

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:

402675591

Receive Date:

04/30/2021

Report taken by:

ALEX FISCHER

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>		Phone: <u>(970) 989-3092</u>
City: <u>LAKEWOOD</u> State: <u>CO</u> Zip: <u>80228</u>		Mobile: <u>(970) 989-3092</u>
Contact Person: <u>Richard Murray</u>	Email: <u>g.richard.murray@state.co.us</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 17908Initial Form 27 Document #: 402675591

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>WELL</u>	Facility ID: <u></u>	API #: <u>057-06047</u>	County Name: <u>JACKSON</u>
Facility Name: <u>MARGARET SPAULDING (OWP) 4-B</u>	Latitude: <u>40.718408</u>	Longitude: <u>-106.498800</u>	
** correct Lat/Long if needed: Latitude: <u></u>		Longitude: <u></u>	
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>LOCATION</u>	Facility ID: <u>324634</u>	API #: <u></u>	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: <u></u>		Longitude: <u></u>	
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 SWMost Sensitive Adjacent Land Use wildlife and surface water.Is domestic water well within 1/4 mile? NoIs surface water within 1/4 mile? YesIs groundwater less than 20 feet below ground surface? Yes

Other Potential Receptors within 1/4 mile

Livestock.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

☐ E&P Waste

☒ Other E&P Waste

☒ Non-E&P Waste

☐ Produced Water

☐ Workover Fluids

Debris

☐ Oil

☐ Tank Bottoms

☐ Condensate

☐ Pigging Waste

☐ Drilling Fluids

☐ Rig Wash

☐ Drill Cuttings

☐ Spent Filters

☐ Pit Bottoms

☒ Other (as described by EPA) Contaminated soil (if observed).

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	GROUNDWATER	NA	Laboratory Analytical if Encountered
UNDETERMINED	SOILS	NA	Laboratory Analytical

INITIAL ACTION SUMMARY

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

This F27 is being submitted for the decommissioning of well API 057-06047 and it's associated flowline(s). This well has previously been plugged and wellhead cut to below grade.

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):

This well is part of the COGCC Orphan Well Program. Two samples will be collected from the wellhead. There is some stored equipment on the wellpad and a soil containment area (landfarm). The areas below equipment will be investigated as part of Remediation Project doc # 402673506. The soil containment area will be investigated on a separate form 27. See attachments for a site map depicting approximate soil sample points. Prior to collecting confirmation samples, soils will be field screened and contaminated soils will be removed and disposed of as E&P waste. All on location flowlines will be removed to the edge of existing disturbance and soil characterized for COGCC table 915. A minimum of 1 soil sample will be collected from each flowline segment per COGCC guidance on Rule 915.e.(2). Due to the OWP nature of this project, actual path of flowlines are unknown. Flowline risers will be GPS'd and the path documented during removal.

Proposed Groundwater Sampling

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

If a pathway to groundwater is determined or groundwater is encountered during excavation activities, a groundwater sample will be collected and analyzed for Table 915-1 constituents and notice given to COGCC.

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 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.

Prior to collecting soil samples, soil will be screened for impacts. Soils that indicate impact will be removed and disposed of as E&P waste per COGCC rule 905.

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.

Excavation and offsite disposal.

Soil Remediation Summary

☐ In Situ

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

☒ Ex Situ

Yes _____ Excavate and offsite disposal
If Yes: Estimated Volume (Cubic Yards) _____ 8
Name of Licensed Disposal Facility or COGCC Facility ID # _____ 0
No _____ 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.

If Groundwater impacts are discovered, they will be documented on REM doc # 402673506.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Frequency: ☐ Quarterly ☐ Semi-Annually ☐ Annually ☐ Other _____

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.

Reclamation will be in accordance with COGCC 1000 Series Rules

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 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). 05/05/2021

Date of commencement of Site Investigation. 05/05/2021

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: ` Kristopher Neidel

Title: EPS

Submit Date: ` 04/30/2021

Email: Kris.Neidel@stat.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: ALEX FISCHER

Date: 04/30/2021

Remediation Project Number: 17908

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

	Operator shall collect sample(s) from comparable, nearby non-impacted native soil for purposes of establishing background soil conditions including pH, electrical conductivity (EC) and sodium adsorption ratio (SAR), per Rule 915.e.(2).D.
	A supplemental Form 27 will be submitted within 45 days of the completion of the actions described in this submission.
	Upon discovery of flowline release during the PA and removal, the operator must investigate the extent of release and provide form 19 and a supplemental form 27 with proposed investigation sample sites for COGCC staff approval.
	If groundwater is encountered during any excavation, a minimum of one surface/groundwater sample shall be collected per Rule 913.c.(6) for those constituents listed in Table 915-1.
	Discrete soil samples shall be collected and analyzed for Table 915-1 Cleanup Concentrations using the Protection of Groundwater Screening Level Concentrations.
5 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**

402675591	FORM 27-INITIAL-SUBMITTED
402675871	SOIL SAMPLE LOCATION MAP
402675887	AERIAL IMAGE

Total Attach: 3 Files

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

	Inspection Doc #673403628 and Photo #2 in Doc# 673403629 shows hydrocarbons staining on the ground surface near the wellhead.	04/30/2021
	Groundwater is present between 11 feet to 30 feet below ground surface (bgs). The Spring Gulch Canal is approximately 350 feet west of the wellhead and Wolfer Canal is approximately 225 east of the wellhead.	04/30/2021

Total: 2 comment(s)