

State of Colorado
Energy & Carbon Management Commission

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Report taken by:
Grace Rollins

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>		
City: <u>DENVER</u>	State: <u>CO</u>	Phone: <u>(713) 350-4906</u>
	Zip: <u>80217-3779</u>	Mobile: <u>()</u>
Contact Person: <u>Ariana Ochoa</u>	Email: <u>DJRemediation_Forms@oxy.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 27567 Initial Form 27 Document #: 403305355

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>310674</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>MEGAN H16-99HZ</u>	Latitude: <u>40.221687</u>	Longitude: <u>-104.677196</u>	
	** correct Lat/Long if needed: Latitude: <u>40.220815</u>	Longitude: <u>-104.677426</u>	
QtrQtr: <u>SWSW</u>	Sec: <u>16</u>	Twp: <u>3N</u>	Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>123-32747</u>	County Name: <u>WELD</u>
Facility Name: <u>UPRC H17-99HZ</u>	Latitude: <u>40.221461</u>	Longitude: <u>-104.677199</u>	
	** correct Lat/Long if needed: Latitude: _____	Longitude: _____	
QtrQtr: <u>SWSW</u>	Sec: <u>16</u>	Twp: <u>3N</u>	Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: SPILL OR RELEASE Facility ID: 484373 API #: _____ County Name: WELD
 Facility Name: UPRC H17-99HZ O SA Tank Battery Latitude: 40.220815 Longitude: -104.677426
 ** correct Lat/Long if needed: Latitude: _____ Longitude: _____
 QtrQtr: SWSW Sec: 16 Twp: 3N Range: 65W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 489842 API #: _____ County Name: WELD
 Facility Name: UPRC H17-99HZ Wellhead Latitude: 40.221452 Longitude: -104.677227
 ** correct Lat/Long if needed: Latitude: _____ Longitude: _____
 QtrQtr: SWSW Sec: 16 Twp: 3N Range: 65W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use Agriculture
 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? Yes

Other Potential Receptors within 1/4 mile

Domestic water well: none
 Surface water: none
 Wetlands: none
 Spring: none
 Livestock: none
 Occupied Building: none
 High Priority Habitats: none

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	GROUNDWATER	TBD	Groundwater samples/laboratory analytical results
Yes	SOILS	TBD	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.

Facility decommissioning activities were completed at the UPRC H17-99HZ O SA production facility on April 18 through 28, 2023, as summarized in the approved Form 27-Supplemental Document #404165444. Laboratory analytical results indicated that the TPH, naphthalene, TMBs, 1,2-methylnaphthalene, and/or barium concentrations in the PWV and separator soil samples exceeded the applicable ECMC Table 915-1 standards and/or background limits, and the ECMC issued Spill/Release Point ID 484373 for this release. Soil analytical results are summarized in Tables 2A through 5A.

On March 24, 2025, a historical release was discovered during reclamation activities at the former UPRC H17-99HZ wellhead and soil samples (REC-B01@1', REC-B02@2', REC-B03@2', REC-B04@2', REC-B05@2', REC-B06@2', REC-B07@2', REC-B08@2', and REC-B09@2') were collected from the material showing signs of potential impacts based on field observations, and submitted for laboratory analysis of the full ECMC Table 915-1 analytical suite using standard ECMC approved methods appropriate for detecting the target analytes in Table 915-1. Analytical results indicated that the TPH, 1,3,5-TMBs, 1-,2-methylnaphthalene, naphthalene, arsenic, barium, lead, selenium, and/or pH concentrations in multiple soil samples exceeded the applicable ECMC Table 915-1 standards and/or background limits. As such, a Form 19-Initial Spill/Release Report ECMC Document No. 404161166 was submitted on April 11, 2025, and the ECMC issued Spill/Release Point ID 489842. Soil sample location and field screening data are presented in Table 1A and 1B. Soil analytical results are summarized in Tables 2B through 5B. The applicable secured laboratory analytical reports 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):

From 5/5/23-5/17/24, excavation activities were completed to address the soil impacts at the former PWVs and separators. Samples were collected from the final excavation extents at depths of approximately 4'-35' bgs. Based on waste characterization results (PW-B01@5'), the PWV confirmation samples were submitted for analysis of EX, TPH, naph., TMBs, PAHs, and/or Table 915-1 Metals, as previously presented on approved Form 27 Supp. Doc.#403765429. The separator confirmation samples were submitted for analysis of BTEX, TPH, naph., TMBs, PAHs, and/or Table 915-1 Metals, as previously presented on approved Form 27 Supp. Doc.#403859405. Final analytical results indicate that the confirmation samples were in compliance with Table 915-1 standards and/or background limits. Additional assessment and/or excavation activities are ongoing to address the remaining soil impacts encountered during reclamation activities. Future soil samples will be submitted for analysis of full Table 915-1.

Proposed Groundwater Sampling

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

Groundwater was encountered in the PWV excavation at approx. 32' bgs. On October 11, 2023, a groundwater sample was collected from the PWV excavation (GW-01) and submitted for laboratory analysis of BTEX, naphthalene, and TMBs by USEPA Method 8260D as approved in the Form 27-Initial (Document No. 403305355). Analytical results indicated that the benzene concentration in GW-01 exceeded the Table 915-1 standard as summarized in Table 6A. Monitoring wells will be installed at the site and sampled for the ECMC Table 915-1 groundwater analytical suite.

Proposed Surface Water Sampling

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

[Empty text box for surface water sampling details]

Additional Investigative Actions

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

[Empty text box for additional investigative actions]

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 93
 Number of soil samples exceeding 915-1 88
 Was the areal and vertical extent of soil contamination delineated? No
 Approximate areal extent (square feet) 4000

NA / ND

-- Highest concentration of TPH (mg/kg) 6500
 -- Highest concentration of SAR 5.35
 BTEX > 915-1 No
 Vertical Extent > 915-1 (in feet) 35

Groundwater

Number of groundwater samples collected 1
 Was extent of groundwater contaminated delineated? No
 Depth to groundwater (below ground surface, in feet) 32
 Number of groundwater monitoring wells installed 0
 Number of groundwater samples exceeding 915-1 1

-- Highest concentration of Benzene (µg/l) 16.6
 -- Highest concentration of Toluene (µg/l) 3.64
 -- Highest concentration of Ethylbenzene (µg/l) 6.78
 -- Highest concentration of Xylene (µg/l) 84.5
 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 WH-BG02-WH-BG04 and PW-BG05-PW-BG07 were collected from non-impacted native material (Vona loamy sand) adjacent to the former UPRC H17-99HZ wellhead and UPRC H17-99HZ O SA facility at depths ranging from 3'-20' bgs. Background samples from the former Megan H 16-12 JI wellhead (located approximately 900' NW) have been included (collected from similar soil type (Olney loamy sand), depths, and from the same continuous land use (grassland)), as previously approved in Form 27-Supp. Doc. #404270868. Additionally, background samples from the former Megan H 16-33 O SA facility (located approximately 1,230' NW), which are sufficiently away from the delineated impacts, have been included (collected from similar soil type (Olney loamy sand), depths, and from the same continuous land use (grassland)). The samples were submitted for analysis of the Soil Suitability for Reclamation and/or ECOM Table 915-1 Metals. The background locations are illustrated on Figures 1 & 2.

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?

Additional assessment and/or excavation activities are ongoing to address the remaining soil impacts encountered during reclamation activities.
 Groundwater monitoring wells will be installed at the site to fully define the extent and magnitude of the remaining soil impacts. A background groundwater sample will be collected and submitted for laboratory analysis of TDS, sulfate ions, and chloride ions to establish background levels.

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 28, 2023 through May 17, 2024, approximately 2,350 cubic yards of impacted material were excavated from the former PWV excavation area and transported to the Buffalo Ridge Landfill, located in Keenesburg, Colorado for disposal; approximately 1,990 cubic yards of impacted material were excavated and transported to the Kerr-McGee Land Treatment Facility in Weld County, Colorado for recycling. Final analytical results indicate that the soil samples collected from the final PWV and separator excavation extents were in compliance with Table 915-1 standards and/or background limits. The excavation areas have been backfilled and contoured to match pre-existing conditions.

Additional assessment and/or excavation activities are ongoing to address the remaining soil impacts encountered during reclamation activities.

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.

Final analytical results indicate that the soil samples collected from the final PWV and separator excavation extents were in compliance with Table 915-1 standards and/or background limits. Groundwater monitoring wells will be installed at the site to fully define the extent and magnitude of the remaining groundwater impacts. Soil samples will be collected from each soil boring location during monitoring well installation activities, and will be submitted for complete Table 915-1 Contaminants of Concern. Estimated time to attain NFA is TBD based on the groundwater concentrations, the extent of impacted groundwater, and the efficacy of the selected remedial technologies.

Additional assessment and/or excavation activities are ongoing to address the remaining soil impacts encountered during reclamation activities.

Soil Remediation Summary

<input type="checkbox"/> In Situ _____ Bioremediation (or enhanced bioremediation) _____ Chemical oxidation _____ Air sparge / Soil vapor extraction _____ Natural Attenuation _____ Other _____	<input checked="" type="checkbox"/>	Ex Situ	Yes _____ Excavate and offsite disposal If Yes: Estimated Volume (Cubic Yards) _____ 4340 Name of Licensed Disposal Facility or ECMC Facility ID # _____ 149007 _____ Excavate and onsite remediation _____ Land Treatment _____ Bioremediation (or enhanced bioremediation) _____ Chemical oxidation _____ Other _____
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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.

Groundwater monitoring wells will be installed at the site to fully define the extent and magnitude of the remaining groundwater impacts. Based on the remaining benzene groundwater impacts in the wellhead excavation area, the groundwater monitoring wells will be sampled on a quarterly basis and submitted for laboratory analysis of the ECMC Table 915-1 groundwater analytical suite. A groundwater monitoring location figure illustrating the locations of the surveyed monitoring wells will be provided in a Form 27-Supplemental update.

Does Groundwater meet Table 915-1 standards? _____

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 Remediation 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. _____

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. 01/17/2023

Actual Spill or Release date, or date of discovery. 04/25/2023

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 04/18/2023

Proposed site investigation commencement. 04/18/2023

Proposed completion of site investigation. 12/31/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 04/25/2023

Proposed date of completion of Remediation. 12/31/2026

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

No additional assessment and/or remediation activities have been conducted at this site since the previous Form 27-Supplemental update was submitted (Document # 404270868).

In response to the COAs on the approved Form 27-Supplemental Document #404165444, background soil samples from Megan State H15-32D, 33D O SA (Rem #31208) have been removed from the report. Additionally, future confirmation soil samples will be analyzed for the complete Table 915-1 Contaminants of Concern. The analytical summary tables have been included with the applicable updated background sample data.

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

Signed: Ariana Ochoa

Title: Sr. HSE Advisor

Submit Date: 10/10/2025

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: Grace Rollins

Date: 11/12/2025

Remediation Project Number: 27567

COA Type**Description**

	Per the comment on the most recent approved Form 27 under Remediation Project # 27095 (Document # 403872384): "The horizontal and vertical extent of impacts to soil have not been delineated to date. Background samples cannot be approved until impacts are fully delineated." This COA remains applicable to both Remediation Project # 27095 and the subject Remediation Project. Off-location backgrounds cannot be considered until they have been approved under their respective Remediation Project.
	All ongoing/unaddressed comments/COAs from previous Forms remain applicable.
2 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**

404369087	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
404369466	LABORATORY ANALYTICAL REPORT
404369468	LABORATORY ANALYTICAL REPORT
404369469	LABORATORY ANALYTICAL REPORT
404369470	LABORATORY ANALYTICAL REPORT
404369472	LABORATORY ANALYTICAL REPORT
404369488	ANALYTICAL DATA SUMMARY TABLE(S)
404380345	ANALYTICAL DATA SUMMARY TABLE(S)
404381776	SOIL SAMPLE LOCATION MAP
404381777	SOIL SAMPLE LOCATION MAP
404381778	SOIL SAMPLE LOCATION MAP
404433051	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 12 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)