

# State of Colorado Oil and Gas Conservation Commission

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403227255

Receive Date:

12/15/2022

Report taken by:

ALEX FISCHER

## 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 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: <u>SIMCOE LLC</u>	Operator No: <u>10749</u>	<b>Phone Numbers</b> Phone: <u>(970) 852-5172</u> Mobile: <u>(970) 769-9523</u>
Address: <u>1199 MAIN AVE SUITE 101</u>		
City: <u>DURANGO</u>	State: <u>CO</u> Zip: <u>81301</u>	
Contact Person: <u>Sabre Beebe</u>	Email: <u>sabre.beebe@ikavenergy.com</u>	

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 22776 Initial Form 27 Document #: 403010188

#### 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: <u>SPILL OR RELEASE</u>	Facility ID: <u>481402</u>	API #: _____	County Name: <u>LA PLATA</u>
Facility Name: <u>Piccoli A 1 discharge line</u>		Latitude: <u>37.170083</u>	Longitude: <u>-107.792092</u>
		** correct Lat/Long if needed: Latitude: _____	Longitude: _____
QtrQtr: <u>SWSE</u>	Sec: <u>23</u>	Twp: <u>34N</u>	Range: <u>9W</u> Meridian: <u>M</u> Sensitive Area? <u>No</u>

#### SITE CONDITIONS

General soil type - USCS Classifications CL Most Sensitive Adjacent Land Use Agriculture

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

## 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	~0.5 acre	Sampling and measurement during response

### INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

Well and line were shut in and isolated. Water truck dispatched to location. Wattles installed on slop and at culvert leading to creek and other areas. Hydrovac truck recovered free standing water below fill slope and water truck recovered water on well pad.

### 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 ):

Sampling performed previously and submitted via supplemental form 19

#### 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 ):

Surface water sampling was performed during response to release and submitted via form 19

### 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 6

Number of soil samples exceeding 915-1 4

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

Approximate areal extent (square feet) 25182

ND Highest concentration of TPH (mg/kg)

-- Highest concentration of SAR 13.5

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 0

#### 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

ND Highest concentration of Benzene (µg/l)

ND Highest concentration of Toluene (µg/l)

ND Highest concentration of Ethylbenzene (µg/l)

ND Highest concentration of Xylene (µg/l)

ND Highest concentration of Methane (mg/l)

#### Surface Water

2 Number of surface water samples collected

0 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?

Produced water traveled off well pad and down the fill slope onto non-disturbed area

☒ Were background samples collected as part of this site investigation?

Background sampling conducted to the northeast of the well pad

☐ 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.

SAR to be remediated insitu

#### REMEDIAL 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.

Remediation of elevated SAR will be performed insitu by applying a combination of soil amendments and inter-seeding with Phyto remedial grass seeds. Seeding and amendment treatment is planned to be executed no later than May 30, 2022 weather permitting. Monitoring with soil sampling will be performed following the monsoon season 2022 and annually thereafter until such time that soil sample values are below the threshold. Soil samples will be analyzed for SAR, EC and pH as SAR results from initial sampling are elevated.

#### Soil Remediation Summary

☒ In Situ

☐ Ex Situ

Yes 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 COGCC Facility ID #

Natural Attenuation

Yes

Other

phytoremediation in addition to  
soil amendments

Excavate and onsite remediation

Land Treatment

Bioremediation (or enhanced bioremediation)

Chemical oxidation

Other

### **Groundwater Remediation Summary**

No Bioremediation ( or enhanced bioremediation )

No Chemical oxidation

No Air sparge / Soil vapor extraction

No Natural Attenuation

No 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.

Financial Assurance is currently being work through the new rules and processes within the COGCC.

Operator anticipates the remaining cost for this project to be: \$ 3000

### 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:

## REMEDIATION COMPLETION REPORT

### REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? No

If YES:

☐ Compliant with Rule 913.h.(1).☐ Compliant with Rule 913.h.(2).☐ Compliant with Rule 913.h.(3).

Do all soils meet Table 915-1 standards?

Does the previous reply indicate consideration of background concentrations?

Does Groundwater meet Table 915-1 standards?

Is additional groundwater monitoring to be conducted? \_\_\_\_\_

Operator shall comply with the COGCC 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.

There will be no change in the grade of the land as in-situ remediation will be performed by utilizing liquified soil amendments and phytoremediation with Western Wheatgrass, Alkali Sacaton, and Beardless Wildrye seed mix to aid in salt remediation in the soils.

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. 06/15/2022

Proposed date of completion of Reclamation. 06/30/2022

## 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. 01/11/2022

Actual Spill or Release date, or date of discovery. 01/11/2022

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/11/2022

Proposed site investigation commencement. \_\_\_\_\_

Proposed completion of site investigation. \_\_\_\_\_

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/15/2022

Proposed date of completion of Remediation. 06/30/2022

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**

Monitoring with sampling performed on 10/05/2022. Sample results attached. Sample summary table attached. Vegetation monitoring shows that there is no impact on the vegetation. Vegetation is greater on the fill slope than noted on day of release. New vegetation is beginning to germinate and grow. SAR levels on pad, mid flow path and terminus have dropped significantly from initial sampling. Insitu treatment appears to be working.

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

Signed: Sabre Beebe

Title: Environmental Coordinator

Submit Date: 12/15/2022

Email: sabre.beebe@ikavenergy.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: ALEX FISCHER

Date: 12/15/2022

Remediation Project Number: 22776

**COA Type****Description**

	Per COA on Supplemental F27 Doc #403084613 Provide a 915.b. Soil Suitability for Reclamation Plan. See the latest March 11, 2022 Operator Guidance Rule 915.b. Soil Suitability for Reclamation.  The Plan shall be submitted in first Quarter of 2023 in order for COGCC Reclamation Specialist to review prior to growing season.
	In reviewing the file, the surface water samples were not sampled and analyzed for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene. The chain of custody (Doc #402953554) had two (2) parameters covered with white out paint. Please provide an explanation on a Supplemental F27.
	Chromium VI was detected at sample location SO5, SO6, and SO7; and Boron was detected in SO4, SO5, SO6, and SO7 during the January 24, 2022 sampling event. These constituents were not sampled and analyzed for during the October 10, 2022 sampling event. Operator shall include these constituents on future sampling events.
	Visual and photo documentation throughout the growing season shall be conducted and included on a Supplemental F27.
4 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**

403227255	FORM 27-SUPPLEMENTAL-SUBMITTED
403227267	ANALYTICAL RESULTS
403227268	ANALYTICAL RESULTS
403261444	MAP

Total Attach: 4 Files

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

Engineering Tech	Returned to Draft so the operator could provide a soil sample location map.	12/14/2022
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Total: 1 comment(s)