

# State of Colorado Oil and Gas Conservation Commission

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Document Number:

401303005

Receive Date:

06/07/2017

Report taken by:

ROB YOUNG

## 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.

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

### OPERATOR INFORMATION

Name of Operator: <u>AUGUSTUS ENERGY RESOURCES LLC</u>	Operator No: <u>10489</u>	<b>Phone Numbers</b>
Address: <u>36695 HWY 385</u>		Phone: <u>(970) 332-3585</u>
City: <u>WRAY</u>	State: <u>CO</u>	Zip: <u>80758</u>
Contact Person: <u>Loni Davis</u>	Email: <u>ldavis@augustusenergy.com</u>	Mobile: <u>( )</u>

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 10207Initial Form 27 Document #: 401303005

#### 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 checked="" 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 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>LOCATION</u>	Facility ID: <u>303411</u>	API #: _____	County Name: <u>YUMA</u>
Facility Name: <u>ECKLEY CONRAD-63N45W 6SWNE</u>		Latitude: <u>40.259670</u>	Longitude: <u>-102.441160</u>
		** correct Lat/Long if needed: Latitude: <u>40.259888</u>	Longitude: <u>-102.441302</u>
QtrQtr: <u>SWNE</u>	Sec: <u>6</u>	Twp: <u>3N</u>	Range: <u>45W</u>
		Meridian: <u>6</u>	Sensitive Area? <u>Yes</u>

#### SITE CONDITIONS

General soil type - USCS Classifications SMMost Sensitive Adjacent Land Use NAIs 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

NA

## 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
No	SOILS	NA	Soil Analysis

### INITIAL ACTION SUMMARY

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

a 200 bbl produced water tank was removed from location. Sample was taken at a 3' depth, hole was filled with clean topsoil. Gravel from existing berm was spread along lease road.

### 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 ):

2 samples were taken - one at the bottom of the tank location and one sample was from the background location.  
Tank sample coords Lat 40.25988 lon -102.44134  
Background Coords lat 40.25983 lon -102.44149

#### 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 2

Number of soil samples exceeding 910-1 0

Was the areal and vertical extent of soil contamination delineated?           

Approximate areal extent (square feet) 0

### NA / ND

NA Highest concentration of TPH (mg/kg)           

-- Highest concentration of SAR 1.1

           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

           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?

1 background sample was collected coords of sample are lat 40.25983 Lon -102.44149

☐ 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.

the produced water tank was removed, open hole was filled with clean topsoil, gravel from existing berm was spread along lease road. There was no contaminated soil to remove.

## 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 was no impact to soil or groundwater therefore, no remediation is required. We will reclaim the location with grass seed specifically for Sandy sites. we will spread grass seed at this time, but due to the weather turning hot we will plan to reseed in the fall (October) when conditions are more favorable for grass growth if required.

## 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
- ☐ 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.

## 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: \_\_\_\_\_

## 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.

we will re-seed the area with Sharp Bros. Seed Company Buffalo brand grass seed which contains Western Wheat grass, Switch grass, Prairie Sandreed, Yellow Indiangrass and Bluestem. See attached seed tag for details.

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 approve the seed mix? ☐ No \_\_\_\_\_

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

## IMPLEMENTATION SCHEDULE

### PRIOR DATES

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

Actual Spill or Release date, if known. \_\_\_\_\_

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 06/01/2017

Date of commencement of Site Investigation. 06/01/2017

Date of completion of Site Investigation. 06/01/2017

### REMEDIAL ACTION DATES

Date of commencement of Remediation. 06/01/2017

Date of completion of Remediation. 06/01/2017

### SITE RECLAMATION DATES

Date of commencement of Reclamation. 10/11/2017

Date of completion of Reclamation. 10/11/2017

**OPERATOR COMMENT**

This form 27 is to provide information regarding the tank removal at Location 303414 associated with Well API # 05-125-06950.

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

Signed: Loni Davis

Title: Oper Acctg & Reg Spec

Submit Date: 06/07/2017

Email: ldavis@augustusenergy.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: ROB YOUNG

Date: 06/09/2017

Remediation Project Number: 10207

**COA Type****Description**

	Final reclamation shall be performed as per the 1000 Series Rules.
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**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**

401303005	FORM 27-INITIAL-SUBMITTED
401303233	PHOTOS
401303234	ANALYTICAL RESULTS
401303238	OTHER
401303388	AERIAL IMAGE

Total Attach: 5 Files

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

Environmental	Submit a supplemental eForm 27 requesting NFA for project closure.	06/09/2017
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Total: 1 comment(s)