

State of Colorado
Energy & Carbon Management Commission

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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 INFORMATION

Name of Operator: NOBLE ENERGY INC	Operator No: 100322	Phone Numbers
Address: 1099 18TH STREET SUITE 1500		Phone: (832) 349-0757
City: DENVER State: CO Zip: 80202		Mobile: ()
Contact Person: Lauren Hoff	Email: lauren.hoff@chevron.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 38413 Initial Form 27 Document #: 403987427

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 #: 123-23512	County Name: WELD
Facility Name: FOSS 6-33	Latitude: 40.510070	Longitude: -104.487110	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SWSW	Sec: 6	Twp: 6N	Range: 63W Meridian: 6 Sensitive Area? Yes

Facility Type: WELL	Facility ID: _____	API #: 123-25138	County Name: WELD
Facility Name: FOSS 6-35	Latitude: 40.511337	Longitude: -104.484180	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SESW	Sec: 6	Twp: 6N	Range: 63W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SW _____

Most Sensitive Adjacent Land Use Cropland _____

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

Within Mule Deer Severe Winter Range HPH
Within Pronghorn Winter Concentration Area HPH
Residential 0.25mi NW

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 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	Lab analysis and field screening if encountered
Yes	SOILS	Refer to tables and figures	Lab analysis and field screening

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 FOSS 06-35 wellhead cut and cap and flowline removal. During flowline decommissioning activities, the Foss 06-33 flowline was discovered running adjacent to the Foss 06-35 flowline. The Foss 06-33 flowline was abandoned-in-place (ABIP) on May 12, 2014, as per Form 42 Document Number 400606676, and does not have an associated remediation project number. Consequently, the samples collected along the Foss 06-33 will be reported under the Foss 06-35 remediation project (REM #38413), along with all future remediation activities. The Foss 06-35 flowline is represented as FL01, and the Foss 06-33 flowline is represented as FL02. Approximately 1,463' of FL01 was removed, with approximately 49' being ABIP. Approximately 506' of FL02 was removed, with approximately 49' being ABIP. The associated Form 44 will be included on a subsequent Form 27. Soil samples were collected along the flowlines 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 field screened at the N-E-S-W sides of the wellhead.

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):

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. Additionally, soil samples were field screened at the N-E-S-W sides of the wellhead. Soil samples were taken along the flowline 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

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 and inorganic compounds 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 of the wellhead and flowline areas occurred during decommissioning activities. Field personnel field screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required. A detailed summary of wellhead cut and cap activities, including field notes, site photos, figures, and laboratory analytical results, was included on ECMC Document Number 404170256.

A detailed summary of flowline decommissioning activities, including field notes, site photos, figures, and laboratory analytical results, is attached to this Form 27.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 8

Number of soil samples exceeding 915-1 8

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

Approximate areal extent (square feet) 800

NA / ND

ND Highest concentration of TPH (mg/kg) _____

-- Highest concentration of SAR 5.95

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 4

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?

Were background samples collected as part of this site investigation?

On March 10, 2025, six background soil samples were collected from three discrete locations (BKG01-BKG03) at depths of 3 ft and 4 ft bgs under the nearby Foss 06-34 flowline project (REM #39225), and submitted for analysis of pH, EC, SAR, boron, and metals in soil per ECMC Table 915-1. The maximum background concentration for pH and SAR were observed to be 8.82 and 15.1, respectively. The maximum background concentration with a 1.25x multiplier for arsenic was calculated to be 1.61 mg/kg. Concentrations of pH and arsenic remain above the applicable ECMC regulatory standards and above background levels in wellhead and flowline decommissioning 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?

Based on the results of flowline decommissioning activities, remedial excavation activities will be conducted to remove hydrocarbon impacted material in the vicinity of soil samples FL01-07@4', FL02R-W@3', and FL02-01@4'. Soil samples will be collected from the base and sidewalls of the excavation extents and submitted for analysis of the full ECMC Table 915-1 suite.

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.

The sources identified at flowline decommissioning samples FL01-07@4', FL02R-W@3', and FL02-01@4' will be removed via remedial excavations.

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.

Analytical results from the March 12, 2025, flowline removal activities indicated that organic compound concentrations were in exceedance of the applicable ECMC regulatory standards in soil samples FL01-07@4', FL02R-W@3', and FL02-01@4'. Based on the results, remedial excavation activities will be conducted to remove the hydrocarbon impacted material in the vicinity of the aforementioned soil sample locations. Soil samples will be collected from the base and sidewalls of the excavation extents and submitted for analysis of the full ECMC Table 915-1 suite.

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:

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 CSS; SSMRP

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 (policies 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? _____

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 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?

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. 01/29/2025

Proposed date of completion of Reclamation. 07/17/2027

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. 11/05/2024

Actual Spill or Release date, or date of discovery. 07/15/2025

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/29/2025

Proposed site investigation commencement. 07/17/2025

Proposed completion of site investigation. 04/17/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 07/17/2025

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

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.

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

Basis for change in implementation schedule:

The implementation schedule is being updated due to the necessity for remedial excavation activities at the site. The remedial excavations will be completed following the approval of this Form 27.

OPERATOR COMMENT

This Form 27 is being submitted to include a summary of decommissioning activities at the Foss 06-35 and Foss 06-33 locations.

A summary of wellhead cut and cap activities was included on ECMC Document Number 404170256.

Flowline decommissioning activities were completed on March 12, 2025, during which, the Foss 06-33 flowline was discovered running adjacent to the Foss 06-35 flowline. The Foss 06-33 flowline was abandoned-in-place on May 12, 2014, as per Form 42 Document Number 400606676, and does not have an associated remediation project number. Consequently, the samples collected along the Foss 06-33 flowline will be reported under the Foss 06-35 remediation project (REM #38413), along with all future remediation activities. The Foss 06-35 flowline is represented as FL01, and the Foss 06-33 flowline is represented as FL02.

Analytical results from flowline removal activities indicated that organic compound concentrations were in exceedance of the applicable ECMC regulatory standards in soil samples FL01-07@4', FL02R-W@3', and FL02-01@4'. Based on the results, remedial excavation activities will be conducted to remove the hydrocarbon impacted material in the vicinity of the aforementioned soil sample locations. Soil samples will be collected from the base and sidewalls of the excavation extents and submitted for analysis of the full ECMC Table 915-1 suite. The remedial excavations will be completed following the approval of this Form 27.

The Spill ID's for the reportable releases observed at soil sample locations FL01-07@4' (Form 19 Document Number 404281330), FL02R-W@3' (Form 19 Document Number 404281667), and FL02-01@4' (Form 19 Document Number 404283322), are pending at the time of this submittal and will be included on a subsequent Form 27.

Pursuant to Rule 913.e, Supplemental Form 27s will be submitted on a quarterly schedule to provide updates and progress of the remediation until closure criteria is met.

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

Signed: Jesse Marcus

Title: Environmental Consultant

Submit Date: _____

Email: jmarcus@tasman-geo.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: 38413

COA Type**Description**

0 COA	
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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**

404284324	SITE INVESTIGATION REPORT
404284330	LABORATORY ANALYTICAL REPORT

Total Attach: 2 Files

General Comments**User Group****Comment****Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)