

State of Colorado
Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:
404536873

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: (970) 278-6934
City: DENVER State: CO Zip: 80202		Mobile: ()
Contact Person: Erica Zuniga	Email: EricaZuniga@chevron.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 20786 Initial Form 27 Document #: 402859681

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 #: 123-26814	County Name: WELD
Facility Name: WELLS RANCH AA 21-04	Latitude: 40.477227	Longitude: -104.448797	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NWNW	Sec: 21	Twp: 6N	Range: 63W Meridian: 6 Sensitive Area? Yes
Facility Type: SPILL OR RELEASE	Facility ID: 480576	API #: _____	County Name: WELD
Facility Name: Wells Ranch AA 21-04	Latitude: 40.477227	Longitude: -104.448797	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NWNW	Sec: 21	Twp: 6N	Range: 63W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications CL

Most Sensitive Adjacent Land Use Cropland

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

Occupied building 645'

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
No	GROUNDWATER	Not Applicable	Laboratory analysis
Yes	SOILS	57' X 40' X 7'	Laboratory 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.

This project is part of Operator's ongoing data integrity review process associated with its Rule 525.e. Voluntary Disclosure. Operator has completed a comprehensive review of previously submitted forms and associated data and attachments of this project. Based on this review, Operator is submitting the attached Data Integrity Review Investigation and Remedial Action Plan (Plan). The Plan includes: (1) an overview of the project's prior remediation measures, including initial actions undertaken; (2) a status update on existing Conditions of Approval (COAs); and (3) proposed next steps.

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):

Operator's proposed soil sampling approach is outlined in the Plan that is being submitted with this Form for approval. Operator will undertake sampling consistent with approval. Key activities will include:
 + Complete soil assessment activities to delineate residual petroleum hydrocarbon soil impacts that exceed COGCC Table 915-1.
 + Collect additional background samples from soil of native and/or similar lithologic material not impacted by Oil and Gas activity to compare and calculate a site-specific local clean up level. Following comparison to the site-specific local clean up level, if necessary, further delineation will be conducted to address exceedances.

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):

Surface water was not encountered during previous investigations and will not be conducted. If surface water is encountered during the site investigation, Operator will develop and submit its proposed surface water sampling approach for approval. Operator will undertake sampling consistent with approval

Additional Investigative Actions

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

As part of our ongoing DIR process, Operator conducted additional reviews of prior data packages/form submissions for all active remediation projects irrespective of whether it was a project previously included in its Rule 525.e. Voluntary Disclosure; Operator did not identify potential data alterations in the original laboratory analytical reports submitted to ECMC for this project. Prior to undertaking additional actions associated with any prior approved supplemental F27, Operator submits this supplemental Form 27 to provide: reissuance of the original unaltered copy of the lab report generated by the lab to protect the laboratory analytical report from subsequent modification by anyone outside the lab (Reissued Report) Initial actions were previously undertaken and there are no changes to report at this time.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 0

Number of soil samples exceeding 915-1

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

Approximate areal extent (square feet) 2280

NA / ND

-- Highest concentration of TPH (mg/kg) 158.7
 47

-- Highest concentration of SAR 8.4

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 7

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet) 9

Number of groundwater monitoring wells installed

Number of groundwater samples exceeding 915-1

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?

Were background samples collected as part of this site investigation?

Background sampling will be performed consistent with the Plan upon approval.

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?

Noble is proposing to conduct additional site investigation activities as outlined in the attached Plan. Key activities will include:
+ Complete soil assessment activities to delineate residual petroleum hydrocarbon soil impacts that exceed COGCC Table 915-1.
+ Collect additional background samples from soil of native and/or similar lithologic material not impacted by Oil and Gas activity to compare and calculate a site-specific local clean up level. Following comparison to the site-specific local clean up level, if necessary, further delineation will be conducted to address exceedances.

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.

Upon completion of assessment/investigation activities, remedial activities will be performed in accordance with the 900 Series Rules.

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.

This project is part of Operator's ongoing data integrity review process associated with its Rule 525.e. Voluntary Disclosure. Operator has completed a comprehensive review of previously submitted forms and associated data and attachments of this project. Based on this review, Operator is submitting the attached Plan.

Soil Remediation Summary

In Situ

Ex Situ

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

- Yes _____ Excavate and offsite disposal
- _____ If Yes: Estimated Volume (Cubic Yards) _____ 530
- _____ 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.

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 Site Data Integrity Review and Remedial Action 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 remaining costs for this project to be determined with the development of work plans necessary to meet ECMC regulations.

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

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:

Volume of E&P Waste (solid) in cubic yards 530

E&P waste (solid) description E&P solid waste derived from excavation activities

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: Waste Management and Republic

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? 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 completed in accordance with ECMC 1000 Series Rules.

Is the described reclamation complete? _____

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. 02/28/2027

Proposed date of completion of Reclamation. 12/31/2029

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. 08/21/2021

Actual Spill or Release date, or date of discovery. 09/01/2021

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 08/25/2021

Proposed site investigation commencement. 08/31/2021

Proposed completion of site investigation. 02/15/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 02/20/2026

Proposed date of completion of Remediation. 02/15/2027

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:

Completion dates subject to change based upon consent to access property where project is located, data received as part of the site investigation, and implementation of appropriate remedial activities. Initiation of the site investigation project is a result of Operator's ongoing data integrity review process associated with its Rule 525.e. Voluntary Disclosure.

Remedial actions will be initiated consistent with ECMC approved of the Plan in a supplemental Form 27.

OPERATOR COMMENT

This project is part of Operator's ongoing data integrity review process associated with its Rule 525.e. Voluntary Disclosure. Operator has completed a comprehensive review of previously submitted forms and associated data and attachments of this project. Based on this review, Operator is submitting the attached Plan. The Plan includes an overview of the project's prior remediation measures, including initial actions and next steps. The previously issued COAs are addressed in the Plan.

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

Signed: Erica Zuniga _____

Title: Rem Operations Specialist _____

Submit Date: _____

Email: EricaZuniga@chevron.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: 20786 _____

<u>COA Type</u>	<u>Description</u>
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.

<u>Att Doc Num</u>	<u>Name</u>
404536897	LABORATORY ANALYTICAL REPORT
404536898	LABORATORY ANALYTICAL REPORT
404536899	LABORATORY ANALYTICAL REPORT
404536900	LABORATORY ANALYTICAL REPORT
404536901	LABORATORY ANALYTICAL REPORT
404536902	LABORATORY ANALYTICAL REPORT
404536903	LABORATORY ANALYTICAL REPORT
404536904	LABORATORY ANALYTICAL REPORT
404536906	LABORATORY ANALYTICAL REPORT
404536908	LABORATORY ANALYTICAL REPORT
404536910	LABORATORY ANALYTICAL REPORT
404536912	LABORATORY ANALYTICAL REPORT
404536914	LABORATORY ANALYTICAL REPORT
404536916	LABORATORY ANALYTICAL REPORT
404536918	LABORATORY ANALYTICAL REPORT
404536920	LABORATORY ANALYTICAL REPORT
404536922	LABORATORY ANALYTICAL REPORT
404536924	LABORATORY ANALYTICAL REPORT
404536926	LABORATORY ANALYTICAL REPORT
404537367	OTHER

Total Attach: 20 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)