

# State of Colorado Oil and Gas Conservation Commission

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Receive Date:

Report taken by:

## 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>WEXPRO COMPANY</u>	Operator No: <u>95960</u>	<b>Phone Numbers</b>
Address: <u>P O BOX 45003</u>		Phone: <u>(307) 352-7561</u>
City: <u>SALT LAKE CITY</u>	State: <u>UT</u>	Zip: <u>84145-0601</u>
Contact Person: <u>April Stegall</u>	Email: <u>april.stegall@dominionenergy.com</u>	Mobile: <u>(307) 352-7575</u>

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 9792 Initial Form 27 Document #: 2526709

#### 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: Submittal of work plan and RAP, please see the attachments and comments

#### SITE INFORMATION

No Multiple Facilities

Facility Type: <u>PIT</u>	Facility ID: <u>100382</u>	API #: <u></u>	County Name: <u>MOFFAT</u>
Facility Name: <u>B.W. MUSSER 11</u>	Latitude: <u>40.922380</u>	Longitude: <u>-108.293429</u>	
	** correct Lat/Long if needed: Latitude: <u>40.922440</u>	Longitude: <u>-108.293420</u>	
QtrQtr: <u>SWSE</u>	Sec: <u>9</u>	Twp: <u>11N</u>	Range: <u>97W</u>
	Meridian: <u>6</u>	Sensitive Area? <u>No</u>	

#### SITE CONDITIONS

General soil type - USCS Classifications SC

Most Sensitive Adjacent Land Use Rangeland, Non-cropland, Oil and Gas

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**

729' FROM NATURAL DRAINAGE, 9671' FROM NEAREST WATER WELL

**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	GROUNDWATER	None	Visual inspection
Yes	SOILS	See analysis	SOIL ANALYSIS
No	SURFACE WATER	None	Visual inspection

**INITIAL ACTION SUMMARY**

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

Pit was previously backfilled. Historic Google Earth imagery indicates that the pit would have been closed between 2006 and 2011.

**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 attachment for proposed soil sampling.

**Proposed Groundwater Sampling**

☐ Will groundwater samples be collected as part of this investigation? ( Number, analyses, and locations of samples ):

A visual inspection was performed looking for signs of stained soil and potential leeching of pit components that may have impacted surface water or groundwater, none were found. Groundwater was not encountered during previous sampling. If groundwater is encountered during completion of delineation or remediation, COGCC will be contacted immediately.

**Proposed Surface Water Sampling**

☐ Will surface water samples be collected as part of this investigation? ( Number, analyses, and locations of samples ):

A visual inspection was performed looking for signs of stained soil and potential leeching of pit components that may have impacted surface water or groundwater, none were found.

**Additional Investigative Actions**

☐ Additional alternative investigative actions described in attached Site Investigation Plan ( summary ):

N/A

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

Number of soil samples collected 7

Number of soil samples exceeding 915-1 3

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 4622

### NA / ND

-- Highest concentration of TPH (mg/kg) 9650

-- Highest concentration of SAR 5.93

BTEX > 915-1 Yes

Vertical Extent > 915-1 (in feet) 30

### 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?

Based on analytical results, horizontally impacted soil is considered complete. Vertically impacted soil delineation is considered incomplete because impacted soil was observed to the depth of refusal at the center borehole and bedrock was not recovered to confirm refusal occurred at the bedrock surface. Please see the attached plan for proposal to complete delineation.

## 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.

Please see the attached remedial action plan for remedial options. It has been recommended that delineation be completed before choosing a remediation practice to better understand the full content of contamination.

## 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.

The top two remedial option candidates include in situ soil vapor extraction (SVE) and SVE with in situ soil heating. It has been recommended that additional soil data be gathered prior to final selection of remedial technology to be implemented. Please see the attached remedial action plan and plan to complete delineation for more information.

## **Soil Remediation Summary**

☐ In Situ

\_\_\_\_\_ Bioremediation ( or enhanced bioremediation )

\_\_\_\_\_ Chemical oxidation

Yes \_\_\_\_\_ Air sparge / Soil vapor extraction

\_\_\_\_\_ Natural Attenuation

Yes \_\_\_\_\_ Other SVE or SVE with in situ soil heating, to be determined after completion of delineation \_\_\_\_\_

☐ 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.

N/A, there is no indication that groundwater was impacted. If groundwater is encountered during delineation or remediation, COGCC will be notified immediately.

## REMEDIATION PROGRESS UPDATE

### PERIODIC REPORTING

**Approved Reporting Schedule:**

☐ Quarterly

☐ Semi-Annually

☐ Annually

☒ Other

Wexpro to follow COGCC reporting recommendations.

☐ **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 SVE system.

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

## 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? Yes \_\_\_\_\_

Is additional groundwater monitoring to be conducted? No \_\_\_\_\_

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.

To be determined after delineation and remediation have been completed and soils meet Table 910-1 standards.  
Reclamation will follow COGCC and Federal requirements.

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? \_\_\_\_\_

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). \_\_\_\_\_

Proposed site investigation commencement. 08/10/2017

Proposed completion of site investigation. 08/10/2017

### **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**

Please see the attached proposed boreholes, in addition to the previously approved procedures for delineation and SVE installation. Impacts are being found at our planned delineation boreholes, so step-outs are needed in able to fully delineate impacts from the historic produced water pits. The drilling of additional boreholes furthest from the pit are contingent upon the findings of the additional boreholes closest to the pits.

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

Signed: April Stegall

Title: Reclamation Agent

Submit Date:

Email: april.stegall@dominionenergy.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:

Date:

Remediation Project Number: 9792

**COA Type****Description**

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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**

402727754	AERIAL IMAGE
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Total Attach: 1 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)