

State of Colorado Oil and Gas Conservation Commission

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Document Number:

403305812

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 COGCC 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: 2001 16TH STREET SUITE 900		Phone: (715) 562-0251
City: DENVER State: CO Zip: 80202		Mobile: ()
Contact Person: Dan Peterson	Email: RBUEUF27@chevron.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 22098 Initial Form 27 Document #: 402965054

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 #: 123-17286	County Name: WELD
Facility Name: BECCA D 3-11	Latitude: 40.252420	Longitude: -104.539510	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NESW	Sec: 3	Twp: 3N	Range: 64W Meridian: 6 Sensitive Area? Yes
Facility Type: SPILL OR RELEASE	Facility ID: 482109	API #: _____	County Name: WELD
Facility Name: Becca D 3-11	Latitude: 40.252420	Longitude: -104.539510	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NESW	Sec: 3	Twp: 3N	Range: 64W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use Range Land

Is domestic water well within 1/4 mile? Yes

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

Freshwater Emergent Wetlands 0.2mi SE
Tank Battery 0.07/0.08mi NW
Residential 0.19mi W

SITE INVESTIGATION PLAN

TYPE OF WASTE:

☒ E&P Waste ☐ Other E&P Waste ☐ Non-E&P Waste

☒ Produced Water

☐ Workover Fluids

☒ Oil

☐ Tank Bottoms

☒ Condensate

☐ Pigging Waste

☐ Drilling Fluids

☐ Rig Wash

☐ Drill Cuttings

☐ Spent Filters

☐ Pit Bottoms

☐ Other (as described by EPA)

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	GROUNDWATER	12'x10'	Lab analysis
Yes	SOILS	12'x10'x13'	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 COGCC Rule 911 a site investigation was conducted pertaining to the BECCA D03-11 wellhead cut and cap and flowline abandonment. Approximately 555' of flowline was abandoned-in-place. Approximately 860' of flowline was removed. The wellhead was cut and capped per COGCC rules.

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 will be collected at the base of the excavation or the area showing the highest degree of impact during field screening activities at the wellhead excavation. One grab confirmation soil sample will be collected at the wellhead excavation, and one sample collected from the flowline terminus. Soil samples were analyzed by a certified laboratory for TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons) organic compounds in soil per COGCC Table 915-1, EC, SAR, pH, and boron. One sample was collected for waste characterization of metals. All samples collected were analyzed by a certified laboratory using approved COGCC laboratory analysis methods.

Proposed Groundwater Sampling

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

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):

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

NA / ND

Number of soil samples collected

-- Highest concentration of TPH (mg/kg) 306

Number of soil samples exceeding 915-1 2-- Highest concentration of SAR 2.9Was the areal and vertical extent of soil contamination delineated? YesBTEX > 915-1 NoApproximate areal extent (square feet) 120Vertical Extent > 915-1 (in feet) 13**Groundwater**Number of groundwater samples collected 4Highest concentration of Benzene (µg/l) Was extent of groundwater contaminated delineated? YesHighest concentration of Toluene (µg/l) Depth to groundwater (below ground surface, in feet) 13Highest concentration of Ethylbenzene (µg/l) Number of groundwater monitoring wells installed 4Highest concentration of Xylene (µg/l) Number of groundwater samples exceeding 915-1 1Highest concentration of Methane (mg/l) **Surface Water**0 Number of surface water samples collectedNumber 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?

A background sample for arsenic, barium, lead, and selenium analysis was collected. Residual metals at the site are consistent and/or less than background concentrations. Another background sample for pH and boron analysis was collected.

☐ 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?**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.

A site assessment was completed to delineate residual soil impacts at the site. Groundwater was encountered during the subsurface assessment, therefore GSSL appear applicable. Source excavation activities will be completed to remove residual impacts at the site. Noble proposes excavation soil samples be collected for TPH (C6-C36) and Table 915-1 organics analysis.

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.

Source excavation activities will be started to remove impacts at the site by March 1, 2023. Groundwater will be monitored for natural attenuation. NFA will be considered when soil concentrations are in compliance with COGCC Table 915-1 standards, and groundwater is in compliance for four (4) consecutive quarters

Soil Remediation Summary☐ In Situ☐ Ex Situ Bioremediation (or enhanced bioremediation) Excavate and offsite disposal Chemical oxidationIf Yes: Estimated Volume (Cubic Yards) Air sparge / Soil vapor extractionName of Licensed Disposal Facility or COGCC Facility ID #

_____ Natural Attenuation

_____ Other _____

_____ 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.

Four monitoring wells were installed to delineate impacts at the site. Replacement wells will be installed as necessary, post-remediation. The wells will be sampled on a quarterly basis for BTEX, naphthalene, 1,2,4-TMB, 1,3,5-TMB, 1-methylnaphthalene, 2-methylnaphthalene, and benzo(a)-anthracene analysis. Noble requests inorganic groundwater parameters be removed from the sampling plan.

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 Subsurface Assessment Summary

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 COGCC rules. Records are available on the COGCC's website.

Operator anticipates the remaining cost for this project to be: \$ 40000

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

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

Volume of E&P Waste (liquid) in barrels

E&P waste (liquid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC 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? No

Operator shall comply with the COGCC 1000-Series Reclamation Requirements for all impacted and disturbed areas.

OPERATOR COMMENT

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

Signed: Andrew Newberry

Title: Environmental Consultant

Submit Date: _____

Email: anewberry@eagle-enviro.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: _____

Date: _____

Remediation Project Number: 22098

COA Type**Description**

0 COA	

Attachment Check 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**

403305835	SITE INVESTIGATION REPORT
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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)