

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

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Document Number:

402235840

Receive Date:

11/12/2019

Report taken by:

John Heil

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>XTO ENERGY INC</u>	Operator No: <u>100264</u>	Phone Numbers
Address: <u>110 W 7TH STREET</u>		Phone: <u>(970) 675-4089</u>
City: <u>FORTH WORTH</u> State: <u>TX</u> Zip: <u>76102</u>		Mobile: <u>(970) 250-4867</u>
Contact Person: <u>Natalie Steiner</u>	Email: <u>natalie_steiner@xtoenergy.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 14820 Initial Form 27 Document #: 402235840

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>LOCATION</u>	Facility ID: <u>316678</u>	API #: _____	County Name: <u>RIO BLANCO</u>
Facility Name: <u>YELLOW CREEK-61S98W 2NWSE</u>	Latitude: <u>39.991300</u>	Longitude: <u>-108.355590</u>	
	** correct Lat/Long if needed: Latitude: <u>39.990995</u>	Longitude: <u>-108.355973</u>	
QtrQtr: <u>NWSE</u>	Sec: <u>2</u>	Twp: <u>1S</u>	Range: <u>98W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

SITE CONDITIONS

General soil type - USCS Classifications CL Most Sensitive Adjacent Land Use Non-Crop land

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? Yes

Other Potential Receptors within 1/4 mile

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> E&P Waste | <input type="checkbox"/> Other E&P Waste | <input type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | _____ |
| <input type="checkbox"/> Oil | <input type="checkbox"/> Tank Bottoms | |
| <input type="checkbox"/> Condensate | <input type="checkbox"/> Pigging Waste | |
| <input type="checkbox"/> Drilling Fluids | <input type="checkbox"/> Rig Wash | |
| <input type="checkbox"/> Drill Cuttings | <input type="checkbox"/> Spent Filters | |
| | <input type="checkbox"/> Pit Bottoms | |
| | <input type="checkbox"/> Other (as described by EPA) | _____ |

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	216'X90'	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 supplemental was submitted on 10/25/2019 (Document #402222077)
On 10/13/2019 ~6:30 AM lease operator discovered the manifold on a produced water tank had frozen and broke causing the Produced water to release. All tanks were locked out until all repairs to the manifold are complete. The impacted soil was removed through excavation activities. After excavation activities were completed, confirmation soil samples were collected from the excavation and submitted for laboratory analysis. (COGCC Table 910-1). See Table 1 and Site Map for sampled areas

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):

7 discrete samples have been taken - see Site Map with samples

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):

XTO Energy will remove all gravel from secondary containment and visually inspect liner for any holes or rips and make repairs if needed

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 7
Number of soil samples exceeding 910-1 0
Was the areal and vertical extent of soil contamination delineated? No
Approximate areal extent (square feet) 0

NA / ND

-- Highest concentration of TPH (mg/kg) 30.3
-- Highest concentration of SAR 15
BTEX > 910-1 No
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) 0'
Number of groundwater monitoring wells installed 0
Number of groundwater samples exceeding 910-1 0

NA Highest concentration of Benzene (µg/l) _____
NA Highest concentration of Toluene (µg/l) _____
NA Highest concentration of Ethylbenzene (µg/l) _____
NA Highest concentration of Xylene (µg/l) _____
NA 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

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Impacted material will be excavated and will be removed and transported off site for disposal at Wray Gulch Landfill

REMEDICATION 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.

Impacted material will be removed and transported off site to disposal at Wray Gulch Landfill, Meeker Co. All gravel from the secondary containment will be removed and a visual inspection will be made on the liner. Any and all repairs will be made immediately upon finding.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

Yes _____ Excavate and offsite disposal

_____ Chemical oxidation

_____ If Yes: Estimated Volume (Cubic Yards) _____ 50

_____ Air sparge / Soil vapor extraction

_____ Name of Licensed Disposal Facility or COGCC Facility ID # _____

_____ Natural Attenuation

No _____ Excavate and onsite remediation

_____ Other _____

_____ 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

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 will be mix/blended and processed to below Table 910-1 concentration levels or transported offsite to a permitted disposal/recycling facility.

Volume of E&P Waste (solid) in cubic yards _____ 0

E&P waste (solid) description _____

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: _____

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

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.

Any disturbances associated with this project will be reclaimed as specified by CPW

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. 10/13/2019

Actual Spill or Release date, if known. 10/12/2019

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 10/14/2019

Date of commencement of Site Investigation. 10/14/2019

Date of completion of Site Investigation. _____

REMEDIAL ACTION DATES

Date of commencement of Remediation. 10/14/2019

Date of completion of Remediation. _____

SITE RECLAMATION DATES

Date of commencement of Reclamation. _____

Date of completion of Reclamation. _____

OPERATOR COMMENT

For Review by John Heil:

XTO Energy is submitting this workplan for the YCF 2-35-1 (Form 19 #402222077) Spill ID 468770. To determine the vertical aerial extent of impact within the footprint of the tank battery, all gravel will be removed from the secondary containment. liner will be thoroughly inspected for any holes or rips. Repairs will be done immediately upon finding. Table 910-1 sampling has been completed, see attached report and table.

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

Signed: ` Natalie Steiner

Title: SSHE Technician

Submit Date: ` 11/12/2019

Email: natalie_steiner@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: John Heil

Date: 12/18/2019

Remediation Project Number: 14820

COA Type**Description**

	<p>Inspection Doc # 699700045 states "Numerous holes in the synthetic liner were observed in addition to patches peeling off the synthetic liner. Secondary containment is not sufficiently impervious to contain spilled or released materials, per Rule 605.a.(4)."</p> <p>with a corrective action</p> <p>"Prior to placing the tank battery back into service, the operator shall complete a site investigation and determine the vertical aerial extent of impact within the footprint of the tank battery and all observed wet and stained areas outside of the tank battery. The operator shall submit a Site Investigation/Remediation Work Plan (F-27) within 14-days describing how the operator will complete the delineation of impacts and a schedule for the delineation. Based on the results of the Site Investigation, remediation of all impacts shall be completed prior to the reconstruction of the tank battery and placing it back into service. Install liner material to ensure spill or released materials will be maintained within containment structure."</p> <p>The operator shall complete a site investigation and determine the vertical and aerial extent of impact within the footprint of the tank battery beneath the liner, and remediate at that time any impact.</p>
	The operator states that "Table 910-1 sampling has been completed..." The COGCC does not concur with this statement. Soil samples collected and analyzed for locations #4 and #5 indicate Benzene concentrations just below the Table 910-1 concentration levels.
	Operator shall provide a map of the all areas excavated and the depth of excavation.
	Operator shall provide the depth of the 7 sample point and the approximate amount of material excavated.

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**

402235840	FORM 27-INITIAL-SUBMITTED
402236558	ANALYTICAL RESULTS
402236560	OTHER
402236569	SOIL SAMPLE LOCATION MAP

Total Attach: 4 Files

General Comments

User Group

Comment

Comment Date

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)