

State of Colorado
Energy & Carbon Management Commission

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Report taken by:
Kari Brown

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 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>KERR MCGEE OIL & GAS ONSHORE LP</u>	Operator No: <u>47120</u>	Phone Numbers
Address: <u>P O BOX 173779</u>		Phone: <u>(720) 929-4307</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80217-3779</u>		Mobile: <u>()</u>
Contact Person: <u>Max Moran</u>	Email: <u>DJRemediation_Forms@oxy.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 40391 Initial Form 27 Document #: 404157128

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>LOCATION</u>	Facility ID: <u>435886</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>AGGREGATE STATE TANK BATTERY 37C-16HZ</u>	Latitude: <u>40.150386</u>	Longitude: <u>-104.778643</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWSE</u>	Sec: <u>9</u>	Twp: <u>2N</u>	Range: <u>66W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>489263</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Aggregate State 24 22 25-9 HZ O SA</u>	Latitude: <u>40.150810</u>	Longitude: <u>-104.778527</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWSE</u>	Sec: <u>9</u>	Twp: <u>2N</u>	Range: <u>66W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SC

Most Sensitive Adjacent Land Use Crop land

Is domestic water well within 1/4 mile? No

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

Domestic water well: none
Surface water: approximately 770' SE
Wetland: an area with wetland characteristics is located approximately 770' SE and 400' W
Spring: none
Livestock: none
Occupied Building: none
High Priority Habitats: none

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	Groundwater not encountered	Groundwater samples/laboratory analytical results
Yes	SOILS	16'(N-S) x 19'(E-W) x 12' bgs	Inspection/soil samples/laboratory analytical results

INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

On January 28, 2025, a release was discovered at the Aggregate State 24 22 25-9 HZ O SA location. As such, the ECMC was notified via email January 28, 2025 and a Form 19-Initial Spill/Release Report (ECMC Document No. 404072710) was submitted on January 29, 2025, and the ECMC issued Spill/Release Point ID 489263. The cause of the release was due to a dump line failure at the separator. Groundwater was not encountered. Visual inspection and field screening of soils around the pad location was conducted, and a soil sample (Initial Waste Characterization @ 3") was submitted for laboratory analysis of the full ECMC Table 915-1 analytical suite. Laboratory analytical results indicated that the TPH, BTEX, TMB, 1&2-methylnaphthalene, naphthalene, benzo(a)anthracene, and fluorene concentrations in the soil sample exceeded the applicable ECMC Table 915-1 standards. A topographic Site Location Map showing the geographic setting of the site location is provided as Figure 1. Soil sample location and field screening data are presented in Table 1. Soil analytical results are summarized in Tables 2 through 5. The soil sample locations are illustrated on Figures 2 through 5. The secured laboratory analytical reports are attached. The field notes and a photographic log are attached.

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):

On February 26 through July 7, 2025, excavation activities were conducted to address the soil impacts around the release location, and 11 confirmation soil samples were collected from the base and sidewalls of the final excavation extents at depths of approximately 2 - 12' below ground surface (bgs). The confirmation soil samples were submitted for laboratory analysis of the full Table 915-1 analytical suite. Final analytical results indicated that impacted soils were removed, and constituent concentrations in the soil samples collected from the final excavation extents were in compliance with ECMC Table 915-1 standards and/or within background limits.

Proposed Groundwater Sampling

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

Groundwater was not encountered during initial assessment or subsequent excavation activities.

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 20
Number of soil samples exceeding 915-1 20
Was the areal and vertical extent of soil contamination delineated? Yes
Approximate areal extent (square feet) 305

NA / ND

-- Highest concentration of TPH (mg/kg) 34990
-- Highest concentration of SAR 1.81
BTEX > 915-1 Yes
Vertical Extent > 915-1 (in feet) 12

Groundwater

Number of groundwater samples collected 0
Was extent of groundwater contaminated delineated? No
Depth to groundwater (below ground surface, in feet) _____
Number of groundwater monitoring wells installed _____
Number of groundwater samples exceeding 915-1 _____

____ Highest concentration of Benzene (µg/l) _____
____ Highest concentration of Toluene (µg/l) _____
____ Highest concentration of Ethylbenzene (µg/l) _____
____ Highest concentration of Xylene (µg/l) _____
____ 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 soil samples BG01-BG05 were collected from non-impacted like and kind material on/adjacent to the pad location at depths of approx. 4'-6' bgs, as approved on Form 19-Initial Spill/Release Report Doc. 403760776, submitted on 4/24/24. The background soil samples were submitted for laboratory analysis of the Soil Suitability for Reclamation Parameters and/or Table 915-1 Metals using standard methods appropriate for detecting the target analytes in Table 915. Analytical results for the background soil samples are presented on Tables 3 and 5. Background soil sample locations are presented on Figure 6.

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.

Between April 11, 2025 through June 7, 2025, approximately 10 cubic yards of impacted soil was excavated and transported to the Buffalo Ridge Landfill located in Keenesburg, Colorado for disposal; approximately 63 cubic yards of impacted hydro-excavation soil slurry was removed from the excavation area via vacuum truck and transported to the Kerr-McGee Aggregate Recycle Facility for recycling. The excavation area will be backfilled and contoured to match pre-existing conditions.

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.

Final laboratory analytical results indicated that constituent concentrations in the confirmation soil samples collected from the final excavation extents were in compliance with the applicable ECMC Table 915-1 standards and/or within background limits. Groundwater was not encountered during initial assessment or subsequent excavation activities. Based on the analytical and soil screening data presented herein, assessment is complete at this site and no further activities are required. As such, Kerr-McGee is requesting a No Further Action (NFA) determination for this location.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

Yes _____ Excavate and offsite disposal

_____ Chemical oxidation

_____ If Yes: Estimated Volume (Cubic Yards) _____ 73

_____ Air sparge / Soil vapor extraction

_____ Name of Licensed Disposal Facility or ECMC Facility ID # _____ 434766

_____ Natural Attenuation

_____ Excavate and onsite remediation

_____ Other _____

_____ 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.

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.

The site will be reclaimed in accordance with ECMC 1000 Series Reclamation Rules. Timeliness of reclamation initiation and completion will be subject to NFA, surface owner discretion and land use, and suitable ground conditions which allow for execution of surface reclamation activities so as to not cause unwarranted damages.

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? Yes

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

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

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. 10/28/2025

Proposed date of completion of Reclamation. 10/28/2026

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. 01/28/2025

Actual Spill or Release date, or date of discovery. 01/28/2025

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/28/2025

Proposed site investigation commencement. 01/28/2025

Proposed completion of site investigation. 07/07/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 01/28/2025

Proposed date of completion of Remediation. 07/07/2025

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

The previous Form 27-Supplemental (Document #404276961, submitted 7/30/25) is still in process with the ECMC.

Based on the analytical data presented herein, site assessment activities are complete, and KMOG is requesting a No Further Action (NFA) determination for this location.

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

Signed: Max Moran

Title: Environmental Advisor

Submit Date: 10/28/2025

Email: DJRemediation_Forms@oxy.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: Kari Brown

Date: 03/17/2026

Remediation Project Number: 40391

COA Type**Description**

	<p>Based on the information presented, it appears that no further action is necessary at this time and the ECMC approves the closure request. However, if future conditions at the site indicate contaminant concentrations in soils exceeding ECMC standards or if groundwater is found to be impacted, then further investigation and/or remediation activities may be required.</p> <p>The surface area disturbed by the remediation activity shall be reclaimed in accordance with the 1000 Series Reclamation Rules. For locations with active ongoing oil and gas operations, comply with Rule 1003 interim reclamation requirements and for locations that will no longer have active oil and gas operations, comply with Rule 1004 Final Reclamation requirements.</p>
1 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.

Att Doc Num**Name**

404392601	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
404392775	SITE MAP
404392797	LABORATORY ANALYTICAL REPORT
404392798	LABORATORY ANALYTICAL REPORT
404392800	LABORATORY ANALYTICAL REPORT
404392804	LABORATORY ANALYTICAL REPORT
404392814	LABORATORY ANALYTICAL REPORT
404392815	LABORATORY ANALYTICAL REPORT
404400610	SOIL SAMPLE LOCATION MAP
404400611	SOIL SAMPLE LOCATION MAP
404400614	SOIL SAMPLE LOCATION MAP
404400618	PHOTO DOCUMENTATION
404401694	SOIL SAMPLE LOCATION MAP
404402354	SOIL SAMPLE LOCATION MAP
404412554	LABORATORY ANALYTICAL REPORT
404412573	ANALYTICAL DATA SUMMARY TABLE(S)
404582861	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 17 Files

General Comments

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

Total: 0 comment(s)