FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number: 404156349
Receive Date:
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
Mobile: (970) 939-1929

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 32307 Initial Form 27 Document #: 403566080

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 #: 123-25351 County Name: WELD
Facility Name: FRANK CC 7-19 Latitude: 40.329994 Longitude: -104.484596
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SENW Sec: 7 Twp: 4N Range: 63W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 486257 API #: County Name: WELD
Facility Name: Frank CC #7-19 Latitude: 40.329994 Longitude: -104.484596
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SENW Sec: 7 Twp: 4N Range: 63W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications CL

Most Sensitive Adjacent Land Use Cropland

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? No

Other Potential Receptors within 1/4 mile

Drainages are present 0.23mi NE, 0.14mi E, 0.15mi SE, 0.19mi S, and 0.20mi SW of the Location.

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 results pending
Yes	SOILS	Undetermined	Soil sampling and 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 Energy & Carbon Management Commission (ECMC) Rule 911, site investigation was conducted pertaining to the FRANK CC 7-19 wellhead cut and cap and flowline abandonment. On February 22, 2024, initial wellhead characterization sampling was completed following cut and cap operations. Five analytical soil samples were collected from the wellhead excavation: one from each sidewall and one from the base. Additionally, soil samples were field screened from the soil surface to the north, east, south, and west of the excavation area. Wellhead excavation samples were submitted for all ECMC Table 915-1 soil constituents. One background sample was collected from nearby, non-impacted soil and analyzed for Table 915-1 inorganics. See the Site Investigation Report (Document 403790947) submitted with Form 27 Document 403717336 for details.

On December 12, 2024, initial flowline characterization sampling was completed. The flowline was partially removed an partially abandoned-in-place due to the presence of additional buried lines. Soil samples were collected from three bellholes situated along the extent of the removed portion of the flowline for field screening. The samples from the wellhead and the abandonment-in-place connection point were submitted for analysis of all Table 915-1 constituents. Additionally, two background samples were collected and analyzed for Soil Suitability for Reclamation (SSR) parameters and metals. See the attached Site Investigation Reports for 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 necessary to characterize the extent of identified impacts associated with the flowline. Additionally, all wellhead sample locations will be recollected for recharacterization. All soil samples will be analyzed for all Table 915-1 soil constituents of concern. Additional background soil samples may be collected to further characterize native levels of metals at the Location.

Proposed Groundwater Sampling

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

Five groundwater monitoring wells (MW-01 through MW-05) were installed at the location during 1Q25 and sampled on March 20, 2025. The monitoring wells will be sampled on a quarterly basis until all analytical results are in compliance with Table 915-1 groundwater standards for four consecutive quarters.

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 area occurred during sampling 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: 7

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

Approximate areal extent (square feet): 325

NA / ND

ND — Highest concentration of TPH (mg/kg):

-- — Highest concentration of SAR: 14.1

BTEX > 915-1: No

Vertical Extent > 915-1 (in feet): 7

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:

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?

☒ Were background samples collected as part of this site investigation?

On December 12, 2024, two background samples were collected from nearby, non-impacted soil and analyzed for Table 915-1 inorganics in association with the flowline assessment. Additional background samples were collected on February 24, 2025, to further characterize native levels of inorganic constituents at the Location. Background sampling locations were located sufficiently away from the impacted area to reflect conditions not impacted by oil and gas activity, and were obtained from similar depths and soil horizons or lithologic materials for comparison to confirmation soil samples.

☐ 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?

Supplemental site investigation (SSI) activities will be conducted to recharacterize sample locations previously sampled by Eagle Environmental (Eagle) at the wellhead and to delineate the extent of soil impacts identified by initial flowline investigation activities. All characterization/delineation soil samples will be analyzed for all Table 915-1 constituents. Additional background soil samples may be collected to further characterize native levels of metals at the Location.

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? Yes

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 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 February 22, 2024, initial wellhead characterization sampling was completed following cut and cap operations. Analytical results indicated levels of organic and inorganic constituents in exceedance of Table 915-1 Protection of Groundwater Soil Screening Levels (PGSSLs). One background sample indicated native levels of boron, sodium adsorption ratio (SAR), and electrical conductivity (EC) exceeding Table 915-1 allowable limits and levels of arsenic and barium exceeding PGSSLs. See the Site Investigation Report (Document 403790947) submitted with Form 27 Document 403717336 for details.

On December 12, 2024, initial flowline characterization sampling was completed. Samples were collected from the wellhead and the abandonment-in-place connection points and were submitted for analysis of all Table 915-1 constituents. Analytical results indicated exceedances of Table 915-1 PGSSLs or SSRs for several organic constituents, pH, and metals. Background samples indicated exceedances of the applicable standards for arsenic, barium, cadmium, lead, and selenium. See the attached Site Investigation Reports for details.

On February 24 and 25, 2025, delineation soil sampling was conducted at the wellhead. Five soils borings were advanced and completed as monitoring wells MW-01 through MW-05. One soil sample was collected for analysis from each soil boring and submitted for all Table 915-1 constituents. Additionally, five background soil borings were completed. Analytical results of the delineation samples indicated organic constituents of concern in compliance with PGSSLs. Elevated levels of SAR were within observed background concentrations, and elevated metals were within 1.25 times background concentrations for all constituents except for lead in MW-05, which is situated adjacent to the point of release (POR). Based on this information, impacts at the wellhead have been laterally delineated. Vertical delineation has been achieved for all constituents, except for lead.

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.

Five groundwater monitoring wells (MW-01 through MW-05) were installed at the location during 1Q25 and sampled on March 20, 2025. The monitoring wells will be sampled on a quarterly basis until all analytical results are in compliance with Table 915-1 groundwater standards for four consecutive quarters. Laboratory analytical results for the March 20, 2025, sampling event are pending, and will be included in a subsequent Form 27.

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

[ ] 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. 02/22/2024

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. 09/21/2023

Actual Spill or Release date, or date of discovery. 03/13/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 02/22/2024

Proposed site investigation commencement. 02/22/2024

Proposed completion of site investigation. 07/31/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 03/13/2024

Proposed date of completion of Remediation. 07/31/2026

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 FRANK CC 7-19 wellhead and flowline and necessity for supplemental site investigation activities adjacent to the wellhead and flowline.

OPERATOR COMMENT

This form has been submitted to provide a quarterly update for Remediation Project 32307, including details of flowline characterization activities conducted in December 2024 and wellhead SSI activities conducted in February 2025. The lab reports associated with the wellhead SSI have been secured by the issuing laboratory and attached as stand-alone documents. A secured analytical data report for the flowline characterization is pending and will be provided upon receipt from Summit Analytical.

Additionally, in response to ECMC Form 27 condition of approval (COA) dated March 4, 2025 (Document Number 404038930), the original laboratory analytical report associated with initial wellhead characterization has been re-attached to this submission as a standalone document.

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 report from subsequent unauthorized modification by anyone outside the lab, which resulted in the lab reissuing the original report with additional protections (Reissued Report). The Reissued Report was received directly from the lab on February 27, 2025, which includes a watermark confirming both the laboratory representative who reissued the report and the date and time of the reissuance. The metadata associated with this Reissued Report also includes the lab representative's name, the date and time the laboratory reissued the report, and an explanation for the report reissuance.

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 COAs responding to Operator's Form 27 submission found in Document Number 404038930.

Results of groundwater monitoring activities conducted in March 2025 will be submitted in a subsequent Form 27. Groundwater monitoring will continue on a quarterly basis and an additional site investigation will be conducted at the flowline and wellhead in Summer 2025. Quarterly reporting will continue until the site investigation is complete and full Table 915-1 standards are met within the remediation area.

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

Signed: Amanda Baca Title: Project Scientist

Submit Date: Email: amanda.baca@confluence-cc.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: 32307

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
404156374	SITE INVESTIGATION REPORT
404156375	ANALYTICAL RESULTS
404156377	ANALYTICAL RESULTS
404156378	ANALYTICAL RESULTS
404164590	ANALYTICAL RESULTS
404165395	SITE INVESTIGATION REPORT

Total Attach: 6 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)