FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

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Document Number: 404398089
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: Lauren Hoff Email: lauren.hoff@chevron.com

Phone Numbers
Phone: (832) 349-0757
Mobile: ( )

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 33461 Initial Form 27 Document #: 403638204

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.
- [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

No Multiple Facilities

Facility Type: WELL Facility ID: API #: 123-33909 County Name: WELD
Facility Name: LOWER LATHAM PC G 01-32D Latitude: 40.343190 Longitude: -104.623060
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SENE Sec: 2 Twp: 4N Range: 65W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SW
Most Sensitive Adjacent Land Use Rangeland
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

within Bald Eagle Active Nest Site - Half Mile Buffer
Riverine (Gilmore Ditch) 0.17mi E, Lower Latham Reservoir 0.25mi W
Feedlot Structures 0.17mi/0.2/0.21/0.22mi SSE
Farming Structures 0.13/0.14/0.15/0.18/0.19mi NNE, 0.07/0.09
Residential Structures 0.06mi NE, 0.15mi NNE
No other potential receptors are located within ¼ mile of the Site.
Above distances are approximations.

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 if encountered
Yes	SOILS	Refer to Tables and Figures	Field Screening 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 ECMC Rule 911 a site investigation was conducted pertaining to the LOWER LATHAM PC G01-32D flowline removal. Approximately 732' of flowline was removed. Additionally, soil samples were collected at any points of material change and/or hammer unions, directional changes, as well as at the bell holes on either side of a waterway. The ECMC was updated in a supplemental Form 27 if a portion of the flowline is abandoned-in-place due to field constraints.

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):

A grab soil sample were collected at the base of the excavation or the area showing the highest degree of impact during field screening activities. Additionally, soil samples were collected at any points of material change and/or hammer unions, directional changes, as well as at the bell holes on either side of a waterway. Soil samples were analyzed by a certified laboratory for the full extent of Table 915-1, including but not limited to: TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons) organic compounds in soil per ECMC Table 915-1, and EC, SAR, pH, metals, and boron. All samples collected were analyzed by a certified laboratory using approved ECMC laboratory analysis methods.

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 site investigation a grab groundwater sample will be collected and analyzed for all organic compounds and inorganic parameters per ECMC 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 along the flowline and at the wellhead and separator areas occurred during abandonment activities. Field personnel field screened all disturbed areas using a PID, visual, and olfactory senses to determine if laboratory confirmation sampling was required. The applicable ECMC Closure Checklists were utilized and filled out during the abandonment process. A photolog was attached.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil **NA / ND**

Number of soil samples collected 5 | ND | Highest concentration of TPH (mg/kg)

Number of soil samples exceeeding 915-1 3 | -- | Highest concentration of SAR 0.877

Was the areal and vertical extent of soil contamination delineated? No | BTEX > 915-1 No

Approximate areal extent (square feet) 300 | Vertical Extent > 915-1 (in feet) 3

Groundwater

Number of groundwater samples collected 0 | Highest concentration of Benzene (µg/l)

Was extent of groundwater contaminated delineated? Yes | Highest concentration of Toluene (µg/l)

Depth to groundwater (below ground surface, in feet) | Highest concentration of Ethylbenzene (µg/l)

Number of groundwater monitoring wells installed | Highest concentration of Xylene (µg/l)

Number of groundwater samples exceeding 915-1 | 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?

Fifteen background soil samples were collected from an area not impacted by oil and gas development and at similar depths and lithologies as confirmation soil samples collected at the location and analyzed for Table 915-1 metals and SSR constituents. Background soil sample analytical results were reported with elevated levels of pH, Arsenic (As), Barium (Ba), Cadmium (Ca) and Lead (Pb).

Background Soil Sample Analysis (mg/kg)
pH @ 1ft: Max = 8.63
pH @ 3ft: Max = 8.39
pH @ 4ft: Max = 8.99
As @ 1ft: Max*1.25 = 7.08
As @ 3ft: Max*1.25 = 5.76
As @ 4ft: Max*1.25 = 7.55
Ba @ 1ft: Max*1.25 = 139
Ba @ 3ft: Max*1.25 = 140
Ba @ 4ft: Max*1.25 = 215
Cd @ 1ft: Max*1.25 = 0.535
Cd @ 3ft: Max*1.25 = 0.435
Cd @ 4ft: Max*1.25 = 0.590
Pb @ 1ft: Max*1.25 = 14.8
Pb @ 3ft: Max*1.25 = 17.4
Pb @ 4ft: Max*1.25 = 19.8

☐ 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?

Per the note provided by the ECMC regarding Document No. 403987452, Noble has re-sampled all previously collected soil samples that were outside of the appropriate temperature preservation range. The re-samples were collected from the same depths and locations as the original confirmation samples submitted from the March 19, 2024, flowline decommissioning event. Re-sampling was conducted on January 14, 2025, and included the following locations: FL01 3FT, 2-8G 1-32D 2-22D FL02 3FT, 2-8G 1-32D 2-22D FL05 3FT, 02-01G Combi Trench 3FT and W FL Riser Combi Trench 3FT. All re-samples were analyzed for the full Table 915-1 analyte suite.

Based on the results of the re-sampling, elevated concentrations of inorganics and metals were observed in multiple locations along the former LOWER LATHAM PC G01-32D flowline. To further evaluate these findings, soil will be re-sampled and analyzed for the full Table 915-1 analyte suite at the 02-01G Combi Trench 3FT, and W FL Riser Combi Trench 3FT sample locations, at the same depths where the elevated concentrations were observed. In addition, background samples will be collected to characterize native soil conditions.

If the re-sampled results meet Table 915-1 concentration standards, Noble will request that a No Further Action (NFA) determination be granted. Background samples will be used to support justification for elevated concentrations where applicable.

Alternatively, if re-sample results are confirmed to exceed the Table 915-1 standards and cannot be attributed to native soil conditions based on background characterization, a minimum of five additional samples will be collected to delineate the magnitude and extent of the elevated constituents.

Please refer to Figure 4 of the attached for re-sample locations.

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 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.

NA

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.

If groundwater is encountered during additional site assessment activities, a grab groundwater sample will be collected and analyzed for all organic compounds and inorganic parameters per Table 915-1.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

[X] Quarterly [ ] Semi-Annually [ ] Annually [ ] Other

[X] **Request Alternative Reporting Schedule:**

[ ] Semi-Annually [X] Annually [ ] Other annually and or if work commences, F27s to be submitted 90 days after WH C&C decom activities unless a reportable release is discovered

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 Timeline 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 MWZZ316714 and MWZX316724) 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? 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 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 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. 10/20/2025

Proposed date of completion of Reclamation. 06/30/2027

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. 12/21/2023

Actual Spill or Release date, or date of discovery.

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/18/2024

Proposed site investigation commencement. 12/12/2024

Proposed completion of site investigation. 12/31/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation.

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.

[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 need to decommission the LOWER LATHAM PC G01-32D (Flowline) wellhead. The proposed site investigation will be completed following the approval of this form.

OPERATOR COMMENT

This form serves to update the ECMC with a method to address elevated barium concentrations in the W FL Riser Combi Trench 3FT flowline sample location for the LOWER LATHAM PC G01-32D (33461) and adjust the reporting schedule since the wellhead has not been cut and capped at the time of this form submittal.

The Operator proposes to conduct Wilcoxon statistical analysis of flowline confirmation samples and background samples. The goal is to demonstrate that site samples reflect naturally occurring background concentrations of ECMC Table 915-1 metals, in particular barium.

The Operator respectfully requests to adjust the current quarterly reporting schedule to and annual schedule and/or if work commences, F27s to be submitted 90 days after wellhead cut and cap decommissioning activities unless a reportable release is discovered. The results of the supplemental site investigation for the wellhead cut and cap will be submitted on a subsequent Form 27.

Supplemental Form 27s will be prepared and submitted on a annually, if approved, to provide updates and progress of the remediation until closure criteria has been achieved.

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

Signed: Ethan Black Title: Consultant

Submit Date: Email: ethanb@fremontenv.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: 33461

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
404428793	ANALYTICAL DATA SUMMARY TABLE(S)
404428794	LABORATORY ANALYTICAL REPORT
404428795	LABORATORY ANALYTICAL REPORT
404428796	LABORATORY ANALYTICAL REPORT
404428797	LABORATORY ANALYTICAL REPORT

Total Attach: 5 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)