FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

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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 INFORMATON

Name of Operator: NOBLE ENERGY INC Operator No: 100322
Address: 1099 18TH STREET SUITE 1500
City: DENVER State: CO Zip: 80202
Contact Person: Jason Davidson Email: jason.davidson@chevron.com

Phone Numbers
Phone: (970) 939-1929
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PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 27651 Initial Form 27 Document #: 403310938

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.
- [X] 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.
- [X] 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 #: 123-15168 County Name: WELD
Facility Name: HSR-CUTLER 14-31 Latitude: 40.263460 Longitude: -104.708560
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SESW Sec: 31 Twp: 4N Range: 65W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 484448 API #: County Name: WELD
Facility Name: HSR-Cutler 14-31 Latitude: 40.263460 Longitude: -104.708560
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SESW Sec: 31 Twp: 4N Range: 65W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SW

Most Sensitive Adjacent Land Use Grassland

Is domestic water well within 1/4 mile? Yes

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

Division of Water Resources (DWR) well permit 18587-F is located 0.16mi SE.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- [X] **E&P Waste**
  - [X] Produced Water
  - [X] 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
UNDETERMINED	GROUNDWATER	NA	Lab analysis or field screening, if encountered
Yes	SOILS	To be determined	Soil sampling and lab 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 Energy & Carbon Management Commission (ECMC) Rule 911, site investigations were conducted pertaining to the HSR-CUTLER 14-31 wellhead cut and cap and flowline removal. On April 19, 2023, initial wellhead characterization sampling was completed on the day of cut and cap operations. Five soil samples were collected for field screening and analysis - four from the excavation sidewalls and one from the base of the excavation. All samples were submitted for analysis of ECMC Table 915-1 organic constituents of concern and Soil Suitability for Reclamation (SSR) constituents. The excavation base sample was also analyzed for all Table 915-1 metals. One background soil sample was collected and submitted for analysis of pH and Table 915-1 metals, with the exception of hexavalent chromium.

On April 24, 2023 flowline characterization sampling was conducted at the separator connection as a part of the decommissioning assessment for the HSR-Sells-64N65W 31 SWSW Facility (Location ID: 329606 / Remediation project number: 27599). Two samples were field screened and one was submitted for analysis of Table 915-1 organic constituents and SSRs. On October 12 and 13, 2023, additional flowline characterization sampling was conducted at the cut points along approximately 890 feet of removed flowline. Eight soil samples were collected for field screening and one soil sample (obtained at a directional change point) was submitted for analysis of Table 915-1 organic constituents and SSRs.

See the attached Site Investigation Reports for initial investigation details.

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):

Additional soil samples will be collected as needed to delineate the extent of soil impacts identified by initial investigation activities. Soil samples will be submitted for analysis of all Table 915-1 soil constituents of concern. Background samples may be collected to characterize native levels of inorganic constituents at the Location.

Proposed Groundwater Sampling

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

If groundwater is encountered during the proposed site investigation a grab groundwater will be collected and analyzed for all organic and inorganic compounds per Table 915-1.

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):

Visual inspection at the wellhead and flowline areas occurred during cut and cap and removal activities. Field personnel field screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected: 7

Number of soil samples exceeeding 915-1: 2

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

Approximate areal extent (square feet): 100

NA / ND

-- Highest concentration of TPH (mg/kg): 25.1

-- Highest concentration of SAR: 2.93

BTEX > 915-1: No

Vertical Extent > 915-1 (in feet): 6

Groundwater

Number of groundwater samples collected: 0

Was extent of groundwater contaminated delineated? Yes

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

Number of groundwater monitoring wells installed:

Number of groundwater samples exceeding 915-1:

Highest concentration of Benzene (µg/l):

Highest concentration of Toluene (µg/l):

Highest concentration of Ethylbenzene (µg/l):

Highest concentration of Xylene (µg/l):

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?

[X] Were background samples collected as part of this site investigation?

On April 19, 2023, one background soil sample was collected and analyzed for pH and Table 915-1 metals, with the exception of hexavalent chromium. See the attached Site Investigation Report for details.

[ ] Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards):

Volume of liquid waste (barrels):

[X] Is further site investigation required?

Supplemental site investigation (SSI) activities will be conducted to delineate the extent of soil impacts identified by initial investigation activities. Delineation soil samples will be collected and analyzed for all Table 915-1 constituents. Additional background samples will be collected and analyzed for all Table 915-1 inorganics. The SSI schedule will be submitted on a subsequent Form 27.

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.

Noble is in the process of determining the extent of impacts associated with the project. Once impacts are delineated, Noble will prepare a remediation plan to remove the source material within the investigation area.

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.

On April 19, 2023, initial wellhead characterization sampling was completed following cut and cap operations. Five soil samples were collected for field screening and analysis - four from the excavation sidewalls and one from the base of the excavation. All samples were submitted for analysis of Table 915 -1 organic constituents of concern and SSR constituents. The excavation base sample was also analyzed for all Table 915-1 metals. Analytical results of wellhead excavation samples indicated compliance with Table 915-1 Protection of Groundwater Soil Screening Levels (PGSSLs) or the applicable standards except for 1,2,4-trimethylbenzene, pH, and arsenic. A background soil sample indicated compliance with the applicable standards for all analyzed constituents except for arsenic.

On April 24, 2023 flowline characterization sampling was conducted at the separator connection as a part of the decommissioning assessment for the HSR-Sells-64N65W 31 SWSW Facility (Location ID: 329606 / Remediation project number 27599). Two samples were field screened and one was submitted for analysis of Table 915-1 organic constituents and SSRs. On October 12 and 13, 2023, additional flowline characterization sampling was conducted at cut points along approximately 890 feet of removed flowline. Eight soil samples were collected for field screening and one soil sample (obtained at a directional change point) was submitted for analysis of Table 915-1 organic constituents of concern and SSRs. Analytical results of all flowline characterization samples indicated compliance with the applicable standards for all analyzed constituents.

See the attached Site Investigation Reports for initial investigation details.

Soil Remediation Summary

☐ **In Situ**

- _____ Bioremediation (or enhanced bioremediation)
- _____ Chemical oxidation
- _____ Air sparge / Soil vapor extraction
- _____ Natural Attenuation
- _____ Other _____

☐ **Ex Situ**

- _____ Excavate and offsite disposal
  - 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.

Groundwater was not encountered during decommissioning activities.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

[X] 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

[X] Other Quarterly Update

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.

Noble intends to directly address the costs of remediation at the locations as part of our asset retirement obligation process and operations. Noble has general liability insurance (policy MWZZ 316714) and financial assurance in compliance with ECMC rules. Records are available on the ECMC's website. The cost for remediation is an estimate only, costs may change upwards or downward based on site-specific information. Noble makes no representation or guarantees as to the accuracy of the estimate.

Operator anticipates the remaining cost for this project to be: $ 50000

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?

Does the previous reply indicate consideration of background concentrations?

Does Groundwater meet Table 915-1 standards?

Is additional groundwater monitoring to be conducted?

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 completed in accordance with ECMC 1000 Series Rules.

Is the described reclamation complete? Yes

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

[X] 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. 04/18/2023

Proposed date of completion of Reclamation. 10/31/2026

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. 12/28/2022

Actual Spill or Release date, or date of discovery. 05/10/2023

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 04/19/2023

Proposed site investigation commencement. 03/01/2023

Proposed completion of site investigation. 07/31/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 04/19/2023

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

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.

[X] Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

The implementation schedule has been changed due to the decommissioning of the HSR-CUTLER 14-31 wellhead and flowline and necessity for supplemental site investigation activities adjacent to the wellhead and flowline. The schedule for the proposed site investigation will be provided in the subsequent Form 27.

OPERATOR COMMENT

This form has been submitted to provide a quarterly update for Remediation Project 27651 and to submit original laboratory reports associated with the project. No work has been conducted since Q4 2023. See the attached Site Investigation Reports for investigation details to date.

In response to ECMC Form 27 Comment dated January 15, 2025 (Document Number 403954271), Operator is submitting a replacement Form 27. 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. As part of its data integrity review process, Operator requested the lab protect the laboratory analytical reports from subsequent unauthorized modification by anyone outside the lab, which resulted in the lab reissuing the original reports with additional protections (Reissued Reports). Reissued Reports were received directly from the lab Origins Laboratory, INC. on February 13, 2025, which include a watermark confirming both the laboratory representative who reissued the report and the date and time of the reissuance. Reissued Reports were received directly from Summit Scientific on February 27, 2025, which include the application of a Digital ID/Verified Certification (lock) to support reissuance. The metadata associated with the Reissued Reports also includes the lab representative's name, the date and time the laboratory reissued the report, and an explanation for the report reissuance. The Reissued Reports are attached to this submission.

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 or other information responsive to ECMC's general comments responding to Operator's Form 27 submission found in Document Number 403954271.

Remediation and site investigation, previously directed by Eagle Environmental, is now under the direction of Confluence Compliance Companies (Confluence). In response to ECMC's general comments in Form 27 Document 403954271, Confluence has thoroughly reviewed all laboratory analytical reports and data as it relates to this project. The data contained in the Reissued Reports, which represents all data collected to date for the project, has been cross-checked against the corresponding original laboratory reports and data presented in the Site Investigation Reports. No discrepancies were identified during the review.

Confluence is working with Noble to establish a remediation/site investigation schedule which will be proposed in a subsequent Form 27 by June 1, 2025. Quarterly reporting will be conducted until closure criteria are achieved for the remediation project.

All work pertaining to the HSR-CUTLER 14-31 wellhead and flowline will proceed under Remediation Project 27651. Remediation Project 28602 was erroneously opened separately to cover flowline assessment for the project. Form 27 Document 404082851 has been submitted to close Remediation Project 28602.

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

Signed: Jason Davidson Title: Remediation Advisor

Submit Date: Email: jason.davidson@chevron.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: 27651

COA Type	Description
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
404086337	SITE INVESTIGATION REPORT
404086339	SITE INVESTIGATION REPORT
404107758	ANALYTICAL RESULTS
404107767	ANALYTICAL RESULTS
404107769	ANALYTICAL RESULTS
404109542	ANALYTICAL RESULTS

Total Attach: 6 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)