

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:
403525209
Receive Date:
09/14/2023

Report taken by:
Kyle Waggoner

Site Investigation and Remediation Workplan (Initial 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 ECOM 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>NAVEX RESOURCES LLC</u>	Operator No: <u>10360</u>	Phone Numbers
Address: <u>1020 E LEVEE STREET, SUITE 130</u>		
City: <u>DALLAS</u>	State: <u>TX</u>	Zip: <u>75207</u>
Contact Person: <u>mark bieker</u>	Email: <u>mabieker@gmail.com</u>	Phone: <u>(785) 6504836</u>
		Mobile: <u>(785) 6504836</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 31694 Initial Form 27 Document #: 403525209

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

No Multiple Facilities

Facility Type: <u>LOCATION</u>	Facility ID: <u>483129</u>	API #: _____	County Name: <u>KIT CARSON</u>
Facility Name: <u>Travis 1-10</u>	Latitude: <u>39.108632</u>	Longitude: <u>-102.432658</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SENE</u>	Sec: <u>10</u>	Twps: <u>11S</u>	Range: <u>45W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications OL Most Sensitive Adjacent Land Use dryland crop
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

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
No	SOILS	N/A	Drill cuttings sampling

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 Form 27 is submitted for approval of on-site burial of drill cuttings in a drill cuttings trench. There is no site remediation, emergency response, or impacts associated with the location.

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):

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 2

Highest concentration of TPH (mg/kg) _____

Number of soil samples exceeding 915-1 2

Highest concentration of SAR _____

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

BTEX > 915-1 No

Approximate areal extent (square feet) 0

Vertical Extent > 915-1 (in feet) 0

Groundwater

Number of groundwater samples collected 0

Highest concentration of Benzene (µg/l) _____

Was extent of groundwater contaminated delineated? No

Highest concentration of Toluene (µg/l) _____

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

Highest concentration of Ethylbenzene (µg/l) _____

Number of groundwater monitoring wells installed _____

Highest concentration of Xylene (µg/l) _____

Number of groundwater samples exceeding 915-1 _____

Highest concentration of Methane (mg/l) _____

Surface Water

0 Number of surface water samples collected

0 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?

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

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Drill cuttings are stored inside of bermed and lined containment until review of sampling results, approval of the Form 27 reclamation plan, and burial in a drill cuttings trench.

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.

Navex engaged a third-party reclamation company and agronomics specialist to analyze drill cuttings data and prescribe a Rule 915.b materials handling process. Based on this input, drill cuttings will be compacted and stabilized with 4' of soil cover. Drill cuttings will receive a split application of powdered gypsum (calcium sulfate) and/or calcium carbonate to dissipate salts. The material will be activated with a water spray to optimize effectiveness. The split application will be performed as a first application with a second application approximately 2 months later. Split application is shown to best address elevated EC and SAR. The Location's arid area and deep water table (> 150') prevents leaching of salts up the soil column. The seedbed over the cuttings trench will be deep tilled to 12 to 18 inches. The area will be seeded with corn, wheat, or milo, per landowner specifications.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

_____ Excavate and offsite disposal

_____ Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) _____

_____ Air sparge / Soil vapor extraction
_____ Natural Attenuation
_____ Other _____

_____ 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 _____

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.

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

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? _____

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: _____

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.

This Form 27 is submitted to address the Rule 905.g.(2).E requirement for a Form 27 submittal before drill cuttings burial in a drill cuttings trench. It addresses the Rule 915.b requirement for detail before requesting to leave elevated EC, SAR, and pH in situ.

Navex will bury drill cuttings in a drill cuttings trench on the Working Pad Surface. Salts, represented by EC, SAR, and associated pH, are elevated above values in Table 915-1. Sample results are listed below. Each sample consisted of 5 aliquots across a vertical profile.

EC mmhos/cm = 0.3 (Background); 10.1 (Sample 1); 9.4 (Sample 2).
SAR = 0.2 (Background); 23.9 (Sample 1); 17.9 (Sample 2).
pH = 7.8 (Background); 8.5 (Sample 1)

Navex engaged a third-party reclamation company and agronomics specialist to analyze drill cuttings data and prescribe a Rule 915.b materials handling process. Based on this input, drill cuttings will be compacted and stabilized with 4' of soil cover. Drill cuttings will receive a split application of powdered gypsum (calcium sulfate) and/or calcium carbonate to dissipate salts. The material will be activated with a water spray to optimize effectiveness. The split application will be performed as a first application with a second application approximately 2 months later. Split application is shown to best address elevated EC and SAR. The Location's arid area and deep water table (> 150') prevents leaching of salts up the soil column. The seedbed over the cuttings trench will be deep tilled to 12 to 18 inches. The area will be seeded with corn, wheat, or milo, per landowner specifications.

Is the described reclamation complete? No

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. 09/20/2023

Proposed date of completion of Reclamation. 09/27/2023

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. _____

Actual Spill or Release date, or date of discovery. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). _____

Proposed site investigation commencement. 05/26/2023

Proposed completion of site investigation. 05/26/2023

REMEDIAL ACTION DATES

Proposed start date of Remediation. _____

Proposed date of completion of Remediation. _____

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:

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: mark bieker

Title: Consultant

Submit Date: 09/14/2023

Email: mabieker@gmail.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: Kyle Waggoner

Date: 09/22/2023

Remediation Project Number: 31694

COA Type**Description**

	Approval of this Form 27 does not imply approval for Disposal of Drill Cuttings on Site
	Operator shall comply with Rule 422. LOCAL GOVERNMENT WELFARE PROTECTION STANDARDS
	Operator shall coordinate all additional site assessment activities with the surface owner or their representative and include an updated date of Surface Owner consultation on a Form 27 Supplemental for any proposed site assessment or remediation work.
	Per Rule 905.g.(2) Operators will demonstrate compliance with Table 915-1 through sampling and analysis. Operator shall provide analytical data from an accredited lab with the next Form 27 Supplemental.
	Operator shall sample Drill Cuttings for Table 915-1 Organic Compounds in Soil, Table 915-1 metals, and Table 915-1 Soil Suitability for Reclamation (Electrical conductivity, Sodium adsorption ratio, and pH by saturated paste method, boron (hot water soluble)). to achieve a baseline for materials
	Per Rule 905.g. Operators will treat or dispose of drill cuttings.
6 COAs	

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**

403525209	INVESTIGATION/REMEDATION WORKPLAN (INITIAL)
403538611	FORM 27-INITIAL-SUBMITTED

Total Attach: 2 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)