
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.

Refer to Rules 340, 905, 906, 907, 908, 909, and 910

OPERATOR INFORMATION

Name of Operator: <u>CM PRODUCTION LLC</u>	Operator No: <u>10352</u>	Phone Numbers
Address: <u>390 UNION BLVD SUITE 620</u>		
City: <u>LAKEWOOD</u>	State: <u>CO</u>	Zip: <u>80228</u>
Contact Person: <u>Richard Murray</u>	Email: <u>g.richard.murray@state.co.us</u>	
		Phone: <u>(907) 989-3092</u>
		Mobile: <u>(970) 989-3092</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION
Remediation Project #: 17912 Initial Form 27 Document #: 402673506

PURPOSE INFORMATION

<input type="checkbox"/> 901.e. Sensitive Area Determination	<input type="checkbox"/> 909.c.(5), Rule 910.b.(4): Remediation of impacted ground water
<input type="checkbox"/> 909.c.(1), Rule 905: Pit or PW vessel closure	<input type="checkbox"/> Rule 909.e.(2)A.: Notice completion of remediation in accordance with Rule 909.b.
<input type="checkbox"/> 909.c.(2), Rule 906: Spill/Release Remediation	<input type="checkbox"/> Rule 909.e.(2)B.: Closure of remediation project
<input type="checkbox"/> 909.c.(3), Rule 907.e.: Land treatment of oily waste	<input type="checkbox"/> Rule 906.c.: Director request
<input type="checkbox"/> 909.c.(4), Rule 908.g.: Centralized E&P Waste Management Facility closure	<input checked="" type="checkbox"/> Other <u>Rule 911: Closure of Oil and Gas Facilities</u>

SITE INFORMATION Y Multiple Facilities (in accordance with Rule 909.c.)

Facility Type: <u>LOCATION</u>	Facility ID: <u>324634</u>	API #: _____	County Name: <u>JACKSON</u>
Facility Name: <u>MARGARET SPAULDING-69N81W 28SWSE</u>	Latitude: <u>40.717432</u>	Longitude: <u>-106.499019</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWSE</u>	Sec: <u>28</u>	Twp: <u>9N</u>	Range: <u>81W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
Facility Type: <u>TANK BATTERY</u>	Facility ID: <u>427281</u>	API #: _____	County Name: <u>JACKSON</u>
Facility Name: <u>M. SPAULDING CENTRALIZED TANK BATT 1</u>	Latitude: <u>40.718009</u>	Longitude: <u>-106.498498</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWSE</u>	Sec: <u>28</u>	Twp: <u>9N</u>	Range: <u>81W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SW Most Sensitive Adjacent Land Use Grazing 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

Wolfer Ditch less than 50 feet to the east and Spring Gulch Ditch approximately 385 feet to the west. Groundwater ranges from 11 feet below ground surface (bgs) to 30 feet bgs.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> E&P Waste | <input checked="" type="checkbox"/> Other E&P Waste | <input checked="" type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | Potential petroleum oils and lubes (POLs) _____ |
| <input checked="" type="checkbox"/> Oil | <input checked="" type="checkbox"/> Tank Bottoms | |
| <input type="checkbox"/> Condensate | <input type="checkbox"/> Pigging Waste | |
| <input type="checkbox"/> Drilling Fluids | <input type="checkbox"/> Rig Wash | |
| <input type="checkbox"/> Drill Cuttings | <input type="checkbox"/> Spent Filters | |
| | <input type="checkbox"/> Pit Bottoms | |
| | <input type="checkbox"/> Other (as described by EPA) _____ | |

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	GROUNDWATER	Potential impact.	Not yet investigated.
UNDETERMINED	SOILS	Throughout tank battery prod fac	visual

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 COGCC Orphan Well Program will be decommissioning the MS Tank Battery and Production Facility. All production equipment will be removed from the location. Fifteen 400 BBLs above ground storage tanks, Five separators, Seven empty 330 gallons totes, Ten outbuildings of various sizes from 64 sf to 660 sf above ground flowlines and 3050 feet of below grade on location flowline. All flowlines will be removed to the edge of location cut, capped, and buried per COGCC Guidelines or as approved by COGCC. All trash and debris will be removed from location (potential POLs). Soil samples will be collected in accordance with COGCC Rule 911.a(4) Guidance Document. Samples will be collected from beneath the 5 separators, flowline manifold, within the footprint of the Production Facility, from within the footprint of the tank battery, along the flowline ends and path(s) and submitted for laboratory analysis of Table 915-1 constituents.

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 will be collected for laboratory analysis of Table 915-1 constituents in the area showing the highest degree of impact during field screening activities at the various locations and equipment previously described (see Attachment); samples will be collected in accordance with COGCC Rule 911.a(4) Guidance Document. Additionally, visual inspection and field screening of soils will be conducted in the areas surrounding the flowline, including the closest point where the flowline begins at the edge of the Location and at the terminus point at the flowline manifold and separator, to determine if impacts are present. Based on these observations, soil samples may be collected and submitted for laboratory analysis of Table 915-1 constituents.

Proposed Groundwater Sampling

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

Under a separate scope of work (SOW) groundwater monitoring wells (MWs) will be installed within the proximity of the Tank Battery, Production Facility and across the Location, if warranted.

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):

The footprint and locations of the tanks and tank battery and the foot print and locations of equipment Production Facility will be surveyed (GPS). Once all of the equipment has been removed, under a separate SOW a Phase II Subsurface Site Investigation will be proposed to delineate the horizontal and vertical extent of impact across the Location. Groundwater MWs will also be installed.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 0
Number of soil samples exceeding 910-1 _____
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 > 910-1 _____
_____ Vertical Extent > 910-1 (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 910-1 _____

_____ 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 910-1
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.

Any impacted soils will be removed and transported to a licensed disposal facility in accordance with Rules 905 and 906. Spill reporting will be conducted in accordance with Rule 912.

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.

N/A

Soil Remediation Summary

In Situ

- Bioremediation (or enhanced bioremediation)
- Chemical oxidation
- Air sparge / Soil vapor extraction
- Natural Attenuation
- Other _____

Ex Situ

- Excavate and offsite disposal
- If Yes: Estimated Volume (Cubic Yards) _____
- 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

Frequency: Quarterly Semi-Annually Annually Other Will be determined from the Phase II Subsurface Investigation results.

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? 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 _____

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.

Reclamation will be in accordance with COGCC 1000 Series Rules.

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 approve the seed mix? _____

If NO, does the seed mix comply with local soil conservation district recommendations? _____

IMPLEMENTATION SCHEDULE

PRIOR DATES

Date of Surface Owner notification/consultation, if required. _____

Actual Spill or Release date, if known. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 05/03/2021

Date of commencement of Site Investigation. _____

Date of completion of Site Investigation. _____

REMEDIAL ACTION DATES

Date of commencement of Remediation. _____

Date of completion of Remediation. _____

SITE RECLAMATION DATES

Date of commencement of Reclamation. _____

Date of completion of Reclamation. _____

OPERATOR COMMENT

COGCC OWP anticipates work to start as soon as May 3, 2021. This eForm 27 was prepared by a COGCC EPS on behalf of the COGCC OWP program.

NOTE: THE PITS, LANDFARM, AND E&P WASTE STOCKPILE WILL NOT BE Characterized AND ARE NOT PART OF THIS SCOPE OF WORK.

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

Signed: Alex Fischer _____

Title: Environmental Supervisor _____

Submit Date: 04/29/2021

Email: alex.fischer@state.co.us

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: 04/30/2021

Remediation Project Number: 17912

Condition of Approval

COA Type

Description

	As flowlines are removed, the entire length of the excavation shall be observed for any indication of impacts such as; odor, black or grey staining, salt impacts, wax, etc. Any area of suspected impact shall be; reported and delineated with soil analytical for Table 915-1.
	Any observance of groundwater shall be reported to EPS staff within 24 hours. If groundwater is observed to be impacted, EPS staff shall be notified immediately.
	Proposed sample locations are approved, however if impacts are suspected at other locations, confirmation samples shall be taken at those locations.
	Per Rule 911.b. If a spill is discovered during closure activities, a Form 19 spill report shall be filled. (Per 912.b.(1)E. spill is defined as >10cu yd of contaminated soil.)
	Operator should provide notice to Environmental staff, Kris Neidel (kris.neidel@state.co.us) or 970-846-5097 72 hrs prior to any sampling events or field activity related to facility closure. .
	This Site Investigation and Remediation Workplan (Form 27) is conditionally approved; however, additional information or activities may be required during the course of remediation.

	After equipment is removed, a Form 27 supplemental shall be submitted that:(1)Reports results of work outlined here and (2)Includes a plan to fully delineate soil over the location footprint from the pits to the edge of disturbance to the north. Sample shall be compared to table 915-1 MCL levels. The delineation shall terminate at shallow groundwater and include groundwater analysis.
	No equipment shall be staged on any ground surface other than, existing Oil and Gas locations.
8 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.

<u>Att Doc Num</u>	<u>Name</u>
402673506	FORM 27-INITIAL-SUBMITTED
402674537	SOIL SAMPLE LOCATION MAP

Total Attach: 2 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)