

State of Colorado
Energy & Carbon Management Commission

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403870430
Receive Date:
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Report taken by:
Krystal Heibel

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: <u>OWN RESOURCES OPERATING LLC</u>	Operator No: <u>10699</u>	Phone Numbers Phone: <u>(970) 3323585</u> Mobile: <u>(713) 6287339</u>
Address: <u>305 S RIDGE STREET #6279</u>		
City: <u>BRECKENRIDGE</u>	State: <u>CO</u>	Zip: <u>80424</u>
Contact Person: <u>Niels Phaf</u>	Email: <u>niels.phaf@ownresources.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 28238 Initial Form 27 Document #: 403291206

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: <u>WELL</u>	Facility ID: _____	API #: <u>125-11010</u>	County Name: <u>YUMA</u>
Facility Name: <u>CDM PARTNERSHIP 32-8</u>	Latitude: <u>39.985110</u>	Longitude: <u>-102.322680</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWNE</u>	Sec: <u>8</u>	Twp: <u>1S</u>	Range: <u>44W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
Facility Type: <u>LOCATION</u>	Facility ID: <u>338133</u>	API #: _____	County Name: <u>YUMA</u>
Facility Name: <u>CDM PARTNERSHIP-61S44W 8SWNE</u>	Latitude: <u>39.985110</u>	Longitude: <u>-102.322680</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWNE</u>	Sec: <u>8</u>	Twp: <u>1S</u>	Range: <u>44W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: LOCATION Facility ID: 467888 API #: _____ County Name: YUMA
Facility Name: CDM PARTNERSHIP 31-8 Latitude: 39.991413 Longitude: -102.324243
** correct Lat/Long if needed: Latitude: _____ Longitude: _____
QtrQtr: NWNE Sec: 8 Twp: 1S Range: 44W Meridian: 6 Sensitive Area? Yes

Facility Type: OFF-LOCATION FLOWLINE Facility ID: 467892 API #: _____ County Name: YUMA
Facility Name: CDM PARTNERSHIP 31-8 Latitude: 39.991413 Longitude: -102.324243
** correct Lat/Long if needed: Latitude: _____ Longitude: _____
QtrQtr: NWNE Sec: 8 Twp: 1S Range: 44W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use crop land

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

No residential dwelling within 1/4 mile, not in high priority habitat area; In designated ground water management area and designated basin; ground water depth >150FT

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 type="checkbox"/> Oil | <input type="checkbox"/> Tank Bottoms | |
| <input 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
Yes	SOILS	Limited	soil 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.

After wellbore plugging is complete, well location will be excavated, wellbore cut and capped 4'-6' below grade, gas and water riser will be cut and capped 4'-6' below grade at wellhead location and endpoint location. Off location produced water tank will not be removed due to being shared with other wells still in production. Off location flowlines abandoned in place per Rule 1105, flowline will be evacuated, flushed with fresh water and pressure tested. The full flowline will be field screened to see if there are any disturbances. During excavation, any soil staining will be noted and soil sample analysis done appropriately.

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):

Soil samples and screenings will be taken at cap depth of wellbore, and cap depth of off location flowlines end points for gas and water, one background sample taken 10'-15' from wellhead. No waste is expected to be found at wellhead location. Full Table 915-1 analysis to be done. If screening along flowline finds no shows, off location flowlines passes third party integrity test, in combination with no known prior leaks along flowline, samples will be taken at the highest potential impacted areas at the beginning and end. If off location flowline does not pass third party integrity test, or if field screening along the line finds impacted areas additional samples will be taken to delineate the impact.

Proposed Groundwater Sampling

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

No groundwater expected to be encountered, ground water in area is deeper than 150ft

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 4

ND Highest concentration of TPH (mg/kg)

Number of soil samples exceeding 915-1 4

Highest concentration of SAR _____

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

BTEX > 915-1 No

Approximate areal extent (square feet) 180

Vertical Extent > 915-1 (in feet) 4

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

 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?

One background sample was taken away from the well head; Arsenic levels were higher than Table 915-1; Arsenic levels in our region are typically higher in background than Table 915-1

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? Yes _____

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Initial sampling has shown high arsenic levels high across all samples, however all lower than background sample; Also SAR is high (18.6) at the wellhead;

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.

Remediation summary:
1. The arsenic levels are higher than table 915-1 - including the background sample; All samples are below the background. Action: no further action
2. The well head has high SAR (18.6) - the area has been treated with gypsum and one season of wheat growth; We propose to resample to understand progress after next growing season in 2025
3. Gas line disconnect and water line disconnect, meet all requirements beyond arsenic level (discussed in point 1); They are also in an active oil and gas location that will be P&Ad when the other wells using this location (467888) are P&Ad - no further action

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

Name of Licensed Disposal Facility or ECMC Facility ID # _____

Yes Natural Attenuation
 Yes Other Gypsum reduces the EC and SAR ratios

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.

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.

Well was plugged in May 2023; Wellhead, pumping equipment and risers were removed; Location was recontoured and returned to farmer for first wheat growing season (see picture); Inspection after wheat harvest still shows a large bear spot, mostly driven by additional need for decompaction - which farmer will do for the next growing season; We also propose another soil suitability sample to make sure SAR has come down after the gypsum treatment after next growing season in 2025

Off location flow lines were abandoned in place and passed third party integrity test. Field screening along the line did not identify any additional disturbances. See Form 44 Final abandonment verification 403895724

Gas line was disconnected at the meter shed, which was removed with no further staining under the meter shed. Water line was disconnected at the water tank; Both at location 467888, which will remain active till the wells using these shared facilities are P&Ad

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. 02/01/2023

Proposed date of completion of Reclamation. 10/30/2025

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. 01/03/2023

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

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 02/01/2023

Proposed site investigation commencement. 05/04/2023

Proposed completion of site investigation. 10/30/2024

REMEDIAL ACTION DATES

Proposed start date of Remediation. 05/04/2023

Proposed date of completion of Remediation. 12/30/2024

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:

Several milestones were not yet populated; Sample findings require additional sample after the first growing season;

OPERATOR COMMENT

We hopefully sufficiently addressed the 8 COAs attached to Form 27 403291206

1. Attached an updated screening and sample location map
2. All soil sample locations have been selected after field and excavation screening of the side walls and bottom quadrants and if no impact was visible we took the sample at those locations with highest potential impact - all samples tested against full Table 915-1
3. Photo documentation attached to this Form 27 update including reclamation photo material update after first growing season
4. See answer for COA 2 (point 2)
5. Surface reclamation has started and an update has been provided
6. Form 44 for flow line abandonment verification 403895724 has been attached in the related form section
7. We have field screened the full length of the flow line, which resulted in no additional disturbances; which resulted in taking samples at the highest impact areas, which are the risers at the ends
8. Sensitive receptor list has been updated

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

Signed: Niels Phaf

Title: CEO

Submit Date: 08/21/2024

Email: niels.phaf@ownresources.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: Krystal Heibel

Date: 10/16/2024

Remediation Project Number: 28238

COA Type

Description

	Operator shall attach the correct Form 44 for the associated flowline. It appears that the Form 44 attached is associated with well CDM PARTNERSHIP 31-8.
	Arsenic concentrations in confirmation soil samples exceed the Table 915-1 Residential Soil Screening Level Concentrations and are greater than 1.25 times the arsenic concentration in the background sample. Operator will provide additional data to characterize arsenic concentrations at the site and to determine its source in the next quarterly report.
	Background sampling locations should be sufficiently away from the impacted area to reflect conditions not impacted by oil and gas activity, and should be obtained from similar depths and soil horizons or lithologic materials for comparison to confirmation soil samples. Background sample(s) were collected from areas on-location adjacent to the wellhead and are not representative of background conditions near the well. These samples shall be omitted from future background determination calculations.
	ECMC does not recognize agricultural grade gypsum application as an assertive remediation plan. Operator shall clarify this projects alternative remediation plan in a future submittal.
	Operator shall conduct an environmental investigation to confirm the presence or absence of impacts adjacent to the flowline at a minimum of every 250'.
	Operator shall provide justification for use of Residential SSL including but not limited to depth to groundwater and the local lithology.
	Operators will collect and submit for laboratory analysis a soil sample collected from the areas most likely to have been impacted during the operational life of the flowline. These areas include, but are not limited to: where Flowlines connect to the wellhead, surface equipment, risers, valves, or manifolds; where Flowlines bend or were repaired in the past and at joints and hammer unions; where Flowlines connect to Flowlines or equipment of different material; and where Flowlines crossed drainages or surface water or are in contact with shallow groundwater. It appears there is a bend in the flowline, so soil sampling is required (at minimum) from that location.
	If groundwater is encountered, Operator will analyze groundwater samples for Table 915-1 Groundwater Inorganic Parameters (total dissolved solids, sulfate, chloride) and organic compounds in groundwater.
8 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.

<u>Att Doc Num</u>	<u>Name</u>
403870430	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
403895618	MAP
403895619	PHOTO DOCUMENTATION
403895620	REMEDATION PROGRESS REPORT
403895621	ANALYTICAL RESULTS
403960132	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 6 Files

General Comments

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

Total: 0 comment(s)