

State of Colorado
Energy & Carbon Management Commission

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404185487

Receive Date:

Report taken by:

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	Phone Numbers	
Address: P O BOX 173779	Phone: (720) 929-4306		
City: DENVER	State: CO	Zip: 80217-3779	Mobile: ()
Contact Person: Erik Mickelson	Email: DJRemediation_Forms@oxy.com		

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 36864 Initial Form 27 Document #: 403895850

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 #: 123-15441 County Name: WELD

Facility Name: GUY H JONES GAS UNIT 2 Latitude: 40.099220 Longitude: -104.846770

** correct Lat/Long if needed: Latitude: _____ Longitude: _____

QtrQtr: NWNW Sec: 36 Twp: 2N Range: 67W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 488937 API #: _____ County Name: WELD

Facility Name: Jones Guy H Gas UN 2 Wellhead Latitude: 40.099241 Longitude: -104.846781

** correct Lat/Long if needed: Latitude: _____ Longitude: _____

QtrQtr: NWNW Sec: 36 Twp: 2N Range: 67W 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? 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

Multiple buildings and livestock holding pens are located within 1/4 mile of the wellhead.
A building is located approximately 500 feet north of the wellhead.
The nearest domestic water well is located approximately 670 feet to the southwest of the wellhead.
An area with wetland characteristics is located approximately 1080 feet northwest of the wellhead.
Surface water is located approximately 120 feet east of the wellhead.
The wellhead is located within a Bald Eagle Active Nest Site Half Mile designated high priority habitat.

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
No	GROUNDWATER	No impacts observed	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.

Wellhead cut and cap and flowline removal operations were completed at the Jones Guy H Gas UN 2 wellhead from November 21, 2024 through January 9, 2025. Groundwater was encountered in a flowline removal pothole at approximately 2' bgs. Visual inspection of soils around the well and associated pumping equipment was conducted following wellhead cut and cap operations and flowline removal activities and soil samples (WH-B01@6', FL-B01@4', and FL-B03@2') were submitted for laboratory analysis to determine if a release occurred. Laboratory analytical results indicated that the benzo (a)anthracene (benzo(a).) concentration in soil sample FL-B01@4' and the pH concentration in soil sample WH-B01@6' exceeded Table 915-1 and/or site specific background limits. As such, a Form 19-Initial/Supplemental Spill/Release Report (ECMC Document No. 404045772) was submitted on January 3, 2025, and the ECMC issued Spill/Release Point ID 488937. A verification sample was collected to verify the pH exceedance in soil sample WH-B01@6' and analytical results indicated that the pH concentration in verification sample WH-B01V@6' was compliant with 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. The wellhead soil sample and field screening locations are illustrated on Figure 2. The flowline soil sample and field screening locations are illustrated on Figure 3.

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 November 21, 2024 - January 9, 2025, soil samples were collected from the base of the cut and cap excavation area (WH-B01@6') and locations where the flowline risers were disconnected at the wellhead (FL-B01@4') and separator (FL-B03@2'). The soil samples were submitted for lab analysis of the full ECMC Table 915-1 and lab analytical results indicated that the benzo(a). concentration in soil sample FL-B01@4' and the pH concentration in soil sample WH-B01@6' exceeded Table 915-1 and/or background limits. A verification sample was collected to verify the pH exceedance in soil sample WH-B01@6' and analytical results indicated that the pH concentration in verification soil sample WH-B01V@6' was compliant with ECMC Table 915-1 standards. Assessment activities to address remaining impacts in FL-B01@4' are on hold due to High Priority Habitat restrictions. Assessment activities will resume after July 31, 2025 and 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):

During remediation activities, groundwater was encountered within a flowline removal pothole at approximately 2' bgs. On November 22, 2024, groundwater sample GW-01 was collected from the excavation area and submitted for laboratory analysis of the full ECMC Table 915-1 constituents in groundwater. Laboratory analytical results indicated that groundwater sample GW-01 was in compliance with the ECMC Table 915-1 standards. Additionally, background groundwater samples GW-BG-01 and GW-BG01-R were collected from adjacent to the former flowline excavation and submitted for laboratory analysis of the full ECMC Table 915-1 Inorganic constituents in groundwater. Additional groundwater assessment is pending and will resume after July 31, 2025, and will be detailed in a forthcoming Form 27-Supplemental.

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):

From November 21-22, 2024, visual inspection and field screening of soils was conducted at 4 sidewall locations within the cut and cap excavation area, 4 locations at the ground surface adjacent to the excavation, and 3 flowline removal potholes. 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 January 31, 2025, a soil gas survey was conducted at 3 soil vapor points (SVP-01-SVP-03) installed adjacent to the former wellhead location following cut and cap operations. GEM 5000 field readings were non-detect for methane at all 3 soil vapor points. SVP locations are illustrated on Figure 2 and SVP screening results are presented in Table 7.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 4
 Number of soil samples exceeding 915-1 3
 Was the areal and vertical extent of soil contamination delineated? No
 Approximate areal extent (square feet) 256

NA / ND

ND Highest concentration of TPH (mg/kg) _____
 -- Highest concentration of SAR 4.36
 BTEX > 915-1 No
 Vertical Extent > 915-1 (in feet) 6

Groundwater

Number of groundwater samples collected 1
 Was extent of groundwater contaminated delineated? No
 Depth to groundwater (below ground surface, in feet) 2
 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 soil samples WH-BG01@3'-WH-BG05@3' and WH-BG01@6'-WH-BG05@6' were collected from native material adjacent to the wellhead cut and cap excavation. 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?

Assessment activities to address remaining impacts in FL-B01@4' are on hold due to High Priority Habitat restrictions. Assessment activities will resume after July 31, 2025 and will be detailed in a forthcoming Form 27-Supplemental. Additional confirmation samples will be collected from the final wellhead excavation extent and will be submitted for the full Table 915-1 constituents, as requested by the ECMC in the COA on the Form 27-Initial (Document # 403895850).

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.

Assessment activities to address remaining impacts in FL-B01@4' are on hold due to High Priority Habitat restrictions. Assessment activities will resume after July 31, 2025 and will be detailed in a forthcoming Form 27-Supplemental. Additional confirmation samples will be collected from the final wellhead excavation extent and will be submitted for the full Table 915-1 constituents, as requested by the ECMC in the COA on the Form 27-Initial (Document # 403895850).

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.

Assessment activities to address remaining impacts in FL-B01@4' are on hold due to High Priority Habitat restrictions. Assessment activities will resume after July 31, 2025 and will be detailed in a forthcoming Form 27-Supplemental. Additional confirmation samples will be collected from the final wellhead excavation extent and will be submitted for the full Table 915-1 constituents, as requested by the ECMC in the COA on the Form 27-Initial (Document # 403895850).

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 # _____

_____ 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.

Per COA on previous submittal (Doc. No. 404076675), groundwater sample (GW-01) was submitted for analysis of the full ECMC Table 915-1 constituents in groundwater (BTEX, naphthalene, 1,2,4-TMB, total dissolved solids (TDS), sulfate, and chloride). Analytical results indicated that the groundwater sample (GW-01) was compliant with ECMC Table 915-1 Contaminants of Concern and contained no organic detections. Given the topographic difference of impacted soil sample FL-B01@4' and groundwater sample GW-01, as well as up-gradient compliant soil sample FL-B03@2', groundwater was not in contact with impacted soil. Per ECMC Rules 912 and 914, the installation of groundwater monitoring wells is not mandated solely due to the shallow depth of groundwater and if groundwater is encountered during confirmation soil sampling to address soil impacts at FL-B01@4', a groundwater sample will be collected and run for Full Table 915-1 Contaminants of Concern to determine if impacts to groundwater are present in the release location.

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: \$ 10500

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. 08/06/2024

Actual Spill or Release date, or date of discovery. 01/02/2025

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 11/21/2024

Proposed site investigation commencement. 11/21/2024

Proposed completion of site investigation. 12/31/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 01/02/2025

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. 404076675), groundwater sample (GW-01) was submitted for analysis of the full ECMC Table 915-1 constituents in groundwater (BTEX, naphthalene, 1,2,4-TMB, total dissolved solids (TDS), sulfate, and chloride). Analytical results indicated that the groundwater sample (GW-01) was compliant with ECMC Table 915-1 Contaminants of Concern and contained no organic detections. Given the topographic difference of impacted soil sample FL-B01@4' and groundwater sample GW-01, as well as up-gradient compliant soil sample FL-B03@2', groundwater was not in contact with impacted soil. Per ECMC Rules 912 and 914, the installation of groundwater monitoring wells is not mandated solely due to the shallow depth of groundwater and if groundwater is encountered during confirmation soil sampling to address soil impacts at FL-B01@4', a groundwater sample will be collected and run for Full Table 915-1 Contaminants of Concern to determine if impacts to groundwater are present in the release location.

A quarterly reporting schedule will be adhered to for future supplemental updates.

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

Signed: Erik Mickelson

Title: Environmental Lead

Submit Date:

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: 36864

COA Type

Description

0 COA	
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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

404188401	SITE MAP
404188406	LABORATORY ANALYTICAL REPORT
404188412	LABORATORY ANALYTICAL REPORT
404188414	LABORATORY ANALYTICAL REPORT
404188430	PHOTO DOCUMENTATION
404188448	OTHER
404253952	SOIL SAMPLE LOCATION MAP
404271560	ANALYTICAL DATA SUMMARY TABLE(S)
404286102	SOIL SAMPLE LOCATION MAP

Total Attach: 9 Files

General Comments

User Group

Comment

Comment Date

		Stamp Upon Approval
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Total: 0 comment(s)