

State of Colorado  
Energy & Carbon Management Commission

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Document Number:  
404217793  
Receive Date:  
07/01/2025

Report taken by:  
Taylor Robinson

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: KERR MCGEE OIL & GAS ONSHORE LP	Operator No: 47120	<b>Phone Numbers</b>
Address: P O BOX 173779		Phone: (713) 350-4906
City: DENVER	State: CO	Zip: 80217-3779
Contact Person: Ariana Ochoa	Email: DJRemediation_Forms@oxy.com	Mobile: (832) 814-7792

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 33531 Initial Form 27 Document #: 403634964

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: WELL	Facility ID: _____	API #: 123-17930	County Name: WELD
Facility Name: HSR-WILLIAM MAYER 5-22	Latitude: 40.213380	Longitude: -104.884210	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SWNW	Sec: 22	Twp: 3N	Range: 67W Meridian: 6 Sensitive Area? Yes
Facility Type: SPILL OR RELEASE	Facility ID: 486341	API #: _____	County Name: WELD
Facility Name: William Mayer 5-22A Wellhead	Latitude: 40.213380	Longitude: -104.884210	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: SWNW	Sec: 22	Twp: 3N	Range: 67W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 489544 API #: \_\_\_\_\_ County Name: WELD  
Facility Name: William Mayer 5-22A Flowline Latitude: 40.213380 Longitude: -104.884210  
\*\* correct Lat/Long if needed: Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_  
QtrQtr: SWNW Sec: 22 Twp: 3N Range: 67W Meridian: 6 Sensitive Area? Yes

**SITE CONDITIONS**

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use Surface Water

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? Yes

**Other Potential Receptors within 1/4 mile**

Irrigation ditch 340 feet (ft) north and 780 ft east. Water well 210 ft southeast. Occupied buildings 540 ft northwest, 620 ft southwest, and 1,020 ft southeast. County Road 500 ft west. Agriculture.

**SITE INVESTIGATION PLAN**

**DENIED**

## 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
UNDETERMINED	GROUNDWATER	TBD	Groundwater Samples/Laboratory Analytical Results
Yes	SOILS	TBD	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.

Wellhead cut and cap operations were completed at the William Mayer 5-22A wellhead on February 26, 2024. Groundwater was not encountered in the wellhead cut and cap excavation. Visual inspection and field screening of soil around the wellhead and associated pumping equipment was conducted following cut and cap operations, and soil sample B01@7' was submitted for laboratory analysis to determine if a release occurred. Flowline removal activities were completed between February 26, 2024 and February 27, 2025 and soil samples were collected from the locations where the flowline riser was disconnected at the wellhead (WH01-RISER@4'), where the flowline crossed an unnamed drainage ditch (FL-B05@3' and FL-B06@3'), and from three directional changes (FL-B20@4', FL-B21@4', and FL-B32@3') and were submitted for laboratory analysis to determine if a release occurred. Laboratory analytical results indicated that the naph., barium, cadmium, and lead concentrations in soil sample WH01-RISER@4' and naph. only in soil samples FL-B20@4', and FL-B21@4' exceeded ECMC Table 915-1 and/or site specific background limits. As such, two Form 19 Initial/Supplemental Spill/Release Reports (Document Nos. 403723279 and 404119900) were submitted on March 21, 2024 and March 7, 2025, and the ECMC issued Spill/Release Point IDs 486341 and 489544 respectively. The remaining portion of the flowline will remain in place due to the proximity to active flowlines.

## 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 May 2, 2024, excavation activities were conducted at the former wellhead flowline riser location. Confirmation soil samples were collected from the sidewalls at 3 ft below ground surface (bgs) and were submitted for laboratory analysis of the site-specific waste profile including TPH, PAHs, boron, and select Table 915-1 metals (approved Doc. No. 403855015), using ECMC-approved methods. Analytical results indicated that the lead concentration in confirmation soil sample E03@3' exceeded ECMC Table 915-1 and/or site specific background limits. As such, a verification soil sample was collected to verify the lead exceedance and laboratory analytical results indicated that the lead concentration in soil sample E03V@3' was in compliance with ECMC Table 915-1 and/or site specific background limits. Excavation and/or assessment activities to address the naph. exceedances in soil samples FL-B20@4' and FL-B21@4' will be detailed in a forthcoming Form 27-Supplemental.

### Proposed Groundwater Sampling

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

Groundwater was not encountered during wellhead cut and cap operations. If groundwater is encountered during additional excavation and assessment activities, a minimum of one grab sample will be collected as soon as practical. Groundwater samples will be submitted to an accredited laboratory for all analytes listed in ECMC Table 915-1 Organic Compounds in Groundwater (benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, 1,2,4-trimethylbenzene (1,2,4 - TMB), and 1,3,5-trimethylbenzene (1,3,5 - TMB)) and Groundwater Inorganic Parameters (total dissolved solids (TDS), chloride, and sulfate) using standard methods appropriate for detecting the target analytes in ECMC Table 915-1.

### 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 ):

On February 26, 2024, visual inspection and field screening of soils were conducted at three sidewall locations within the cut and cap excavation area, four locations at the ground surface adjacent to the wellhead excavation, and twenty-seven flowline removal pothole locations. Based on the inspection and screening results, hydrocarbon-impacted soil was not observed at the screening locations, and no soil samples were submitted for laboratory analysis from these areas, in accordance with the ECMC Operator Guidance. On March 5, 2024, a soil gas survey was conducted at five soil vapor points installed adjacent to the former wellhead location following cut and cap operations. GEM 5000 field readings were all non-detect for methane at all soil vapor points. SVP locations are illustrated on Figure 2 and SVP screening results are presented in Table 6.

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

Number of soil samples collected 12

Number of soil samples exceeding 915-1 12

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

Approximate areal extent (square feet) 256

### NA / ND

-- Highest concentration of TPH (mg/kg) 170.2  
24

-- Highest concentration of SAR 5.91

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 6

### 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 (NATIVE-BG01@3' through NATIVE-BG06@3' and NATIVE-BG01@6' through NATIVE-BG06@6') were collected from native material adjacent to the wellhead cut and cap excavation. Background soil samples collected from the Mayer 22-13L wellhead (~0.5 mi S) from similar depths (3' and 6' bgs), soil type (silty sand), and land use (crop land) have been utilized to calculate site-specific background limits. The background soil samples were submitted for laboratory analysis of the Soil Suitability for Reclamation Parameters and Table 915-1 Metals using standard methods appropriate for detecting the target analytes in Table 915-1. Analytical results for the background soil samples are presented in Tables 3 and 5.

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?

Excavation and/or assessment activities to address the naph. exceedances in soil samples FL-B20@4' and FL-B21@4' will be detailed in a forthcoming Form 27-Supplemental.

## 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.

Excavation and/or assessment activities to address the naph. exceedances in soil samples FL-B20@4' and FL-B21@4' will be detailed in a forthcoming Form 27-Supplemental.

### 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.

Excavation and/or assessment activities to address the naph. exceedances in soil samples FL-B20@4' and FL-B21@4' will be detailed in a forthcoming Form 27-Supplemental.

### **Soil Remediation Summary**

**In Situ**

**Ex Situ**

- \_\_\_\_\_ Bioremediation ( or enhanced bioremediation )
- \_\_\_\_\_ Chemical oxidation
- \_\_\_\_\_ Air sparge / Soil vapor extraction
- \_\_\_\_\_ Natural Attenuation
- \_\_\_\_\_ Other \_\_\_\_\_

- \_\_\_\_\_ Excavate and offsite disposal
- \_\_\_\_\_ If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_
- \_\_\_\_\_ 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 Progress Report \_\_\_\_\_

## 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.

KMOG has sufficient insurance and bonding to fully address the anticipated costs of Remediation, including the remaining estimated costs for this project. KMOG currently has over 40 million in bonds with the Energy and Carbon Management Commission. The cost for remediation is a preliminary estimate only, costs may change upwards or downward based on site-specific information. KMOG makes no representation or guarantees as to the accuracy of the preliminary estimate.

Operator anticipates the remaining cost for this project to be: \$ 13500 \_\_\_\_\_

## 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: \_\_\_\_\_

# 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 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.

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. 03/18/2024

Actual Spill or Release date, or date of discovery. 03/18/2024

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 02/26/2024

Proposed site investigation commencement. 02/26/2024

Proposed completion of site investigation. 12/31/2025

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 03/18/2024

Proposed date of completion of Remediation. 12/31/2025

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**

Per COA on previous submittal (Doc. No. 403634964), all initial investigative soil samples were submitted for laboratory analysis of TPH (C6-C36), Table 915-1 Organic Compounds in Soil, including PAHs, 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)). Confirmation soil samples at the former flowline riser at the wellhead (WH01-RISER@4') release location were submitted for the site specific waste profile as described on a previous Form 27-Supplemental (approved Doc. No. 403855015). Confirmation soil samples to address the naphthalene impacts at soil samples FL-B20@4' and FL-B21@4' will be submitted for laboratory analysis the Full Table 915-1 Contaminants of Concern until sufficient data is obtained to request a reduced analyte list.

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: 07/01/2025

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: \_\_\_\_\_

Date: \_\_\_\_\_

Remediation Project Number: 33531

**COA Type****Description**

COA Type	Description
0 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**

Att Doc Num	Name
404217793	FORM 27-SUPPLEMENTAL-SUBMITTED
404218025	SITE MAP
404218026	SOIL SAMPLE LOCATION MAP
404218028	SOIL SAMPLE LOCATION MAP
404218029	SOIL SAMPLE LOCATION MAP
404218043	PHOTO DOCUMENTATION
404218048	OTHER
404218063	LABORATORY ANALYTICAL REPORT
404218064	LABORATORY ANALYTICAL REPORT
404218066	LABORATORY ANALYTICAL REPORT
404218075	LABORATORY ANALYTICAL REPORT
404218079	LABORATORY ANALYTICAL REPORT
404218081	LABORATORY ANALYTICAL REPORT
404218084	LABORATORY ANALYTICAL REPORT
404218086	LABORATORY ANALYTICAL REPORT
404251385	ANALYTICAL DATA SUMMARY TABLE(S)
404251412	SOIL SAMPLE LOCATION MAP

Total Attach: 17 Files

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

User Group	Comment	Comment Date
Environmental	This form is denied because one or more of the attached laboratory analytical reports is not secured (Doc# 404218075). ECMC has not reviewed this form or any other attachments on this Form. Operator shall resubmit the Form 27 and ensure all laboratory reports are secured and contain metadata appropriate to document any differences in created and modified dates, and/or the laboratory analytical report shall be signed with a validated signature certificate.	11/26/2025

Total: 1 comment(s)

Date Run: 11/26/2025 Doc [#404217793]

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