

**State of Colorado**  
**Oil and Gas Conservation Commission**

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Document Number:  
402673755

Receive Date:

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>	<b>Phone Numbers</b>
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 #: \_\_\_\_\_ Initial Form 27 Document #: 402673755

**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: _____	API #: <u>057-06108</u>	County Name: <u>JACKSON</u>
Facility Name: <u>MARGARET SPAULDING (OWP) 14</u>	Latitude: <u>40.717416</u>	Longitude: <u>-106.499149</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>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>

**SITE CONDITIONS**

General soil type - USCS Classifications SW Most Sensitive Adjacent Land Use surface water and livestock

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**

## SITE INVESTIGATION PLAN

### TYPE OF WASTE:

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> <b>E&amp;P Waste</b> | <input checked="" type="checkbox"/> <b>Other E&amp;P Waste</b>  | <input checked="" type="checkbox"/> <b>Non-E&amp;P Waste</b> |
| <input type="checkbox"/> Produced Water       | <input type="checkbox"/> Workover Fluids                        | Pumpjack and wellhead enclosure will be removed.             |
| <input type="checkbox"/> Oil                  | <input 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 checked="" type="checkbox"/> Other (as described by EPA) | Hydrocarbon impacted soil.                                   |

### 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.

The COGCC Orphan Well Program will be plugging and decommissioning the Margaret Spaulding #14 well. Soil samples will be collected in accordance with COGCC Rule 915.e.(2)B. Two samples will be collected from the wellhead. There is some stored equipment on the wellpad; a tank and an old treater, the areas below equipment will be investigated as part of Remediation Project doc # 402673506 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 flowline will be removed 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 path documented during removal.

### 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 with 2 samples at the wellhead. All on location flowlines will be removed 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. For all samples: Prior to collecting samples, visually impacted soil or soil that PID indicates impact will be removed (and disposed of as E&P waste). Remaining soil that shows the highest degree of impact during field screening will be selected for lab samples. If no potential impacts are observed, samples will be collected in accordance with COGCC Rule 911.a(4) and 915.e.(2) Guidance Documents.

#### 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.

offsite disposal of impacted soil.

## Soil Remediation Summary

In Situ

Ex Situ

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

Yes \_\_\_\_\_ Excavate and offsite disposal  
If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_ 8  
Name of Licensed Disposal Facility or COGCC Facility ID # \_\_\_\_\_ 0  
\_\_\_\_\_ 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.

# REMEDATION 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**

The MS#14 well produced to the central facility via flowline. No process equipment was on the location. There was some stored equipment that is being addressed in a separate form 27 for the Tank Battery (doc # 402673506).

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

Signed: ` Kris Neidel \_\_\_\_\_

Title: EPS \_\_\_\_\_

Submit Date: ` \_\_\_\_\_

Email: Kris.Neidel@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: \_\_\_\_\_

Date: \_\_\_\_\_

Remediation Project Number: \_\_\_\_\_

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

0 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**

402675523	SOIL SAMPLE LOCATION MAP
402675528	MAP

Total Attach: 2 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)