

State of Colorado Energy & Carbon Management Commission

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Receive Date:

08/08/2023

Report taken by:

Kyle Waggoner

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: CORAL PRODUCTION CORP	Operator No: 20275	Phone Numbers Phone: (303) 623-3573 Mobile: ()
Address: 1600 STOUT ST STE 1500		
City: DENVER	State: CO Zip: 80202	
Contact Person: Steve Chonka	Email: schonka018@gmail.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 21402 Initial Form 27 Document #: 402908271

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: WELL	Facility ID: _____	API #: 121-06740	County Name: WASHINGTON
Facility Name: JOST A 2	Latitude: 40.040220	Longitude: -103.375290	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SWNW	Sec: 24	Twp: 1N	Range: 54W Meridian: 6 Sensitive Area? No

SITE CONDITIONS

General soil type - USCS Classifications OH Most Sensitive Adjacent Land Use PASTURELAND, DRY LAND FARMING

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? 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
Yes	SOILS	Unknown	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.

Site investigation activities for facility decommissioning have been performed as described in previous Form 27 documents. This Form 27-S is being submitted in accordance with the COA's provided in Form 27-S document #403321814 which was submitted on February 16, 2023 and approved on May 18, 2023 and to propose additional soil and groundwater investigation activities including sample locations and laboratory analyses for each location. Additionally, per the COA's in the referenced Form 27-S, groundwater monitoring wells were instructed to be installed and sampled by July 4, 2023. However, multiple drilling subcontractors were contacted in May 2023 and their soonest availability was August 2023. Drilling and monitoring well installation is scheduled for August 9 through 14, 2023.

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):

Per the COA's provided in Form 27-S document #403321814, additional soil sampling for inorganics, organics, metals, and PAH are required. Confirmation soil samples will be collected from the monitoring well locations illustrated on the attached Proposed Monitoring Well and Soil Sample Location map. Additionally, laboratory analyses for each location and depths are proposed on the attached Table 5 - Proposed Soil Sample Analyses.

Proposed Groundwater Sampling

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

Groundwater monitoring wells will be installed at the approximate locations illustrated on the attached Proposed Monitoring Well and Soil Sample Location Map. Groundwater samples will be submitted for laboratory analysis of the Table 915-1 list of analytes for groundwater.

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

Number of soil samples collected 51

Number of soil samples exceeding 915-1 12

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 2500

NA / ND

ND Highest concentration of TPH (mg/kg)

-- Highest concentration of SAR 60.2

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 22

Groundwater

Number of groundwater samples collected 1

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet) 47

Number of groundwater monitoring wells installed 0

Number of groundwater samples exceeding 915-1 0

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 samples (BKGD and SS01) were collected at 1, 2, and 3 feet bgs at the locations illustrated on the Attached Figure 2 and submitted for laboratory analysis of the Table 915-1 soil suitability parameters.

☒ Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) 30

Volume of liquid waste (barrels) 0

☒ Is further site investigation required?

Supplemental soil sampling and groundwater monitoring well installation and sampling is required as described herein.

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.

Remediation of impacted material, if present, will be assessed subsequent to the supplemental investigation activities described herein.

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.

A remediation plan, if required, will be developed once the extent of impacts are delineated

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) _____ 30
_____ Name of Licensed Disposal Facility or COGCC 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.

Five proposed monitoring wells locations are illustrated on the attached Figure 5. Groundwater samples will be submitted for laboratory analysis of the Table 915-1 list of groundwater analytes until four consecutive quarters of data are returned below the regulatory standards.

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 Confirmation Soil Samples

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.

General Liability insurance coverage of \$1,000,000 per occurrence. \$60,000 bond F/B/o COGCC.

Operator anticipates the remaining cost for this project to be: \$ 25000

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:

Soil was transported and disposed of at the Pawnee Waste Landfill Facility.

Volume of E&P Waste (solid) in cubic yards 30

E&P waste (solid) description Soil

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility: Pawnee Waste Landfill

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

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?

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 COGCC 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.

Contingent on supplemental soil sampling activities as described herein, a reclamation plan will be submitted to the COGCC for approval and in accordance with Rule 915.b.

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? No

If YES, does the seed mix comply with local soil conservation district recommendations? _____

Did the local soil conservation district provide the seed mix? No

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. 09/01/2023

Proposed date of completion of Reclamation. _____

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). 02/02/2022

Proposed site investigation commencement. 08/09/2023

Proposed completion of site investigation. 08/31/2023

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

This Form 27-S is being submitted in accordance with the COA's provided in Form 27-S document #403321814 which was submitted on February 16, 2023 and approved on May 18, 2023 and to propose additional soil and groundwater investigation activities including sample locations and laboratory analyses for each location. Additionally, per the COA's in the reference Form 27-S, groundwater monitoring wells were instructed to be installed and sampled by July 4, 2023. However, the soonest availability that drilling companies could accommodate was August 2023. Drilling, soil sampling, and monitoring well installation is scheduled for August 9 through 14, 2023.

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

Signed: Drezden Kinnaird

Title: Consultant

Submit Date: 08/08/2023

Email: dkinnaird@cgrs.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: Kyle Waggoner

Date: 08/08/2023

Remediation Project Number: 21402

COA Type**Description**

	Operator shall submit reports of site investigation including all laboratory analytical results for all samples collected, per Rule 913.h.(4).A.. Per the 900 Series rules 915.e "... Analyses of samples will be performed by laboratories that maintain state or national accreditation programs.." The main accreditation programs are National Environmental Laboratory Accreditation Program (NELAP) and National Environmental Laboratories Accreditation Conference (NELAC). Not only is this accreditation required the lab has to be accredited for each specific analyte.
	ECMC does not agree to the reduced analyte list of excluding Table 915-1 Organics from the soil sampling plan. Operator shall collect confirmation soil samples as described in the Rule 915.e.(2) Guidance Document. Operator will analyze soil samples for TPH (C6-C36), 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)).
	All groundwater samples shall be analyzed for Table 915-1 Organic Compounds in Groundwater and Groundwater Inorganic Parameters. Operator shall provide all analytical reports, groundwater analytical summary tables and a potentiometric map depicting groundwater flow direction and gradient on each subsequent Quarterly Monitoring Report.
	Per Doc# 403321814, Operator shall fully populate the implementation schedule in accordance with Rule 913.d on the next Form 27. The "Date of Surface Owner notification" and "Actual Spill or Release date or date of discovery" information is missing.
	Operator shall provide a comprehensive list of all potential receptors within ¼ mile on the subsequent Supplemental Form 27. Location lies within the following mapped High Priority Habitat(s): - Designated Basin Please note that Approval of this Form 27 does not supersede any Federal, State or Local regulations. ECMC recommends consultation with Colorado Parks and Wildlife.
5 COAs	

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**

403433475	FORM 27-SUPPLEMENTAL-SUBMITTED
403488208	ANALYTICAL RESULTS
403488213	MAP

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	While delineating elevated inorganics around the produced water pit, groundwater was encountered at 42' depth (Jan 2022)	08/08/2023
Environmental	Operator has not demonstrated in this or prior Form 27s that pathway to groundwater is not complete. Nearby domestic water well (<1/4 mile from pits) indicates depth to ground water of 38'. This location is within 500' of surface water (Shears Draw) and should be listed as a sensitive area.	08/08/2023
Environmental	Operator has not completed full delineation of Soil Suitability for Reclamation parameters. Specifically areas north of SS-11 and SS-08 and east of SS-05 have not been assessed. "Reclamation Plan" section does not meet the standards required for relief to be granted under Rule 915.b. Referring to COGCC Reclamation Group for further review.	08/08/2023
Environmental	<p>Prior Form 27 Comments and COAs:</p> <p>402908271 12/27/21 "Confirmation samples should be collected from the areas that had visibly impacted soils removed. Photo documentation of the areas before and after soil removal (confirmation soil sampling) should be provided on subsequent Form 27. Discrete soil samples should be collected at the depth of riser plugging (tanks, separator, wellhead, etc.), for the purpose of facility closure documentation. Discrete samples are required for confirmation sampling. A lab familiar with agricultural analysis must be used for the Soil Suitability for Reclamation parameters. Guidance documents for facility closure are available on the COGCC website."</p> <p>403041601 5/13/22 "Burial of the salt impacted soil shall be contingent on the acceptance of a Reclamation plan per Rule 915.b."</p> <p>403073293 6/30/22 "The screening level inorganics data from the pit sampling indicates elevated salt levels. The inorganics impact needs to be delineated in support of developing a Reclamation plan per Rule 915.b."</p>	08/08/2023

Total: 4 comment(s)