FORM
27
Rev 3/16

State of Colorado
Oil and Gas Conservation Commission

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Document Number: 401217771
Receive Date: 02/23/2017
Report taken by: Stan Spencer

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 INFORMATON

Name of Operator: XTO ENERGY INC Operator No: 100264
Address: PO BOX 6501
City: ENGLEWOOD State: CO Zip: 80155
Contact Person: Jessica Dooling

Phone Numbers
Phone: (970) 675-4122
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PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

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

PURPOSE INFORMATION

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

SITE INFORMATION

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

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

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:

- [x] **E&P Waste**
  - [ ] Produced Water
  - [ ] Oil
  - [x] Condensate
  - [ ] Drilling Fluids
  - [ ] Drill Cuttings
- [ ] **Other E&P Waste**
  - [ ] Workover Fluids
  - [ ] Tank Bottoms
  - [ ] Pigging Waste
  - [ ] Rig Wash
  - [ ] Spent Filters
  - [ ] Pit Bottoms
  - [ ] Other (as described by EPA) _____
- [ ] **Non-E&P Waste** _____

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 activites were completed, confirmation soil samples were collected from the excavation base and sidewalls and submitted for laboratory analysis of constutents identified in COGCC Table 910-1. Laboratory analytical results of the excavation soil samples indicated hydrocarbon impacts to the soil. Following additional excavation activities to the north, east, south and vertically, additional soil samples were collected from the sidewalls and base of the excavation and submitted for laboratory analysis of constutents of concern. Please refer to the attached Table 1 for a summary of soil sample laboratory results. Site maps are provided as Figures 1 and 2.

Laboratory analytical reports are available upon request.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

- [x] Will soil samples be collected as part of this investigation? (Number, type (grab/composite), analyses, and locations of samples):

Excavation activities will continue until laboratory analytical results of soil confrimation 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):

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: 9

Number of soil samples exceeeding 910-1: 5

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

Approximate areal extent (square feet): 216

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): 25

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: 0

Number of groundwater samples exceeding 910-1:

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

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?

See remedial action plan.

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Impacted material will be excavated and remediation success will be demonstrated through sample collection and laboratory analysis.

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 petroleum hydrocarbon impacted soil associated with the release will be excavated. Grab soil samples will be collected from the sidewalls and bottom of the excavation and submitted for laboratory analysis of constituents of concern.

XTO plans to continue excavation until laboratory analytical results indicate Table 910-1 compliance.

Background arsenic concentations 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) 160
  - Name of Licensed Disposal Facility or COGCC Facility ID # ____
- Yes Excavate and onsite remediation
  - No Land Treatment
  - No Bioremediation (or enhanced bioremediation)
  - No Chemical oxidation
  - Yes Other Mix/blend processing

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.

REMEDIATION 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 either crushed, mix/blend processed to below Table 910-1 concentration levels or transported offsite to a permitted disposal/recycling facility. Mix/blend processed material that complies with Table 910-1 concentration levels will be used for onsite fill.

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: 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:

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 Conidtions of Apporval.

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 reveiw by Stan Spencer.

XTO Energy is submitting this workplan for the PCU F31-19G Condensate release, Facility ID 448284, and requesting closure of Form 19 DOC# 401143739 and supplemental Form 19As DOC#s 401148146 and 401217993. Excavated impacted soils and any remaining impacted soils identified will be removed and transported offsite for disposal at Wray Gulch Landfill in Meeker, CO, or remediated to below Table 910-1 standards.

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:` 02/23/2017 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: 02/27/2017

Remediation Project Number: 10066

COA Type	Description

Attachment Check List

Att Doc Num	Name
401217771	FORM 27-INITIAL-SUBMITTED
401217976	SITE MAP
401217978	ANALYTICAL RESULTS

Total Attach: 3 Files

General Comments

User Group	Comment	Comment Date
Environmental	Submit confirmation soil samples indicating Table 910-1 compliance prior to backfill operations. Submit request for closure following backfill, compaction and regrading.	02/27/2017

Total: 1 comment(s)