

State of Colorado
Oil and Gas Conservation Commission

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403065368
Receive Date:
06/02/2022
Report taken by:
RICK ALLISON

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.

Closure request is not available for an Initial Site Investigation and Remediation Workplan.

OPERATOR INFORMATION

| | | |
|-------------------------------------|-----------------------------|-----------------------|
| Name of Operator: NOBLE ENERGY INC | Operator No: 100322 | Phone Numbers |
| Address: 2001 16TH STREET SUITE 900 | | Phone: (303) 956-8714 |
| City: DENVER State: CO Zip: 80202 | | Mobile: () |
| Contact Person: Paul Henehan | Email: paulh@fremontenv.com | |

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 15651 Initial Form 27 Document #: 402426909

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: _____

SITE INFORMATION

Yes Multiple Facilities

| | | | |
|--|---------------------|------------------------|--|
| Facility Type: LOCATION | Facility ID: 323210 | API #: _____ | County Name: WELD |
| Facility Name: CPC-HOSHIKO-65N64W 35NESW | Latitude: 40.354206 | Longitude: -104.519163 | |
| ** correct Lat/Long if needed: Latitude: 40.348852 | | Longitude: -104.521793 | |
| QtrQtr: NESW | Sec: 35 | Twp: 5N | Range: 64W Meridian: 6 Sensitive Area? Yes |
| Facility Type: SPILL OR RELEASE | Facility ID: 477092 | API #: _____ | County Name: WELD |
| Facility Name: CPC Hoshiko 35-1, Hoshiko B 35-14 | Latitude: 40.348855 | Longitude: -104.521793 | |
| ** correct Lat/Long if needed: Latitude: _____ | | Longitude: _____ | |
| QtrQtr: SESW | Sec: 35 | Twp: 5N | Range: 64W Meridian: 6 Sensitive Area? Yes |

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use Agricultural

Is domestic water well within 1/4 mile? Yes

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

Wetlands; Occupied Building

Approximate areal extent (square feet) 216

Vertical Extent > 915-1 (in feet) 5

Groundwater

Number of groundwater samples collected 8

-- Highest concentration of Benzene (µg/l) 13

Was extent of groundwater contaminated delineated? Yes

ND Highest concentration of Toluene (µg/l) _____

Depth to groundwater (below ground surface, in feet) 5

-- Highest concentration of Ethylbenzene (µg/l) 130

Number of groundwater monitoring wells installed 7

-- Highest concentration of Xylene (µg/l) 490

Number of groundwater samples exceeding 915-1 1

NA 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?

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.

Grab confirmation soil samples will be collected above the phreatic zone by Fremont Environmental for analysis of TPH C6-36 and organic parameters in soil per COGCC Table 915-1. Excavation activities will be conducted prior to April 1, 2022.

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.

Source impacts will be removed through excavation activities. Quarterly groundwater monitoring will be conducted.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

Yes Excavate and offsite disposal

_____ Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) 130

_____ 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

Yes _____ Natural Attenuation

No _____ 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.

Seven groundwater monitoring wells will be sampled on a quarterly basis to monitor for natural attenuation. Groundwater samples will be analyzed for BTEX, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene by EPA Method 8260. MW3 will be replaced subsequent to excavation activities.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

Quarterly Semi-Annually Annually Other _____

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 _____

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:

No beneficial use

Volume of E&P Waste (solid) in cubic yards _____ 600

E&P waste (solid) description _____ E&P solid waste derived from excavation activities

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: Buffalo Ridge Landfill

Volume of E&P Waste (liquid) in barrels _____ 300

E&P waste (liquid) description _____ Groundwater

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: Republic Services - Tower Road

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? No

Does the previous reply indicate consideration of background concentrations? _____

Does Groundwater meet Table 915-1 standards? Yes

Is additional groundwater monitoring to be conducted? _____

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.

Reclamation will be in accordance with COGCC 1004 Rule

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. 06/24/2020

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. 04/19/2021

Actual Spill or Release date, or date of discovery. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 06/24/2020

Proposed site investigation commencement. _____

Proposed completion of site investigation. 06/24/2020

REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/24/2020

Proposed date of completion of Remediation. 12/31/2024

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:

Due to scheduling conflicts with the excavation crew the excavation will be completed prior to April 1, 2022.

OPERATOR COMMENT

Operator conducted additional soil excavation to facilitate remediation at this site. Approximately 600 cubic yards and 300 bbls of groundwater were removed from the site for offsite disposal. Several existing monitoring wells were destroyed during the excavation work; these wells will be replaced so that the quarterly groundwater monitoring program can continue. Replacement of the wells and future groundwater sampling and analyses data will be submitted with a Supplemental Form 27 report during the next quarterly monitoring event which is scheduled for May 2022.

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

Signed: Paul Henehan

Title: Engineer

Submit Date: 06/02/2022

Email: paulh@fremontenv.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: RICK ALLISON

Date: 06/21/2022

Remediation Project Number: 15651

Condition of Approval

COA Type

Description

| | |
|--------|--|
| | The pH of soil samples collected at the site exceeds the allowable level for Table 915-1 soil suitability for reclamation for pH. Therefore, Operator will define the extent of soil with elevated pH, and if Operator proposes to leave soil with elevated pH in place, Operator will submit a Reclamation plan pursuant to Rule 915.b. |
| | Operator has not supplied sufficient background sampling to compare confirmation soil samples with a site specific background. Operator shall supply additional site specific background data to establish background for total metals in soil. |
| | Operator will analyze groundwater samples from all monitoring wells for Table 915-1 Groundwater Inorganic Parameters, Table 915-1 Organic Compounds in Groundwater, dissolved arsenic, dissolved barium, and dissolved selenium for a minimum of four quarterly monitoring events. |
| 3 COAs | |

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

| | |
|-----------|--------------------------------|
| 403065368 | FORM 27-SUPPLEMENTAL-SUBMITTED |
| 403065369 | REMEDATION PROGRESS REPORT |

Total Attach: 2 Files

General Comments

User Group

Comment

Comment Date

| | | |
|--|--|---------------------|
| | | Stamp Upon Approval |
|--|--|---------------------|

Total: 0 comment(s)