

# State of Colorado Oil and Gas Conservation Commission

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401483773

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12/12/2017

Report taken by:

KRIS NEIDEL

## 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.

Refer to Rules 340, 905, 906, 907, 908, 909, and 910

### OPERATOR INFORMATION

Name of Operator: <u>LYSTER OIL COMPANY INC</u>	Operator No: <u>51922</u>	<b>Phone Numbers</b>
Address: <u>701 COUNTY ROAD 105</u>		Phone: <u>(970) 3268820</u>
City: <u>CRAIG</u>	State: <u>CO</u>	Zip: <u>81625</u>
Contact Person: <u>Amanda Stewart</u>	Email: <u>amanda.lysteroil@gmail.com</u>	Mobile: <u>( )</u>

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 10487Initial Form 27 Document #: 401332883

#### PURPOSE INFORMATION

- |  |  |
|--|--|
| <input type="checkbox"/> 901.e. Sensitive Area Determination                                       | <input type="checkbox"/> 909.c.(5), Rule 910.b.(4): Remediation of impacted ground water                   |
| <input type="checkbox"/> 909.c.(1), Rule 905: Pit or PW vessel closure                             | <input type="checkbox"/> Rule 909.e.(2)A.: Notice completion of remediation in accordance with Rule 909.b. |
| <input checked="" type="checkbox"/> 909.c.(2), Rule 906: Spill/Release Remediation                 | <input type="checkbox"/> Rule 909.e.(2)B.: Closure of remediation project                                  |
| <input type="checkbox"/> 909.c.(3), Rule 907.e.: Land treatment of oily waste                      | <input type="checkbox"/> Rule 906.c.: Director request   |
| <input type="checkbox"/> 909.c.(4), Rule 908.g.: Centralized E&P Waste Management Facility closure | <input type="checkbox"/> Other _____   |

#### SITE INFORMATION

N Multiple Facilities ( in accordance with Rule 909.c. )

Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>081-06765</u>	County Name: <u>MOFFAT</u>
Facility Name: <u>ELK SPRINGS UNIT 14-8</u>		Latitude: <u>40.325640</u>	Longitude: <u>-108.421050</u>
		** correct Lat/Long if needed: Latitude: <u>40.325640</u>	Longitude: <u>-108.421050</u>
QtrQtr: <u>SWSW</u>	Sec: <u>8</u>	Twp: <u>4N</u>	Range: <u>98W</u>
		Meridian: <u>6</u>	Sensitive Area? <u>No</u>

#### SITE CONDITIONS

General soil type - USCS Classifications CLMost Sensitive Adjacent Land Use wildlife areaIs domestic water well within 1/4 mile? NoIs surface water within 1/4 mile? NoIs groundwater less than 20 feet below ground surface? No

Other Potential Receptors within 1/4 mile

## 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	Soil in berm contaminated	visual

### INITIAL ACTION SUMMARY

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

Spill was reported to the COGCC October 2016.

### 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 ):

Initial soil sample was collected September 2016. Soil samples will also be taken in October 2017 and the spring of 2018. Soil samples will be taken at extent of excavation.

#### 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 1

Number of soil samples exceeding 910-1 0

Was the areal and vertical extent of soil contamination delineated?           

Approximate areal extent (square feet) 1900

### NA / ND

-- Highest concentration of TPH (mg/kg) 6900

NA Highest concentration of SAR           

BTEX > 910-1           

Vertical Extent > 910-1 (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 910-1           

           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

0 Number of surface water samples exceeding 910-1

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

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.

We will dig the perimeter of the spill to find edges. Soil will be ariated multiple times and re-tested.

## 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.

Contaminated berm will be excavated to find all perimeter edges. The soil in this berm was originally constructed of non-impacted material. Soil will be spread out on location pad to be exposed to the elements to help evaporate the contamination. Soil will be ariated multiple times a month while weather permits. A berm will be built around the contaminated soil to prevent rain water from spreading the contamination. Any accumulated precipitation will be removed as fluid waste. We anticipate taking a soil sample in October to retest to contamination levels. If soil is deemed permissible, the soil will be re-used on location. If soil still has contamination, it will continue to be ariated, weather permitting and retested in the spring.

## Soil Remediation Summary

☐ In Situ

\_\_\_\_\_ Bioremediation ( or enhanced bioremediation )  
\_\_\_\_\_ Chemical oxidation  
\_\_\_\_\_ Air sparge / Soil vapor extraction  
\_\_\_\_\_ Natural Attenuation  
\_\_\_\_\_ Other \_\_\_\_\_

☒ Ex Situ

No \_\_\_\_\_ Excavate and offsite disposal  
If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_  
Name of Licensed Disposal Facility or COGCC Facility ID # \_\_\_\_\_  
Yes \_\_\_\_\_ Excavate and onsite remediation  
Yes \_\_\_\_\_ Land Treatment  
No \_\_\_\_\_ Bioremediation (or enhanced bioremediation)  
No \_\_\_\_\_ Chemical oxidation  
No \_\_\_\_\_ 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.

N/A

## REMEDATION PROGRESS UPDATE

### PERIODIC REPORTING

**Frequency:** ☐ Quarterly ☐ Semi-Annually ☐ Annually ☐ Other \_\_\_\_\_

**Report Type:** ☐ Groundwater Monitoring ☐ Land Treatment Progress Report ☐ O&M Report  
☐ Other \_\_\_\_\_

### 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 \_\_\_\_\_

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: \_\_\_\_\_

## REMEDATION COMPLETION REPORT

### REMEDATION COMPLETION SUMMARY

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

Do all soils meet Table 910-1 standards? \_\_\_\_\_

Does the previous reply indicate consideration of background concentrations? \_\_\_\_\_

Are the only residual soil impacts pH, SAR, or EC at depths greater than 3 feet below ground surface? \_\_\_\_\_

Does Groundwater meet Table 910-1 standards? \_\_\_\_\_

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

## 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.

Once soil has been confirmed with no contamination, all soil will be placed back in the original berm and surrounding areas on location. Contouring will be the same as previous.

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 approve the seed mix? \_\_\_\_\_

If NO, does the seed mix comply with local soil conservation district recommendations? \_\_\_\_\_

## IMPLEMENTATION SCHEDULE

### **PRIOR DATES**

Date of Surface Owner notification/consultation, if required. \_\_\_\_\_

Actual Spill or Release date, if known. 08/25/2016

### **SITE INVESTIGATION DATES**

Date of Initial Actions described in Site Investigation Plan (start date). 10/21/2016

Date of commencement of Site Investigation. \_\_\_\_\_

Date of completion of Site Investigation. \_\_\_\_\_

### **REMEDIATION ACTION DATES**

Date of commencement of Remediation. 07/06/2017

Date of completion of Remediation. 07/08/2017

### **SITE RECLAMATION DATES**

Date of commencement of Reclamation. \_\_\_\_\_

Date of completion of Reclamation. \_\_\_\_\_

**OPERATOR COMMENT**

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

Signed: ` Amanda Stewart \_\_\_\_\_

Title: Secretary \_\_\_\_\_

Submit Date: ` 12/12/2017 \_\_\_\_\_

Email: amanda.lysteroil@gmail.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: KRIS NEIDEL \_\_\_\_\_

Date: 01/22/2018 \_\_\_\_\_

Remediation Project Number: 10487 \_\_\_\_\_

**COA Type****Description**

	Suspension of aeration is granted through the winter months. Aeration shall resume upon the ground thawing (March/April). BMPs shall be maintained on regular basis (monthly at a minimum) and all site activities shall be reported on Supplemental F19s.
	By March 1, 2018, provide a Supplemental F27 that includes: The November 9, 2017 soil sampling results and the complete laboratory report from ACZ labs. A site map illustrating where soil samples were collected.
	Beginning March 1, 2018, submit monthly Supplemental F27s until remediation to table 910-1 is complete.

**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**

401483773	FORM 27-SUPPLEMENTAL-SUBMITTED
401483777	MONITORING REPORT

Total Attach: 2 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)