FORM 27 Rev 5/22

# State of Colorado
# Energy & Carbon Management Commission

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Document Number: 404661121
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: Dan Peterson Email: Rbueuf27@chevron.com

**Phone Numbers**
Phone: (970) 304-5000
Mobile: ( )

## PROJECT, PURPOSE & SITE INFORMATION

### PROJECT INFORMATION

Remediation Project #: 20710 Initial Form 27 Document #: 402864377

### 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 #: 123-30800 County Name: WELD
Facility Name: ZANE ALTER C 09-21 Latitude: 40.326533 Longitude: -104.555673
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: NESW Sec: 9 Twp: 4N Range: 64W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 489608 API #: County Name: WELD
Facility Name: Zane Alter C09-21 Latitude: 40.325307 Longitude: -104.562613
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: NWSW Sec: 9 Twp: 4N Range: 64W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 490114 API #: County Name: WELD

Facility Name: Zane Alter C09-21 Latitude: 40.325143 Longitude: -104.561622

** correct Lat/Long if needed: Latitude: Longitude:

QtrQtr: NWSW Sec: 9 Twp: 4N Range: 64W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 490116 API #: County Name: WELD

Facility Name: Zane Alter C09-21 Latitude: 40.325268 Longitude: -104.562434

** correct Lat/Long if needed: Latitude: Longitude:

QtrQtr: NWSW Sec: 9 Twp: 4N Range: 64W Meridian: 6 Sensitive Area? Yes

## SITE CONDITIONS

General soil type - USCS Classifications SW

Most Sensitive Adjacent Land Use Crop Land

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? Yes

**Other Potential Receptors within 1/4 mile**

Riverine 0.22miNW

# 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 |
|---|---|---|---|
| Yes | GROUNDWATER | Refer to ECMC Document #404487579 | Lab analysis and field screening |
| Yes | SOILS | Refer to ECMC Document #404487579 | 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 ZANE ALTER C09-21 wellhead cut and cap and flowline removal. On March 10, 2022, the wellhead was cut and capped per ECMC rules. The flowline was fully abandoned-in-place (ABIP) on May 10, 2022. On March 30, 2023, Approximately 1,130-ft of flowline was removed, with approximately 1,070-ft being ABIP where it was comingled with the Amanda Alter C9-20 flowline (API 05-123-25507, Rem #34133). From January 13-14, 2025, approximately 1,020-ft of flowline was removed, with approximately 50-ft (from FL01-07 to FL01R-S) being ABIP due to field constraints. The associated Form 44 Document number is 404078857.

## 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 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 least every 250 feet, beneath the flowline riser at the wellhead, and at the directional changes. 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 ):

Groundwater was encountered at approximately 6 feet below ground surface within the three November 2025 excavations. Three groundwater samples (GW01-GW03) were collected and submitted for analysis of all organic and inorganic compounds in groundwater per ECMC Table 915-1. Analytical results indicated that organic compound concentrations were in compliance with ECMC regulatory standards in all groundwater samples; inorganic parameters were in exceedance of ECMC regulatory standards in GW01 and GW03.

### 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 and full flowline ABIP activities, including field notes, site photos, figures, and laboratory analytical results, was attached to ECMC Document #403147208. The March 2023 partial removal activities were summarized on ECMC Document #403457131. A summary of the January 2025 flowline removal activities was attached to ECMC Document Number 404158249, which is in process and pending approval at the time of this submittal.

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

**Soil**

Number of soil samples collected: 31

Number of soil samples exceeeding 915-1: 0

Was the areal and vertical extent of soil contamination delineated? Yes

Approximate areal extent (square feet): 0

**NA / ND**

-- Highest concentration of TPH (mg/kg): 76.1

-- Highest concentration of SAR: 18.7

BTEX > 915-1: No

Vertical Extent > 915-1 (in feet): 0

**Groundwater**

Number of groundwater samples collected: 3

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet): 6

Number of groundwater monitoring wells installed: 0

Number of groundwater samples exceeding 915-1: 2

ND Highest concentration of Benzene (µg/l):

ND Highest concentration of Toluene (µg/l):

ND Highest concentration of Ethylbenzene (µg/l):

ND Highest concentration of Xylene (µg/l):

NA 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 December 21, 2023, ten background soil samples were collected at five discrete locations (BG01-BG05) at depths of approximately 4 and 8 feet below ground surface (ft bgs) and analyzed for SAR in soil. On May 2, 2025, nine background soil samples were collected from five discrete locations (BKG01-BKG05) under the nearby Johnson, Vern 02 flowline project (REM #34049, Figure 4) at depths ranging from approximately 1-2 ft and 9-10 ft bgs and submitted for analysis of the pH, EC, SAR, boron, and metals in soil per ECMC Table 915-1. The Johnson, Vern 02 flowline and the Zane Alter C09-21 flowline were associated with the same tank battery. The maximum background concentrations for pH, EC, and SAR were observed to be 8.15, 12.2 mmhos/cm, and 19.9, respectively. The maximum background concentrations with a 1.25x multiplier applied for arsenic, barium, cadmium, and chromium were calculated to be 20.6 mg/kg, 153 mg/kg, 0.48 mg/kg, and 0.89 mg/kg, respectively.

[ ] 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?

Due to the presence of groundwater in the vicinity of hydrocarbon impacted material, a groundwater monitoring well network will be installed within and surrounding the former excavation extents to confirm the absence of dissolved-phase hydrocarbon impacts. Volatile organic compound (VOC) concentrations using a photoionization detector (PID) and lithologic descriptions will be recorded for each borehole. If hydrocarbon impacts are encountered, soil samples will be collected from the interval exhibiting the highest PID response and the clean terminus of the boring for analysis of the full Table 915-1 suite. Quarterly groundwater monitoring will be conducted until closure criteria are met. Concurrent with monitoring well installation activities, a confirmation soil sample will be collected at the location of the former wellhead to confirm Table 915 compliance, which was collected by a former Chevron business partner in March of 2022. Proposed monitoring well and soil boring locations are included on ECMC Document Number 404487579, which is still in process and pending approval at the time of this submittal. Site investigation activities are scheduled to commence on June 10, 2026.

# 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.

Between November 12 and 17, 2025, remedial excavation activities were conducted to remove the organic compound exceedances observed during flowline decommissioning activities. Approximately 430 cubic yards of hydrocarbon impacted material were removed from site and transported to Waste Management Buffalo Ridge and disposed of under Noble waste manifests.

## 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.

Additional flowline decommissioning activities occurred on January 13 and 14, 2025. Analytical results indicated that organic compound concentrations were in exceedance of the applicable ECMC regulatory standards in soil samples FL01R-S, FL01-05, and FL01-07. Based on the location of the commonly trenched Amanda Alter C09-20 flowline (REM# 34133) with the Zane Alter C09-21 flowline, the organic exceedances recorded in soil samples FL01-04 and FL01-06 at the Amanda Alter C09-20 Flowline were directly adjacent to the historic releases discovered at soil samples FL01-05 and FL01-07 at the Zane Alter C09-21 flowline. Consequently, the historic releases were reported and removed under the Zane Alter C09-21 flowline project.

Excavation activities were completed between November 12 and 17, 2025, to remove the hydrocarbon impacted material in the vicinity of FL01-05 (Excavation A), FL01-07 (Excavation B), and FL01R-S (Excavation C) under the Zane Alter C09-21 flowline project, and FL01-04 (Excavation A) and FL01-06 (Excavation B) under the Amanda Alter C09-20 flowline project. Thirty-one soil samples were collected from the base and sidewalls of the final excavation extents and submitted for analysis of the full ECMC Table 915-1 suite. Groundwater was encountered within the excavations at approximately 6 ft bgs and three groundwater samples (GW01-GW03) were collected for analysis of all organic compounds and inorganic parameters per ECMC Table 915.

Analytical results indicated that organic compound concentrations were in compliance with ECMC standards in all soil samples collected from the final excavation extents. Additionally, all inorganic and metals concentrations were in compliance with ECMC standards or within background levels.

Analytical results indicated that organic compound concentrations were in compliance with ECMC regulatory standards in all groundwater samples; inorganic parameters were in exceedance of ECMC regulatory standards in GW01 and GW03.

## Soil Remediation Summary

☐ **In Situ**

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

☒ **Ex Situ**

- Yes Excavate and offsite disposal
  - If Yes: Estimated Volume (Cubic Yards) 430
  - 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.

Noble will conduct quarterly groundwater monitoring at the 14 proposed monitoring wells until closure criteria are met. Groundwater samples will be submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-TMB, 1,3,5-TMB, TDS, chloride, and sulfate. Proposed monitoring well locations are included on this 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

[X] Other Second Quarter 2026 - 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 (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:

No beneficial use.

Volume of E&P Waste (solid) in cubic yards 430

E&P waste (solid) description Hydrocarbon Impacted Material

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility: Waste Management-Buffalo Ridge

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

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?

[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. 03/10/2022

Proposed date of completion of Reclamation. 12/30/2027

# 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. 01/27/2023

Actual Spill or Release date, or date of discovery. 02/28/2025

## SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/10/2022

Proposed site investigation commencement. 06/10/2026

Proposed completion of site investigation. 06/10/2026

## REMEDIAL ACTION DATES

Proposed start date of Remediation. 11/12/2025

Proposed date of completion of Remediation. 12/30/2027

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:

The implementation schedule has not been been changed from the previous Supplemental Form 27 submittal (ECMC Document Number 404487579), which is still in process and pending approval at the time of this submittal. Monitoring well installation activities are tentatively scheduled to commence on June 10, 2026.

## OPERATOR COMMENT

This Form 27 is being submitted as a second quarter 2026 timeline update for the proposed supplemental site investigation (SSI) activities at the Zane Alter C09-21 location.

A summary of January 2025 flowline removal activities and notification of reportable releases was included on ECMC Document Number 404158249, which is in process and pending approval at the time of this submittal. A summary of November 2025 remedial excavation activities was included on ECMC Document Number 404487579, which is in process and pending approval at the time of this submittal.

Due to the presence of groundwater in the vicinity of hydrocarbon impacted material, a groundwater monitoring well network will be installed within and surrounding the former excavation extents to confirm the absence of dissolved-phase hydrocarbon impacts (see attached site map for reference). Quarterly groundwater monitoring will be conducted until closure criteria are met. Concurrent with monitoring well installation activities, a confirmation soil sample will be collected at the location of the former wellhead to confirm Table 915 compliance, which was collected by a former Chevron business partner in March of 2022. Proposed monitoring well and soil boring locations were attached to ECMC Document Number 404487579.

The implementation schedule has not been been changed from the previous Supplemental Form 27 submittal (ECMC Document Number 404487579). Site investigation activities are scheduled to commence on June 10, 2026.

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: Bronlyn Bates  Title: Environmental Consultant

Submit Date:  Email: tas-chevron-2@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: 20710

| 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 |
|---|---|
| 404661125 | SITE MAP |

Total Attach: 1 Files

## General Comments

| User Group | Comment | Comment Date |
|---|---|---|
| | | Stamp Upon Approval |

Total: 0 comment(s)