

State of Colorado Oil and Gas Conservation Commission

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403326528

Receive Date:

02/21/2023

Report taken by:

John Heil

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.

Closure request is not available for an Initial Site Investigation and Remediation Workplan.

OPERATOR INFORMATION

Name of Operator: CAERUS PICEANCE LLC	Operator No: 10456	Phone Numbers
Address: 1001 17TH STREET #1600		Phone: (970) 778-2314
City: DENVER State: CO Zip: 80202		Mobile: (970) 778-2314
Contact Person: Jake Janicek	Email: jjanicek@caerusoilandgas.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 27775 Initial Form 27 Document #: 403326528

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: PIT	Facility ID: 117251	API #:	County Name: RIO BLANCO
Facility Name: PICEANCE CREEK UNIT 68-11	Latitude: 39.886142	Longitude: -108.245544	
** correct Lat/Long if needed: Latitude:		Longitude:	
QtrQtr: SWSE	Sec: 11	Twp: 2S	Range: 97W Meridian: 6 Sensitive Area? Yes
Facility Type: UIC DISPOSAL	Facility ID: 159173	API #:	County Name: RIO BLANCO
Facility Name: PCU T68X-11G	Latitude: 39.885470	Longitude: -108.244510	
** correct Lat/Long if needed: Latitude:		Longitude:	
QtrQtr: SWSE	Sec: 11	Twp: 2S	Range: 97W Meridian: 6 Sensitive Area? Yes

Facility Type: WELL		Facility ID: _____		API #: 103-05185		County Name: RIO BLANCO	
Facility Name: PICEANCE CREEK UNIT T68X-11G				Latitude: 39.885470		Longitude: -108.244510	
** correct Lat/Long if needed: Latitude: _____ Longitude: _____							
QtrQtr: SWSE	Sec: 11	Twp: 2S	Range: 97W	Meridian: 6	Sensitive Area? Yes		

Facility Type: LOCATION		Facility ID: 314334		API #: _____		County Name: RIO BLANCO	
Facility Name: PICEANCE CREEK UNIT-62S97W 11SWSE				Latitude: 39.885542		Longitude: -108.244494	
** correct Lat/Long if needed: Latitude: _____ Longitude: _____							
QtrQtr: SWSE	Sec: 11	Twp: 2S	Range: 97W	Meridian: 6	Sensitive Area? Yes		

Facility Type: NONFACILITY		Facility ID: 431140		API #: _____		County Name: RIO BLANCO	
Facility Name: PCU 68-11 injection line 431140				Latitude: 39.890623		Longitude: -108.251488	
** correct Lat/Long if needed: Latitude: _____ Longitude: _____							
QtrQtr: SWSE	Sec: 11	Twp: 2S	Range: 97W	Meridian: 6	Sensitive Area? Yes		

SITE CONDITIONS

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

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? No _____

Other Potential Receptors within 1/4 mile

It appears as if the permitted water wells populated within a quarter mile of the project area on the COGIS database, including the one on the PCU T68X-11G pad, are gas wells that were permitted by a previous operator through the DWR to allow them to use production water in a variety of ways. The submittal of this form includes the determination by the submitter that they are not domestic water wells.

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) _____ No impacts associated with this project have been identified.

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	SOILS	To be determined	Field investigation and 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.

This form is being submitted to comply with COGCC Rules 911.a.(4), 913.a., 913.b.(1), 913.b.(2), and 913.c.(9). The form serves as the initial notification to abandon the PICEANCE CREEK UNIT #T68X-11G (API# 103-05185) well and other supporting infrastructure identified on the location or via a desktop review of the COGCC's COGIS Database.

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):

Please see the "Operator Comments" Section of this form for this information.

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

Number of soil samples collected _____ 0

Number of soil samples exceeding 915-1 _____

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 > 915-1 _____

Vertical Extent > 915-1 (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 915-1 _____

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 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?

☐ 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.

There is currently no source identified.

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.

There are currently no plans for remediation.

Soil Remediation Summary

☐ In Situ

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Air sparge / Soil vapor extraction

_____ Natural Attenuation

_____ Other _____

☐ Ex Situ

_____ Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards) _____

Name of Licensed Disposal Facility or COGCC Facility ID # _____

_____ Excavate and onsite remediation

_____ Land Treatment

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

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 Oil and Gas Facility Decommissioning Notification per
COGCC Rule 911.a.(4) and 913.c.(9)

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.

Per Rule 705.b, and in line with guidance laid out in the SBAP, Caerus has general liability insurance in the amount of \$1M, and Caerus has umbrella insurance, which sits over the general liability insurance in the amount of \$75M. The umbrella and general liability insurance covers property damage, bodily injury to third parties, and sudden or accidental pollution under a combined \$76M.

Operator anticipates the remaining cost for this project to be: \$ 10000

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? No

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.

Any excavations will be backfilled to the existing grade of the pad surface.

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. _____

Actual Spill or Release date, or date of discovery. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 05/01/2023

Proposed site investigation commencement. 05/01/2023

Proposed completion of site investigation. _____

REMEDIAL ACTION DATES

Proposed start date of Remediation. _____

Proposed date of completion of Remediation. _____

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

Proposed Sampling Plan:

Grab samples will be collected from areas most likely to have been impacted in accordance with the following COGCC Rules:

1. COGCC Rule 913.b.(2)C
2. COGCC Rule 915.e.(1)
3. COGCC Rule 915.e.(2)B.
4. COGCC Rule 915.e.(2)C.

In general, the areas of interest tend to be where the lines transition from subsurface to above-ground at each end of the line and soil adjacent to the wellhead. Grab samples will be collected from soil vertically below these areas and submitted for laboratory analysis of all analytes listed in COGCC Table 915-1.

Attempts will also be made to investigate the presence of the pit identified as Facility ID 117251. Based on review of available documentation, there are three areas where this pit may be. All three locations will be investigated by advancing a soil boring at each of the locations to a depth of four feet below pad surface which was the anticipated depth of the pit provided by a previous operator via a Pit Permit (COGCC Document ID 657477). Grab samples will be collected at these points per the paragraph above.

If the soil sampling detailed above identifies impacts, a Form 19 will be submitted per COGCC Rule 912.

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

Signed: Jake Janicek

Title: EHS Specialist

Submit Date: 02/21/2023

Email: jjanicek@caerusoilandgas.com

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: John Heil

Date: 02/24/2023

Remediation Project Number: 27775

COA Type

Description

	Comply with COGCC Rule 1105 flowline abandonment requirements, including notification and verification requirements.
	Comply with Rule 912 for any historical impacts that are discovered.
	Operator shall collect soil samples from areas most likely to be impacted and shall collect an appropriate number of representative soil samples to delineate the horizontal and vertical extents of contamination, per Rule 915.e.(2).B.
	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.
	Per Rule 913.b.(2), the Operator will conduct sampling and analysis of soil, and groundwater--if encountered, to determine the horizontal and vertical extent of any contamination in excess of the cleanup concentrations in Table 915-1 for soil and groundwater. The Operator shall analyze samples for the complete Table 915-1 list and shall compare analytical results for site investigation samples to both the Table 915-1 Residential Soil Screening Level Concentrations and the Protection of Groundwater Soil Screening Level Concentrations. Submit an assessment of potential pathways to groundwater via a Supplemental Form 27.

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

403326528	FORM 27-INITIAL-SUBMITTED
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Total Attach: 1 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)