

State of Colorado
Energy & Carbon Management Commission

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404077468
Receive Date:
03/13/2025
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 ECOM 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>CITATION OIL & GAS CORP</u>	Operator No: <u>17180</u>	Phone Numbers
Address: <u>14077 CUTTEN RD</u>		
City: <u>HOUSTON</u>	State: <u>TX</u>	Zip: <u>77069</u>
Contact Person: <u>Bob Redweik</u>	Email: <u>bredweik@cogc.com</u>	Phone: <u>(281) 891-1550</u>
		Mobile: <u>(713) 702-7534</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 39665 Initial Form 27 Document #: 404077468

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 Yes Multiple Facilities

Facility Type: SPILL OR RELEASE Facility ID: 488536 API #: _____ County Name: CHEYENNE

Facility Name: Speaker Unit Compressor Latitude: 39.024793 Longitude: -103.059697

** correct Lat/Long if needed: Latitude: _____ Longitude: _____

QtrQtr: SWSE Sec: 1 Twp: 12S Range: 51W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

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

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

According to DWR records, there are only 2 water wells in proximity to the location, the closest well (Permit 54199 ~ 2,520 feet to the northeast) did not have a reported static water depth; however, the well was drilled to 90 feet BGS. The location is within the CPW HPH lesser prairie chicken 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	625 square feet	Tank Battery: 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 10/21/2024 by an ECMC representative, an oil spill was noted around two tanks within containment. A Form 19 Spill/Release (ID 488536) was initiated on 11/17/2024. Initial cleanup, investigation, and remediation of the spill started on 12/2/2024 and is ongoing.

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 continue to be delineated using a hand auger and photoionization detector (PID) during excavation. Soil samples will continue to be collected as needed to characterize and/or demonstrate confirmation of impacts.

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

NA / ND

Number of soil samples collected 18 -- Highest concentration of TPH (mg/kg) 2437
 Number of soil samples exceeding 915-1 13 -- Highest concentration of SAR 13.2
 Was the areal and vertical extent of soil contamination delineated? No BTEX > 915-1 No
 Approximate areal extent (square feet) 625 Vertical Extent > 915-1 (in feet) 2

Groundwater

Number of groundwater samples collected 0 Highest concentration of Benzene (µg/l) _____
 Was extent of groundwater contaminated delineated? No Highest concentration of Toluene (µg/l) _____
 Depth to groundwater (below ground surface, in feet) _____ Highest concentration of Ethylbenzene (µg/l) _____
 Number of groundwater monitoring wells installed _____ Highest concentration of Xylene (µg/l) _____
 Number of groundwater samples exceeding 915-1 _____ 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?
 Two (2) background soil samples were collected on 12/2/2024 and 1/23/2025, off location to the northwest (2 feet BGS) and east (3 feet BGS), respectively. Samples were 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) may 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) 2 Volume of liquid waste (barrels) 0

Is further site investigation required?
 The extent of the impacted area will continue to be delineated using a hand auger and photoionization detector (PID) during excavation. Soil samples will continue to be collected as needed to characterize and/or demonstrate confirmation of impacts.

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.
 Additional excavation and site investigation activities shall be conducted to confirm removal of impacted material.

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.
 Impacted material has been and will continue to be excavated and transported offsite to the Kit Carson County Landfill in Burlington, CO.

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	_____ Excavate and onsite remediation

Other _____

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? _____

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 _____

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: _____

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

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. 11/18/2024

Actual Spill or Release date, or date of discovery. 10/23/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 12/02/2024

Proposed site investigation commencement. 12/02/2024

Proposed completion of site investigation. 04/30/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 12/02/2024

Proposed date of completion of Remediation. 05/31/2025

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

During a site inspection conducted on 10/21/2024 by an ECMC representative, an oil spill was noted around two tanks within containment. A Form 19 Spill/Release (ID 488536) was initiated on 11/17/2024. Initial cleanup, investigation, and remediation of the spill started on 12/2/2024 and is ongoing.

Excavation of impacted soil was completed on 12/2/2024 by hand shoveling in areas of soil staining around tanks and associated flowlines, within the tank battery. Thirteen (13) confirmation samples were collected and analyzed for ECMC Table 915-1 constituents. Results indicated elevated levels of TPH, SAR, EC, and pH in 6 samples. Additional investigation was completed on 1/23/25 by further delineating the vertical extent by hand augering below the failed confirmation sample point and resampling. Confirmation samples verified the extent of TPH impacts within the tank battery, which are minimal. TPH impacts will be hand excavated, additional confirmation samples will be collected and analyzed for TPH to confirm removal.

Confirmation samples also indicated exceedances for SAR (soil suitability constituent) at 8 sample locations and the extent has not been fully delineated. Further delineation of SAR will be completed and confirmation samples for SAR will be collected to demonstrate the extent of impact. Once the nature and extent of SAR contamination is determined, a reclamation plan will be submitted to request relief under ECMC Rule 915.b.

During a site inspection conducted on 1/27/2025 by an ECMC representative, an oil staining was noted around the compressor building at this location. A Form 19 Initial Report (Doc# 404089803 - Spill/Release ID 489279) was submitted on 2/12/2024. Upon approval, the ECMC requested the COA: "Spill ID 488536, reported on Form 19 Document # 403998224 is still active and beyond the 90 day closure window. Operator shall file a Form 27 Initial workplan to consolidate remediation activities for Spill ID 488536 and Spill ID 489279." It is likely that Spill ID 489279 will be closed within the 90-day window and Citation is not requesting a transfer at this time. If the spill cannot be closed within the 90-day window, a Form 19 Supplemental Report will be submitting to transfer the spill as requested by the ECMC.

A Form 19 Supplemental Report (Doc# 404062570) is being submitted concurrently with this Form 27 Initial Report to request transfer of Spill 488536 (tank battery spill) 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: 03/13/2025

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: 03/24/2025

Remediation Project Number: 39665

COA Type

Description

	In accordance with Rule 913.e.(3), Operator will adopt a quarterly reporting schedule (every 90 days). ECMC selected Quarterly under Remediation Progress Update.
	Operator shall provide a detailed sampling plan for the Delineation of the areas impacted by Spill ID 488536.
	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
	If groundwater is encountered, the Operator shall sample for Inorganic Parameters (total dissolved solids, sulfate, chloride) in addition to the Organic Compounds
	Operator shall adhere to Protection of Groundwater Soil Screening Levels
	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.
6 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.

<u>Att Doc Num</u>	<u>Name</u>
404077468	FORM 27-INITIAL-SUBMITTED
404123733	SITE MAP

Total Attach: 2 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	<p>3/13/2025 Form returned to Draft, the Box for Rule 913.c.(6) Remediation of impacts to groundwater checked. During my review of Doc 404077468 and Form 19 Doc # 404062570, I did not see any other indication that groundwater was encountered.</p> <p>Please correct form and resubmit,</p>	03/13/2025
Environmental	<p>Form Returned to Draft, ECMC returned this Form 19 to Draft for the Following Reasons. Operator references Spill ID 488546 in Operator comments and the Site Investigation Plan, Spill ID 488546 is not tied to the SPEAKER UNIT COMPRESSOR Facility ID 412172 and should not be referenced.</p> <p>Operator Comment, " During a site inspection conducted on 10/21/2024 by an ECMC representative, an oil spill was noted around two tanks within containment. A Form 19 Spill/Release (ID 488546) was initiated on 11/17/2024. Initial cleanup, investigation, and remediation of the spill started on 12/2/2024 and is ongoing."</p> <p>Operator shall correct the information to reflect the Correct Spill ID</p>	03/12/2025

Total: 2 comment(s)