

**State of Colorado**  
**Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
 Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

401239785

Receive Date:

03/22/2017

Report taken by:

Stan Spencer

## 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>XTO ENERGY INC</u>	Operator No: <u>100264</u>	<b>Phone Numbers</b>
Address: <u>PO BOX 6501</u>		Phone: <u>(970) 675-4122</u>
City: <u>ENGLEWOOD</u>	State: <u>CO</u> Zip: <u>80155</u>	Mobile: <u>(970) 769-6048</u>
Contact Person: <u>Jessica Dooling</u>	Email: <u>jessica_dooling@xtoenergy.com</u>	

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 10066 Initial Form 27 Document #: 401217771

#### 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>SPILL OR RELEASE</u>	Facility ID: <u>448284</u>	API #: _____	County Name: <u>RIO BLANCO</u>
Facility Name: <u>SPILL/RELEASE POINT</u>	Latitude: <u>39.866380</u>	Longitude: <u>-108.209040</u>	
** correct Lat/Long if needed: Latitude: _____ Longitude: _____			
QtrQtr: <u>NWNE</u>	Sec: <u>19</u>	Twp: <u>2S</u>	Range: <u>96W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

#### SITE CONDITIONS

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

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:

☒ 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	18' by 12' by 20'bgs	soil sampling

### INITIAL ACTION SUMMARY

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

An initial form 19 was submitted on 11/6/2016 (Document # 401143739).

On November 6, 2016, a condensate tank on the PCU F31-19G location was discovered to have a leak within secondary containment. The tank was emptied to halt further release. Laboratory analytical results of the initial soil sample collected within the release area indicated hydrocarbon impacts.

The impacted soil was removed through excavation activities. After excavation activities were completed, confirmation soil samples were collected from the excavation base, in the stained bench area and sidewalls and submitted for laboratory analysis of constituents identified in COGCC Table 910-1. Laboratory analytical results of the excavation soil samples indicated hydrocarbon impacts to the soil.

Additional excavation activities have been completed to the north, east, south, vertically and in the stained bench area. Soil confirmation samples indicate Table 910-1 compliance, please refer to attached Tables 1 and 2 for a summary of soil sample laboratory and Figures 1 through 4 for sample locations.

Laboratory analytical reports are available upon request.

### 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 ):

Excavation activities are complete, analytical results of soil confirmation samples indicate COGCC Table 910-1 compliance.

#### Proposed Groundwater Sampling

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

Groundwater was not encountered during assessment activities.

#### Proposed Surface Water Sampling

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

NA

### Additional Investigative Actions

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

NA

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

Number of soil samples collected 9

Number of soil samples exceeding 910-1 5

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

Approximate areal extent (square feet) 1800

### NA / ND

-- Highest concentration of TPH (mg/kg) 50271

-- Highest concentration of SAR 0.605

BTEX > 910-1 Yes

Vertical Extent > 910-1 (in feet) 32

### Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet) 0

Number of groundwater monitoring wells installed 0

Number of groundwater samples exceeding 910-1 0

NA Highest concentration of Benzene (µg/l) 0

NA Highest concentration of Toluene (µg/l) 0

NA Highest concentration of Ethylbenzene (µg/l) 0

NA Highest concentration of Xylene (µg/l) 0

NA Highest concentration of Methane (mg/l) 0

### 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) 0

Volume of liquid waste (barrels) 0

☐ Is further site investigation required?

# REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? Yes \_\_\_\_\_

## SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Impacted material has been excavated, laboratory results indicate Table 910-1 compliance in sidewalls, excavation bottom and bench area, see Tables 1 and 2 and Figures 1 through 4. Excavated material was sampled for Table 910-1 compliance, Stockpile #1 material will be disposed of offsite at an approved disposal facility and Stockpile #2 material meeting Table 910-1 concentration levels will be used onsite for fill material (see Table 2).

## 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.

The hydrocarbon impacted soil associated with the release was excavated. Grab soil samples were collected from the sidewalls, stained bench area and bottom of the excavation and submitted for laboratory analysis of constituents of concern.

Analytical results indicate Table 910-1 compliance.

Background arsenic concentrations for the area were COGCC approved in REM Project Number 8426.

## Soil Remediation Summary

☐ In Situ

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

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

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

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

\_\_\_\_\_ Other \_\_\_\_\_

☒ Ex Situ

Yes \_\_\_\_\_ Excavate and offsite disposal

\_\_\_\_\_ If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_ 1200

\_\_\_\_\_ Name of Licensed Disposal Facility or COGCC Facility ID # \_\_\_\_\_

No \_\_\_\_\_ Excavate and onsite remediation

No \_\_\_\_\_ 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.

Groundwater was not encountered during assessment activities.

## REMEDATION PROGRESS UPDATE

### PERIODIC REPORTING

**Frequency:** ☐ Quarterly ☐ Semi-Annually ☐ Annually ☒ Other Supplemental Form 27

**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? Yes \_\_\_\_\_

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

Soil removed from the excavation with laboratory results above Table 910-1 concentration levels will be transported offsite to a permitted disposal/recycling facility. Material that meets Table 910-1 concentration levels will be used for onsite fill.

Volume of E&P Waste (solid) in cubic yards \_\_\_\_\_ 1200

E&P waste (solid) description Hydrocarbon (Condensate) Impacted Soil, E&P Exempt

COGCC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-COGCC Disposal Facility: Wray Gulch Landfill

Volume of E&P Waste (liquid) in barrels \_\_\_\_\_ 0

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

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

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.

Any disturbances associated with this project will be reclaimed as specified on the surface use plan and BLM Conditions of Approval.

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. 11/06/2016

Actual Spill or Release date, if known. 11/05/2016

### **SITE INVESTIGATION DATES**

Date of Initial Actions described in Site Investigation Plan (start date). 11/05/2016

Date of commencement of Site Investigation. 11/06/2016

Date of completion of Site Investigation.

### **REMEDIAL ACTION DATES**

Date of commencement of Remediation. 11/06/2016

Date of completion of Remediation.

### **SITE RECLAMATION DATES**

Date of commencement of Reclamation.

Date of completion of Reclamation.

**OPERATOR COMMENT**

For review by Stan Spencer.

XTO Energy is submitting an update of the PCU F31-19G condensate release Form 27, REM# 10066, to address completed remediation activities. Pending approval, XTO will complete backfilling of the excavation and submit Notice of Completion for REM# 10066.

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

Signed: ` Jessica Dooling

Title: Piceance EHS Supervisor

Submit Date: ` 03/22/2017

Email: jessica\_dooling@xtoenergy.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: Stan Spencer

Date: 03/23/2017

Remediation Project Number: 10066

**COA Type****Description**

--	--

**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**

401239785	FORM 27-SUPPLEMENTAL-SUBMITTED
401240201	ANALYTICAL RESULTS
401240204	SOIL SAMPLE LOCATION MAP

Total Attach: 3 Files

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

Environmental	Based on the information presented, it appears that no further action is necessary at this time and the COGCC approves the closure request. However, should future conditions at the site indicate contaminant concentrations in soils exceeding COGCC standards or if ground water is found to be impacted, then further investigation and/or remediation activities may be required. In addition, the surface area disturbed by the remediation activity shall be reclaimed in accordance with the 1000 Series Reclamation Rules.  Backfill excavation with Table 910-1 compliant soil and submit NOC.	03/23/2017
---------------	--	------------

Total: 1 comment(s)