

State of Colorado  
Energy & Carbon Management Commission1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
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Document Number:

404073593

Receive Date:

02/02/2025

Report taken by:

Chris Sanchez

## 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 ECMC 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: CITATION OIL & GAS CORP	Operator No: 17180	Phone Numbers Phone: (281) 891-1550 Mobile: (713) 702-7534
Address: 14077 CUTTEN RD		
City: HOUSTON State: TX Zip: 77069		
Contact Person: Bob Redweik	Email: bredweik@cogc.com	

## PROJECT, PURPOSE &amp; SITE INFORMATION

## PROJECT INFORMATION

Remediation Project #: 38709 Initial Form 27 Document #: 404073593

## 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: WELL	Facility ID: _____	API #: 017-06479	County Name: CHEYENNE
Facility Name: RHOADES 22-35 2	Latitude: 38.874390	Longitude: -102.859212	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SENW	Sec: 35	Twp: 13S	Range: 49W Meridian: 6 Sensitive Area? Yes

## SITE CONDITIONS

General soil type - USCS Classifications SC Most Sensitive Adjacent Land Use Rangeland

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 water wells within 1/4 mile of the site. The closest well is a stock well approximately 0.89 miles west of the site with a static water level of 15ft. The surface water present is in the form of a catchment approximately 0.15 west of the site, and a stream approximately 0.40 miles east of the site. Small agricultural basins are present approximately 0.73 miles southeast and 1.06 miles west of the site. The closest occupied building is approximately 0.90 miles south of the site. The location is within the CPW HPH lesser prairie chicken connectivity area and estimated occupied range.

## 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	100 square feet	Observations, PID Screening, Confirmation Soil 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.

During a site inspection conducted on 8/21/2024, by an ECMC representative, a spill was noted at the pumpjack engine on location. Initial cleanup, investigation and remediation of the spill was completed 10/10/2024. A Form 19 Spill/Release (ID 488346) was initiated on 10/31/2024.

### 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 ):

Three (3) soil samples were collected in November 2024 as part of the Form 19 Spill Investigation directly adjacent to the wellhead, below the out of service compressor and pumpjack engine skid (inside the shed). Samples were analyzed for ECMC Table 915-1 constituents and results indicated elevated levels of TPH and Boron below the engine skid. Additional investigation and excavation activities shall be conducted to remediate impacts and confirmation samples will be collected to demonstrate compliance with table 915-1 standards.

#### 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 ):

Additional excavation and site investigation activities shall be conducted to confirm removal of impacted material.

## SITE INVESTIGATION REPORT

### SAMPLE SUMMARY

**Soil**

Number of soil samples collected 3

Number of soil samples exceeding 915-1 1

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 700

**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

**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.

**NA / ND**

-- Highest concentration of TPH (mg/kg) 5130

-- Highest concentration of SAR 5.56

BTEX &gt; 915-1 No

Vertical Extent &gt; 915-1 (in feet) 2

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)

**OTHER INVESTIGATION INFORMATION**☐ Were impacts to adjacent property or offsite impacts identified?☒ Were background samples collected as part of this site investigation?

One background soil sample was collected on 11/26/2024, off-location to the west at ~ 2 feet BGS and was analyzed for Table 915-1 metals and soil suitability constituents. Analytical results indicated that the sample exhibited elevated levels of pH and arsenic. Additional background soil sample(s) will be collected to characterize the native soils for background comparison.

☒ Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) 10

Volume of liquid waste (barrels) 0

☒ Is further site investigation required?

Additional excavation and site investigation activities shall be conducted to confirm removal of impacted material.

**REMEDIAL ACTION PLAN****SOURCE REMOVAL SUMMARY**

Describe how source is to be removed.

Impacted material will continue to be excavated and transported off site to the Kit Carson County Landfill in Burlington, CO. Disposal records will be kept on file and available upon request.

**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.

The extent of the impacted area will continue to be delineated using a hand auger and photoionization detector (PID), before and during excavation. Soil samples will continue to be collected as needed to characterize and/or demonstrate confirmation of impacts. All soil samples will be analyzed for all ECMC Table 915-1 parameters to determine regulatory compliance.

**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

Name of Licensed Disposal Facility or ECMC Facility ID #

\_\_\_\_\_ Natural Attenuation  
\_\_\_\_\_ Other \_\_\_\_\_

\_\_\_\_\_ 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.

Citation carries general liability insurance of \$2,000,000, with excess liability insurance of \$35,000,000. Citation also carries pollution/waste liability insurance of \$20,000,000, and environmental related liability insurance of \$3,000,000 for all active wells and \$1,000,000 for all plugged and abandoned wells. Citation maintains \$1,135,000 in surety bonds with the ECMC. There is no site-specific financial assurance associated with this remediation project. Citation does not intend to file an insurance claim for this remediation project.

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

### 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:

Transportation to landfill.

Volume of E&P Waste (solid) in cubic yards  10

E&P waste (solid) description E&P impacted soils.

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility: Kit Carson County Landfill in Burlington, CO

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

E&P waste (liquid) description

ECMC Disposal Facility ID #, if applicable:

Non-ECMC 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 currently warranted at this location.

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. 11/06/2024

Actual Spill or Release date, or date of discovery. 08/21/2024

## SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 10/09/2024

Proposed site investigation commencement. 11/25/2024

Proposed completion of site investigation. 03/01/2025

## REMEDIAL ACTION DATES

Proposed start date of Remediation. 02/03/2025

Proposed date of completion of Remediation. 04/01/2025

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**

The schedule for investigation/remediation activities is highly weather and site condition dependent. Timing of progress may need to be adjusted accordingly to facilitate successful and safe work conditions.

A Form 19 Supplemental Report (Doc# 404062665) is being submitted concurrently with this Form 27 Initial Report. Citation is requesting transfer of Spill/Release ID 488346 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: 02/02/2025

Email: joel.mason@absarokasolutions.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with ECMC Rules and applicable orders and is hereby approved.

ECMC Approved: Chris Sanchez

Date: 02/04/2025

Remediation Project Number: 38709

## **COA Type**

## **Description**

	The Operator shall add the Spill Facility ID to Site information as an additional facility on the next Supplemental Form filing
	Upon approval of this Form 27i the Operator shall submit a Supplemental Form 19 Requesting Closure of Spill Facility ID 488346
	Background sampling locations should be sufficiently away from the impacted area to reflect conditions not impacted by oil and gas activity, and should be obtained from similar depths and soil horizons or lithologic materials for comparison to confirmation soil samples.
	Operator consistently compares analytical results to Residential Soil Screening Levels. Although groundwater has not been encountered at this location, Operator must prove that there is no pathway to groundwater in order for consideration of the Protection of Groundwater Soil Screening Levels to be removed.
	If groundwater is encountered, the Operator shall sample for Inorganic Parameters (total dissolved solids, sulfate, chloride) in addition to the Organic Compounds
	The impacted soil will be segregated for proper offsite disposal and the lateral and vertical extent of impacts shall be determined with appropriate confirmation soil sampling.  Samples shall be collected for Full Table 915-1 Contaminants of Concern
	In accordance with Rule 913.e.(3), Operator will adopt a quarterly reporting schedule (every 90 days).  ECMC selected Quarterly under Remediation Progress Update.

7 COAs

## **ATTACHMENT 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**

404073593	FORM 27-INITIAL-SUBMITTED
404078061	SITE 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)