

State of Colorado
Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:
404017237
Receive Date:
03/29/2025
Report taken by:
Krystal Heibel

Site Investigation and Remediation Workplan (Supplemental 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: 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 & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 24026 Initial Form 27 Document #: 402820669

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: WELL	Facility ID: _____	API #: 075-09326	County Name: LOGAN
Facility Name: DUBOIS 5	Latitude: 40.774092	Longitude: -103.221475	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NENW	Sec: 7	Twp: 9N	Range: 52W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE	Facility ID: 480165	API #: _____	County Name: LOGAN
Facility Name: Dubois Tank Battery	Latitude: 40.774699	Longitude: -103.221102	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NENW	Sec: 7	Twp: 9N	Range: 52W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SC

Most Sensitive Adjacent Land Use Livestock
Grazing

Is domestic water well within 1/4 mile? Yes

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

The nearest surface water feature to the Site is the North Sterling Outlet Canal. This canal is approximately 0.24 miles from the south side of the Site, which is the nearest it comes to the location, but the canal is present on the site's east, west, and south sides. A review of Colorado's DWR Well Permit Resource data identified two domestic water wells approximately 0.12 miles and 0.13 miles from the Site, indicating depth to non-alluvial groundwater to be 60 feet and 40 feet bgs. A total of 6 wells are located within 0.5mi of the site. An occupied building with livestock is located approximately 370 feet northeast of the site. The facility is located within the Mule Deer severe winter range CPW HPH. Two freshwater pond wetlands are located approximately 50 feet south-southeast of the facility.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> E&P Waste | <input type="checkbox"/> Other E&P Waste | <input type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | _____ |
| <input checked="" 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 type="checkbox"/> Other (as described by EPA) | _____ |

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	To be determined	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.

Citation removed all fluid and visually impacted soils from the spill location between 6/11/21 and 6/21/21. Absaroka sampled release on 6/23/21. The soil sampling activity and results are reported in Form 19 document number 402785100.

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):

Citation will conduct complete soil sampling across the site, including former pit locations to the southeast of the site as the facility is being decommissioned entirely. Samples will be collected from all locations where equipment was situated, as well as beneath the cattle guard in the southwest corner of the facility. In addition, soil borings will be advanced in the former pit locations to collect adequate subsurface sampling. At least 13 soil sample locations are proposed, and multiple samples may be collected from various depths within the borings. At least 5 borings will be advanced in the former pit area. Investigation samples will be analyzed in accordance with Table 915-1. Soil samples will also be collected from at least two (2) upgradient/cross-gradient locations to establish background conditions with respect to EC, SAR, pH, Boron, and metals.

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 <u>111</u>	ND Highest concentration of TPH (mg/kg) _____
Number of soil samples exceeding 915-1 <u>54</u>	-- Highest concentration of SAR <u>78.1</u>

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

BTEX > 915-1 No

Approximate areal extent (square feet) 5000

Vertical Extent > 915-1 (in feet) 16

Groundwater

Number of groundwater samples collected 0

ND Highest concentration of Benzene (µg/l) _____

Was extent of groundwater contaminated delineated? No

ND Highest concentration of Toluene (µg/l) _____

Depth to groundwater (below ground surface, in feet) _____

ND Highest concentration of Ethylbenzene (µg/l) _____

Number of groundwater monitoring wells installed _____

ND Highest concentration of Xylene (µg/l) _____

Number of groundwater samples exceeding 915-1 _____

ND 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 samples were collected from adjacent, upgradient, unaffected areas east and west of the site, and analyzed for EC, SAR, pH, Boron, and metals. On July 19, 2024, three (3) additional background soil borings were advanced off-location and samples were collected from each boring at depths of 2', 5', 12', 14', and 16' and were submitted for laboratory analysis of EC, SAR, pH, Boron, and Arsenic.

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

Volume of solid waste (cubic yards) 310

Volume of liquid waste (barrels) 399

Is further site investigation required?

Additional sampling to evaluate soil suitability conditions and potential in-situ remediation applicability to address the boron and SAR exceedances are being evaluated.

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? No

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Following completion of the complete site investigation and delineation, Citation will address any additional contaminants not previously removed as part of the facility decommissioning.

REMEDICATION 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.

On July 19, 2024, a total of 19 soil borings were advanced and samples were collected from each boring at depths between 2' and 16' and submitted for laboratory analysis of EC, SAR, pH, and Boron. Analytical results indicate that inorganic constituents have been delineated vertically based on background consideration at similar depths and lithologic observations; however, the horizontal bounds of inorganic exceedances have not fully been determined. During this delineation event, no visual or olfactory indications of hydrocarbon impacts were observed. Additional sampling shall be conducted to delineate elevated levels of soil suitability constituents. Following delineation, Citation will develop and implement a site-specific remediation strategy. This strategy will include excavation and disposal of highly impacted materials within the near surface soils, and possible treatment and/or burial at depth (below growing horizon/root zone) to address the SAR and Boron exceedances in the former pit area. Non-hydrocarbon impacts such as EC and SAR may be left in place following additional excavation and sampling if they do not occur in conjunction with hydrocarbons and they are below the root zone, and hence would not affect reclamation potential.

Soil Remediation Summary

In Situ

Ex Situ

 Bioremediation (or enhanced bioremediation)

 Yes Excavate and offsite disposal

 Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) 2000

_____ Air sparge / Soil vapor extraction

Yes _____ Natural Attenuation

_____ Other _____

_____ Name of Licensed Disposal Facility or ECMC 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.

Does Groundwater meet Table 915-1 standards? _____

Is additional groundwater monitoring to be conducted? _____

Operator shall comply with the ECMC 1000-Series Reclamation Requirements for all impacted and disturbed areas.

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.

Following the completion of final investigation and remediation activities, the area will be re-contoured to match the topographic landscape. The former excavation has been backfilled and graded to match topographic landscape as of 8/28/24 to temporarily stabilize location until delineation and final reclamation plan completion.

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 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. _____

Actual Spill or Release date, or date of discovery. 06/11/2021

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 07/25/2022

Proposed site investigation commencement. 09/23/2022

Proposed completion of site investigation. 08/31/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 12/27/2022

Proposed date of completion of Remediation. 09/30/2025

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:

See operator comment.

OPERATOR COMMENT

Citation requests to close remediation project #23802 and move Dubois 5 wellhead site investigation and reporting under remediation project #24026 associated with the Dubois Tank Battery.

This is the 1Q2025 quarterly update for this location. Due to local resource limitations and the need to address higher priority sites, Citation was unable to keep up with quarterly progress for this project. Moving forward, Citation has addressed the situation and will continue with quarterly reporting as required by the ECMC to progress this project. During 4Q2024, the location was inspected to document the status and further evaluate a plan of action. Citation is currently developing this plan and will be increasing remediation efforts for 2025 by retaining additional third-party contractor support starting 2Q2025.

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: 03/29/2025

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: Krystal Heibel

Date: 07/09/2025

Remediation Project Number: 24026

COA Type**Description**

	<p>These projects have different scopes of work and will remain separate.</p> <p>"Citation requests to close remediation project #23802 and move Dubois 5 wellhead site investigation and reporting under remediation project #24026 associated with the Dubois Tank Battery. "</p>
1 COA	

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**

404017237	FORM 27-SUPPLEMENTAL-SUBMITTED
-----------	--------------------------------

Total Attach: 1 Files

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

Environmental	ECMC has processed this form as an update; no analytical was attached thus approval of this form does not imply any agreement with comments on completion of site investigation. All ongoing/unaddressed comments/COAs from previous Forms remain applicable.	07/09/2025
---------------	---	------------

Total: 1 comment(s)