

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: <u>NOBLE ENERGY INC</u>	Operator No: <u>100322</u>	Phone Numbers
Address: <u>1099 18TH STREET SUITE 1500</u>		Phone: <u>(970) 304-5000</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u>		Mobile: <u>()</u>
Contact Person: <u>Dan Peterson</u>	Email: <u>RBUEUF27@chevron.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 28764 Initial Form 27 Document #: 403371312

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: <u>WELL</u>	Facility ID: _____	API #: <u>123-12588</u>	County Name: <u>WELD</u>
Facility Name: <u>PLUSS G 25-07</u>	Latitude: <u>40.285030</u>	Longitude: <u>-104.609370</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWNE</u>	Sec: <u>25</u>	Twp: <u>4N</u>	Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>484793</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Pluss G #25-07</u>	Latitude: <u>40.285030</u>	Longitude: <u>-104.609370</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWNE</u>	Sec: <u>25</u>	Twp: <u>4N</u>	Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SW _____

Most Sensitive Adjacent Land Use Grassland _____

Is domestic water well within 1/4 mile? No _____

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

Farm Structure 0.10mi SW

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 PLUSS G #25-07 (25-2) wellhead decommissioning and flowline removal.

On 06/30/2023 the wellhead was cut and capped per ECMC rules. Five grab soil samples were collected at the base of the excavation and to the N-E-S-W sides of the wellhead. On 08/22/2023 approximately 2772' of flowline was removed, with a portion of the flowline abandoned-in-place due to intersecting with a midstream corridor (F44 Document #403571842). A total of eight soil samples were collected along the flowline (4), at directional changes (2), and terminus (2). Soil samples were analyzed by a certified laboratory for all Table 915-1 compounds, except three wellhead samples not analyzed for metals. Samples WH-FS-01@6' and WH-SS-02@5' at the former wellhead had petroleum hydrocarbon impacts in exceedance of ECMC Table 915-1. ECMC was notified via F19 Doc. # 403465232 submitted 07/14/2023 (Spill FID 484793). SSR and metal exceedances of ECMC Table 915-1 were also noted in wellhead and flowline samples.

Petroleum hydrocarbon exceedances observed at WH-FS-01@6' and WH-SS-02@5' during initial wellhead assessment were removed on 5/22/2025 and 5/27-28/20. Approximately 43 cubic yards of soil were excavated and transported to Buffalo Ridge Landfill in Keenesburg, Colorado for disposal. Confirmation of soil samples were collected from the excavation, and the analytical results indicate organic constituents associated with Spill FID 484793 were removed, however residual inorganic exceedances were detected. One sidewall sample (SW-4-SO-4) had a ECMC Table 915-1 exceedance of the pH SSL and arsenic RSSL, and floor sample (FS-1-SO-8) had an exceedance of the pH SSL and barium GWSSL (F27 Doc. # 404416356)

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 site assessment will be scheduled to collect additional background samples. Three background borings will be advanced, with samples collected at the 2, 3, 4, 5, and 8 feet bgs intervals. The samples will be analyzed for SSR compounds and metals per ECMC Table 915-1. Sample locations are provided on the attached site investigation plan.

Proposed Groundwater Sampling

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

If encountered, groundwater will be sampled for the full Table 915-1 list of constituents.

Proposed Surface Water Sampling

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

No surface water was discovered in the vicinity of the wellsite during the plugging and decommissioning activities. No surface water samples were collected for this project.

Additional Investigative

Actions

Additional alternative investigative actions described in attached Site Investigation Plan (summary):

Visual inspection of the wellhead and flowline areas occurred during abandonment activities. Field personnel field screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required. The ECMC Flowline and wellhead Closure Checklists were utilized and filled out during the initial abandonment activities.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 5
Number of soil samples exceeding 915-1 2
Was the areal and vertical extent of soil contamination delineated? No
Approximate areal extent (square feet) 200

NA / ND

ND Highest concentration of TPH (mg/kg) _____
-- Highest concentration of SAR 0.655
BTEX > 915-1 No
Vertical Extent > 915-1 (in feet) 8

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?

One background sample (BACKGROUND-01@2) was collected by a previous consultant within an area subject to historical oil and gas activities. Background data collected by previous consultant was not utilized in the site background determination/compliance evaluation process.

Three additional background samples were collected from outside of historical oil and gas operations with analytical results indicating maximum background concentrations for compounds that exceed ECMC Table 915-1 in soil samples collected for closure assessment that include: pH (8.06, 4 ft bgs), arsenic max X 1.25 (1.46 mg/kg, 4 ft bgs), and barium max X 1.25 (43.5 mg/kg, 4 ft bgs) .

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?

Excavation confirmation samples meet Table 915 standards for organic compounds, however a site assessment will be scheduled to collect additional background samples. Three background borings will be advanced, with samples collected at the 2, 3, 4, 5, and 8 feet bgs intervals. The samples will be analyzed for SSR compounds and metals per ECMC Table 915-1. Additional site investigation is estimated to begin Q1 - Q2 2026, pending site access. Sample locations are provided on the attached site investigation plan.

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.

Operator conducted supplemental source mass removal (SSMR) excavation activities for the Pluss G #25-07 wellhead, Spill or release Facility ID 484793 on 5/22/2025 and 5/27-28/2025. The excavation was approximately 12' X 12' X 8' deep. Approximately 43 cubic yards of soil were excavated and transported for disposal at Buffalo Ridge Landfill (COR000227827). Clean fill material from Buffalo Ridge Landfill was imported to the Site and used as backfill.

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.

Operator conducted SSMR excavation activities for Pluss G #25-07 wellhead, Spill or release Facility ID 484793 on 5/22/2025 and 5/27-28/2025. Grab confirmation soil samples (one floor sample and four sidewall samples) were collected once the proposed excavation boundaries were achieved. Samples were field screened and analyzed by a certified laboratory using approved ECMC laboratory analysis methods for all ECMC Table 915-1 compounds. The floor sample and four sidewall samples had no ECMC Table 915-1 exceedances for TPH, VOCs, and PAHs. One sidewall sample had a ECMC Table 915-1 exceedance of the pH SSL and arsenic RSSL, while the floor sample had an exceedance of the pH SSL and barium GWSSL. The excavation and site investigation report and encrypted stand alone laboratory analytical reports were included as attachments to SF27 Doc # 404416356. Based on the post excavation confirmation samples having no ECMC Table 915-1 exceedances for TPH, VOCs, and PAHs, no further excavation activities are deemed necessary for Pluss G #25-07 wellhead, Spill or release Facility ID 484793.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

Yes _____ Excavate and offsite disposal

_____ Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) _____ 43

_____ Air sparge / Soil vapor extraction

Name of Licensed Disposal Facility or ECMC Facility ID # _____

_____ Natural Attenuation

_____ Excavate and onsite remediation

_____ Other _____

_____ 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 initial decommissioning sampling or excavation 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 Quarterly Update, Site Investigation Plan

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? Yes

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

NA

Volume of E&P Waste (solid) in cubic yards 43

E&P waste (solid) description Excavated Soil

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: Buffalo Ridge Landfill (COR000227827)

Volume of E&P Waste (liquid) in barrels 0

E&P waste (liquid) description NA

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: NA

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 COGCC 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. 06/30/2023

Proposed date of completion of Reclamation. 12/31/2028

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. 04/11/2023

Actual Spill or Release date, or date of discovery. 07/14/2023

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 06/30/2023

Proposed site investigation commencement. 05/01/2023

Proposed completion of site investigation. 12/31/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 05/22/2025

Proposed date of completion of Remediation. 12/31/2027

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:

Implementation schedule updated to reflect the schedule to complete additional site investigation. Additional site investigation is estimated to begin Q1 - Q2 2026, pending site access. The ECMC will be updated on a subsequent Form 27, if the schedule is changed.

OPERATOR COMMENT

This 1Q26 SF27 for PLUSS G #25-07 (REM # 28764) proposes an additional supplemental site investigation (SSI).

A site investigation was conducted in relation to the PLUSS G25-07 wellhead cut and cap on 06/30/2023 and flowline removal on 8/22/2023, with ECMC notification on F44 Doc #403571842. In June and August 2023 a total of 13 grab soil samples were collected, with 5 at the wellhead and 8 along the flowline. Soil samples were analyzed by a certified laboratory for all Table 915-1 compounds, except three wellhead samples were not analyzed for metals. Samples WH-FS-01 @6' and WH-SS-02@5' at the former wellhead had petroleum hydrocarbon impacts in exceedance of ECMC Table 915-1. ECMC was notified via F19 Doc. # 403465232 submitted 07/14/2023 (Spill FID 484793). SSR and metal exceedances of ECMC Table 915-1 were also noted in one wellhead and eight flowline samples. Petroleum hydrocarbon exceedances observed at WH-FS-01 @6' and WH-SS-02@5' during initial wellhead assessment were removed on 5/22/2025 and 5/27-28/20. Approximately 43 cubic yards of soil were excavated and transported to Buffalo Ridge Landfill in Keenesburg, Colorado for disposal. Confirmation of soil samples were collected from the excavation, and the analytical results indicate organic constituents associated with Spill FID 484793 were removed, however residual inorganic exceedances were detected. One sidewall sample (SW-4-SO-4) had a ECMC Table 915-1 exceedance of the pH SSL and arsenic RSSL, and floor sample (FS-1-SO-8) had an exceedance of the pH SSL and barium GWSSL. Additionally, three background samples were collected on 5/30/2025. Final analytical results for the excavation confirmation soil sampling are summarized in document number 404416356 which remains in process at the time of this submittal.

A SSI will be scheduled to advance three background borings with samples at 2, 3, 4, 5, and 8 feet bgs intervals (28764-BG-04, 28764-BG-05, 28764-BG-06). The samples will be analyzed for SSR compounds and metals per ECMC Table 915-1. Additional site investigation is estimated to begin Q1 - Q2 2026, pending site access. Sample locations are provided on the attached SSI plan.

Pursuant to Rule 913.e, quarterly reporting will be conducted until closure criteria are achieved for the remediation project.

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

Signed: Ryan Plath

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: 28764

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

404546389	SITE INVESTIGATION PLAN
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Total Attach: 1 Files

General Comments

User Group

Comment

Comment Date

		Stamp Upon Approval
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Total: 0 comment(s)