

State of Colorado  
Energy & Carbon Management Commission

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Receive Date:  
10/03/2024

Report taken by:  
Chris Sanchez

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 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: <u>RENEGADE OIL &amp; GAS COMPANY LLC</u>	Operator No: <u>74165</u>	<b>Phone Numbers</b>
Address: <u>6155 S MAIN STREET #225</u>		
City: <u>AURORA</u> State: <u>CO</u> Zip: <u>80016</u>		Phone: <u>(303) 680-4725</u>
Contact Person: <u>Edward Ingve</u>	Email: <u>ed@renegadeoilandgas.com</u>	Mobile: <u>(303) 829-2354</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 31658 Initial Form 27 Document #: 403518243

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: Consistent with Rule 911.a, this Form 27 is being filed for a plug and abandonment operation.

SITE INFORMATION

Yes  Multiple Facilities

Facility Type: <u>PIT</u>	Facility ID: <u>115373</u>	API #: _____	County Name: <u>KIOWA</u>
Facility Name: <u>STATE 1</u>	Latitude: <u>38.320150</u>	Longitude: <u>-103.242688</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNW</u>	Sec: <u>16</u>	Twp: <u>20S</u>	Range: <u>52W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>061-06277</u>	County Name: <u>KIOWA</u>
Facility Name: <u>STATE 1-16</u>	Latitude: <u>38.320390</u>	Longitude: <u>-103.242880</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNW</u>	Sec: <u>16</u>	Twp: <u>20S</u>	Range: <u>52W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: LOCATION Facility ID: 384474 API #: County Name: KIOWA  
Facility Name: STATE-620S52W 16NWNW Latitude: 38.320293 Longitude: -103.242876  
\*\* correct Lat/Long if needed: Latitude: Longitude:  
QtrQtr: NWNW Sec: 16 Twp: 20S Range: 52W Meridian: 6 Sensitive Area? No

**SITE CONDITIONS**

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

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**

# SITE INVESTIGATION PLAN

## TYPE OF WASTE:

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

## DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	SOILS	Undetermined	Visual Determination

## 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 State #1-16 is in the process of being plugged and abandon. No impacts are anticipated. A grab subsoil sample from the wellhead area will be obtained from the hole excavated around the surface casing of the well prior to capping.

## 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 ):

One grab soil sample adjacent (within 2 feet) of the surface casing at a depth of approximately 4 feet. Sample will be analyzed for all 915 table requirements necessary for closure.

### 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 7

Number of soil samples exceeding 915-1 0

Was the areal and vertical extent of soil contamination delineated? Yes       

Approximate areal extent (square feet)       

### NA / ND

ND Highest concentration of TPH (mg/kg)       

Highest concentration of SAR       

BTEX > 915-1       

Vertical Extent > 915-1 (in feet) 0

**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?

As a consequence of measured results from the initial wellhead grab sample from the State #1-16 exceeding Table 915-1 with regards to EC and arsenic three additional soil samples from the well area and three background soil samples away from the wellhead were obtained. An aerial plat of the sample locations has been attached.

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**

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.

If any contamination is found effected soil will be hauled to an approved disposal facility after excavation.

**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.

No impacts are anticipated. If contamination is found in soils effected material will be hauled offsite.

**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.



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.

The small excavated area around wellhead will be back filled in and reseeded per surface owner's desire. Pawnee Buttes Native Alkali Seed Mix has been selected for the site. Soil preparation and seeding will occur in late fall of 2024 or spring of 2025. No extensive reclamation is anticipated.

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? No

If YES, does the seed mix comply with local soil conservation district recommendations? \_\_\_\_\_

Did the local soil conservation district provide the seed mix? No

### SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. 11/01/2024

Proposed date of completion of Reclamation. 07/01/2025

## 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). 09/18/2023

Proposed site investigation commencement. 09/18/2023

Proposed completion of site investigation. 10/06/2023

### 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

Renegade hereby requests approval of this Final Form 27 closure covering the plug and abandonment of the State #1-16 well, location and pit. This Form is ripe for approval as soil samples analyzed associated with the P&A of the well comply with Table 915-1 requirements. Operator was requested to investigate a historical pit (Facility ID #115373) associated with the State #1-16 even though no pit was constructed by Renegade or found on the lease when Renegade washed down the well in 2010. Analysis of ECMC historical documents indicate that the pit in question was likely constructed in 1987 when the well was first put on production. A wellsite inspection form from 1/1992 after the well was initially plugged indicated pits were backfilled and the final plugging submittal for the P&A at that time was approved. Documentation has been referenced under the related forms tab.

This Final Form 27 is tardy given the rules of the ECMC. A significant amount of this can be blamed on myself due to unfamiliarity with the Form 27 and P&A reporting process, the initial soil sample having items exceeding Table 915 and background samples being required and a significant personal health issue happening over this time frame. In the future Renegade will be more responsive to the filing requirements.

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

Signed: Edward Ingve

Title: Manager/Owner

Submit Date: 10/03/2024

Email: ed@renegadeoilandgas.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: 01/20/2025

Remediation Project Number: 31658

## COA Type

## Description

	<p>Soil confirmation sample data indicate that electrical conductivity (EC), at the site exceeds the Table 915-1 soil suitability levels for reclamation.</p> <p>The lateral and vertical extent of impacts shall be determined with appropriate confirmation soil sampling.</p>
	<p>Arsenic concentrations in confirmation soil samples exceed the Table 915-1 Residential Soil Screening Level Concentrations and are greater than 1.25 times the arsenic concentration in the background sample. Operator will provide additional data to characterize arsenic concentrations at the site and to determine its source.</p>
	<p>ECMC removed the final closure for this Form 27, Operator shall Define the vertical and lateral extent of impacts observed in Soils Samples @, Wellhead, #4-NE Well, #5-NW Well and #6-South Well.</p> <p>Additional sampling is required to fully delineate the the vertical and latera extent of impacts.</p> <p>Samples shall be collected for Full Table 915-1 Contaminants of Concern.</p>
3 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>
403886615	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
403886709	ANALYTICAL RESULTS
403886713	ANALYTICAL RESULTS
403890020	SOIL SAMPLE LOCATION MAP
403891785	SITE INVESTIGATION REPORT
403903747	PHOTO DOCUMENTATION
404062833	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 7 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	Form 6 Subsequent Plug and Cap dates show the well was cut and capped on 11/01/2023, this Form 27 Supplemental was filed on 10/03/2024 337 days after cut and cap of wellhead.	01/17/2025

Total: 1 comment(s)