

State of Colorado  
Energy & Carbon Management Commission

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Document Number:  
404150555

Receive Date:

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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 ECMC 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         | <b>Phone Numbers</b>  |
| Address: 1099 18TH STREET SUITE 1500 |                             | Phone: (303) 597-6847 |
| City: DENVER State: CO Zip: 80202    |                             | Mobile: ( )           |
| Contact Person: Phillip Porter       | Email: RBUEUF27@chevron.com |                       |

**PROJECT, PURPOSE & SITE INFORMATION**

**PROJECT INFORMATION**

Remediation Project #: 23204 Initial Form 27 Document #: 403054751

**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: WELL                            | Facility ID: _____  | API #: 123-14879       | County Name: WELD                         |
| Facility Name: PTF C 32-8                      | Latitude: 40.270210 | Longitude: -104.567750 |   |
| ** correct Lat/Long if needed: Latitude: _____ |                     | Longitude: _____       |   |
| QtrQtr: SENE                                   | Sec: 32             | Twp: 4N                | Range: 64W Meridian: 6 Sensitive Area? No |
| Facility Type: SPILL OR RELEASE                | Facility ID: 482445 | API #: _____           | County Name: WELD                         |
| Facility Name: PTF C 32-8                      | Latitude: 40.270210 | Longitude: -104.567750 |   |
| ** correct Lat/Long if needed: Latitude: _____ |                     | Longitude: _____       |   |
| QtrQtr: SENE                                   | Sec: 32             | Twp: 4N                | Range: 64W Meridian: 6 Sensitive Area? No |

## **SITE CONDITIONS**

General soil type - USCS Classifications SC

Most Sensitive Adjacent Land Use Range Land

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? No

### **Other Potential Receptors within 1/4 mile**

HPH N  
Farm Structures 0.08/0.12/0.15/0.18/0.22mi S, 0.15/0.18/0.21mi SW, 0.21mi NW  
Residential 0.23/0.25mi NE, 0.24mi N  
Freshwater Emergent Wetlands 0.22mi W

# 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 checked="" type="checkbox"/> Oil             | <input type="checkbox"/> Tank Bottoms                |  |
| <input checked="" type="checkbox"/> Condensate      | <input type="checkbox"/> Pigging Waste               |  |
| <input checked="" 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      |
|--------------|----------------|------------------|---------------------|
| UNDETERMINED | GROUNDWATER    | NA               | laboratory analysis |
| Yes          | SOILS          | ~10'x~12'x7'     | laboratory analysis |

## **INITIAL ACTION SUMMARY**

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

Pursuant to ECMC Rule 911 a site investigation was conducted pertaining to the PTF C32-08 wellhead cut and cap and flowline removal. Approximately 930' of flowline was removed. The wellhead was cut and capped per ECMC rules. A grab soil sample was collected at the base of the excavation or the area showing the highest degree of impact during field screening activities at the wellhead excavation. Soil samples were analyzed by a certified laboratory for TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons), organic compounds in soil per ECMC Table 915-1, EC, SAR, pH, and boron. One sample was analyzed for waste characterization of ECMC Table 915-1 metals. A grab soil sample was collected at the flowline terminus at the separator and was included with the facility decommissioning assessment and Supplemental Form 27 (Doc. # 403316851). All samples collected were analyzed by a certified laboratory using approved ECMC laboratory analysis methods. Groundwater was not encountered during assessment activities. Soil borings were completed as five (5) monitoring wells.

## **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 ):

### **Proposed Groundwater Sampling**

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

Soil borings were completed as five (5) monitoring wells and will be sampled for BTEX, naphthalene, TMBs, dissolved, arsenic, and inorganic compounds per ECMC Table 915-1 on a quarterly basis.

### **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 2  
Number of soil samples exceeding 915-1 1  
Was the areal and vertical extent of soil contamination delineated? No  
Approximate areal extent (square feet) 120

### **NA / ND**

-- Highest concentration of TPH (mg/kg) 3182  
-- Highest concentration of SAR 0.438  
BTEX > 915-1 No  
Vertical Extent > 915-1 (in feet) 7

### **Groundwater**

Number of groundwater samples collected 15  
Was extent of groundwater contaminated delineated? No  
Depth to groundwater (below ground surface, in feet) 8  
Number of groundwater monitoring wells installed 5  
Number of groundwater samples exceeding 915-1 0

ND Highest concentration of Benzene (µg/l) \_\_\_\_\_  
ND Highest concentration of Toluene (µg/l) \_\_\_\_\_  
Highest concentration of Ethylbenzene (µg/l) \_\_\_\_\_  
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 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?

One background sample was collected for pH and ECMC Table 915-1 metals (sans Cr VI). Additional background samples for arsenic analysis will be collected.

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?

The source will be delineated through an environmental site assessment. Additional background samples for arsenic analysis will also be collected.

## **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.

No current source was generated.

### **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.

Additional background samples for arsenic analysis will be collected. Once delineated, source excavation activities will be completed to remove impacts at the site. Site assessment data will be summarized and provided in a supplemental 27 to confirm the excavation scope and SAP prior to implementation. NFA will be considered when soil and groundwater concentrations are in compliance with ECMC Table 915-1 standards.

### **Soil Remediation Summary**

In Situ

Ex Situ

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

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

\_\_\_\_\_ Chemical oxidation  
\_\_\_\_\_ Air sparge / Soil vapor extraction  
\_\_\_\_\_ Natural Attenuation  
\_\_\_\_\_ Other \_\_\_\_\_

If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_  
Name of Licensed Disposal Facility or ECMC 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.

Soil borings were completed as five (5) monitoring wells and will be sampled for BTEX, naphthalene, TMBs, dissolved, arsenic, and inorganic compounds per ECMC Table 915-1 on a quarterly basis.

# 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 \_\_\_\_\_

## Adequacy of Operator's General Liability Insurance and Financial Assurance

Describe the adequacy of the Operator's general liability insurance and Financial Assurance to fully address the anticipated costs of Remediation, including the estimated remaining cost for this project (below).

If this information has been provided on a Form 27 within the last 12 months, provide the Document Number of that form.

The Operator intends to directly address the costs of remediation at the locations as part of our asset retirement obligation process and operations. The Operator has general liability insurance (policy WZZ 316714) and financial assurance in compliance with ECMC rules. Records are available on the ECMC's website.

Operator anticipates the remaining cost for this project to be: \$ 75000 \_\_\_\_\_

## WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? No \_\_\_\_\_

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 \_\_\_\_\_

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

Non-ECMC Disposal Facility: \_\_\_\_\_

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

E&P waste (liquid) description \_\_\_\_\_

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

Non-ECMC 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? No \_\_\_\_\_

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

Does Groundwater meet Table 915-1 standards? No \_\_\_\_\_

Is additional groundwater monitoring to be conducted? Yes

Operator shall comply with the ECMC 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 ECMC1000 Series Rules.

Is the described reclamation complete? Yes

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. 06/16/2022

Proposed date of completion of Reclamation. 12/31/2025

## 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. 04/05/2022

Actual Spill or Release date, or date of discovery. 06/28/2022

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 06/16/2022

Proposed site investigation commencement. 06/18/2022

Proposed completion of site investigation. 12/31/2025

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/16/2022

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:

The implementation schedule has been updated to reflect the schedule to complete the site investigation. The ECMC will be updated on a subsequent Form 27 with the results of the supplemental site investigation, or if the schedule is changed due to site access constraints. The timeline previously proposed for the supplemental site investigation was extended due to scheduling conflicts

**OPERATOR COMMENT**

In response to ECMC Form-27 comment dated February 17, 2025 (Document Number 404034950), the Operator has requested analytical lab reports associated with this remediation number (project) be protected from unauthorized modification by anyone outside the certified laboratory. As a result, the associated lab reissued the original reports for this project with additional security measures (Reissued Reports).

The Reissued Reports associated with the site investigation was received directly from Origins/Enthalpy laboratory on 2/13/2025 and 4/2/2025 which includes a watermark confirming both the laboratory representative who reissued the reports and the date and time of the reissuance. The Reissued Reports are attached to this submission.

Based on currently available data, this project is not affected by data integrity irregularities and is not associated with Operator's data integrity review process and its Rule 525.e. Voluntary Disclosure.

In the event additional responsive information is received or discovered that would suggest this project should be incorporated into the ongoing data integrity review process associated with Operator's Rule 525.e. Voluntary Disclosure, Operator will update and/or amend the statements in this submission and provide any new or revised data to ECMC.

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

Signed: Tamara Yerkes

Title: Environmental Consultant

Submit Date: \_\_\_\_\_

Email: cvxform27@erm.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with ECMC Rules and applicable orders and is hereby approved.

ECMC Approved: \_\_\_\_\_

Date: \_\_\_\_\_

Remediation Project Number: 23204

**COA Type****Description**

| <u>COA Type</u> | <u>Description</u> |
|-----------------|--------------------|
| 0 COA           |                    |

**ATTACHMENT 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**

|           |                    |
|-----------|--------------------|
| 404150572 | ANALYTICAL RESULTS |
| 404150573 | ANALYTICAL RESULTS |
| 404150574 | ANALYTICAL RESULTS |
| 404150578 | ANALYTICAL RESULTS |
| 404150580 | ANALYTICAL RESULTS |
| 404150582 | ANALYTICAL RESULTS |
| 404150587 | ANALYTICAL RESULTS |
| 404150588 | ANALYTICAL RESULTS |
| 404150589 | ANALYTICAL RESULTS |
| 404150593 | ANALYTICAL RESULTS |
| 404150597 | ANALYTICAL RESULTS |
| 404150599 | ANALYTICAL RESULTS |
| 404153179 | ANALYTICAL RESULTS |

Total Attach: 13 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)