

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 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>KERR MCGEE OIL & GAS ONSHORE LP</u>	Operator No: <u>47120</u>	Phone Numbers
Address: <u>P O BOX 173779</u>		Phone: <u>(720) 929-4306</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80217-3779</u>		Mobile: <u>()</u>
Contact Person: <u>Erik Mickelson</u>	Email: <u>DJRemediation_Forms@oxy.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 39909 Initial Form 27 Document #: 404072367

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>123-10963</u>	County Name: <u>WELD</u>
Facility Name: <u>1415 CORP GAS UNIT 2</u>	Latitude: <u>40.141360</u>	Longitude: <u>-104.863810</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWNW</u>	Sec: <u>14</u>	Twp: <u>2N</u>	Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>490246</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>1415 Corp Gas Unit 2 Wellhead</u>	Latitude: <u>40.141360</u>	Longitude: <u>-104.863810</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWNW</u>	Sec: <u>14</u>	Twp: <u>2N</u>	Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

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

Domestic water well: approximately 850' SE and 1190' NW
Surface water: approximately 180' W
Wetland: an area with wetland characteristic is located approximately 175' W
Spring: none
Livestock: approximately 800' NW
Occupied Building: multiple occupied buildings within 1/4 mile
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
No	GROUNDWATER	Groundwater not encountered	Groundwater samples/laboratory analytical results
No	SOILS	See attached data	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 operations and flowline riser removal activities were completed at the 1415 Corp Gas Unit 2 wellhead on May 1, 2025 - September 17, 2025. Groundwater was not encountered within the wellhead cut and cap excavation area or flowline riser removal pothole. Visual inspection and field screening of soils around the well and associated pumping equipment was conducted following wellhead cut and cap operations and flowline riser removal activities, and soil samples (WH-B01@6', WH-RIS@4', SEP-RIS@5') were submitted for laboratory analysis of Table 915-1 Contaminants of Concern to determine if a release occurred. Laboratory analytical results indicated that the pH concentration in soil sample WH-B01@6' exceeded the applicable ECMC Table 915-1 standard and background limit. As such, a Form 19 Initial/Supplemental Spill/Release Report (ECMC Document 404207826) was submitted on May 19, 2025, and the ECMC issued Spill/Release Point ID 490246. Verification soil samples were collected on 5/1/25 at the same time as initial sampling to confirm concentrations. However, based on ECMC updates, this is no longer an acceptable practice, and as such, this data has been omitted from this report. The flowline's status was changed to abandoned in place due to the proximity of active lines, in accordance with Rule 1105.d.(2)c., as approved in Form 44 Document #404074967. Kerr-McGee will remove the flowline at a later date when the co-located active flowlines are decommissioned and removed. A Form 27-Site Investigation and Remediation Workplan (Initial) will be submitted to the ECMC for approval prior to commencement of flowline removal activities. Soil sample location and field screening data are presented in Table 1. Soil analytical results are presented in Tables 2 through 5. The soil sample locations are illustrated on Figures 2 through 4. 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 8/28/25, soil samples were collected to delineate and assess the elevated pH present at the former wellhead location (WH-B01@6'). Delineation soil samples were collected at depths of 6'-8' bgs and were submitted for laboratory analysis of pH only. Analytical results indicated that constituent concentrations in the delineation soil samples were in compliance with the applicable Table 915-1 standards. Based on these results, and the lack of any additional indications of a release, the elevated pH observed in sample WH-B01@6' (collected directly adjacent to the wellhead) is likely due to residual splash-over cement present from the plugging and abandonment process. Additional details are provided in the Remediation Summary section.

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, flowline riser removal activities, or subsequent assessment 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):

On May 1, 2025, visual inspection and field screening of soils was conducted at 4 sidewall locations within the cut and cap excavation area and 4 locations at the ground surface adjacent to the excavation. 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 May 1, 2025, five soil vapor points (SVP-01 - SVP-05) were installed adjacent to the former wellhead location following cut and cap operations. On May 19, 2025, a soil gas survey was conducted at four soil vapor point locations (SVP-01 - SVP-04). One of the SVP locations was destroyed prior to screening activities. GEM 5000 field readings were non-detect for methane at all four of the screened soil vapor points. SVP screening results are presented in Table 6 and SVP locations are illustrated in Figure 2.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 3
Number of soil samples exceeding 915-1 3
Was the areal and vertical extent of soil contamination delineated? Yes
Approximate areal extent (square feet) 0

NA / ND

ND Highest concentration of TPH (mg/kg) _____
-- Highest concentration of SAR 0.465
BTEX > 915-1 No
Vertical Extent > 915-1 (in feet) 0

Groundwater

Number of groundwater samples collected 0
Was extent of groundwater contaminated delineated? Yes
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 WH-BG01 - WH-BG04 and BG-05 - BG-10 were collected from non-impacted native material adjacent to the wellhead cut and cap excavation at depths ranging from approximately 3'-6' bgs. The background soil samples were submitted for laboratory analysis of the Soil Suitability for Reclamation Parameters in Soils 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. The background sample locations are illustrated on Figures 2 & 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?

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.

No soil was removed during assessment activities at this location.

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.

On 8/28/25, soil samples were collected to delineate and assess the pH exceedance at the former wellhead location (WH-B01@6'). Delineation soil samples were collected at depths of 6'-8' bgs and were submitted for laboratory analysis of pH only. Analytical results indicated that constituent concentrations in the delineation soil samples were in compliance with the applicable Table 915-1 standards. Given that the observed elevated pH is isolated, and there are no other indications that a release occurred at this location, it is believed the elevated pH is likely due to residual splash-over cement present from the plugging and abandonment process. Groundwater was not encountered during wellhead cut and cap operations, flowline riser removal activities, or subsequent assessment 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)

_____ Excavate and offsite disposal

_____ Chemical oxidation

_____ If Yes: Estimated Volume (Cubic Yards) _____

_____ Air sparge / Soil vapor extraction

_____ Name of Licensed Disposal Facility or ECOM 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.

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 NFA Request

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: \$ 0

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? No

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? Yes

Does the previous reply indicate consideration of background concentrations? Yes

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. 10/22/2025

Proposed date of completion of Reclamation. 10/22/2026

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. 02/04/2025

Actual Spill or Release date, or date of discovery. 05/16/2025

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 05/01/2025

Proposed site investigation commencement. 05/01/2025

Proposed completion of site investigation. 09/17/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 05/16/2025

Proposed date of completion of Remediation. 09/17/2025

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 (Doc.#404272359, submitted 7/24/25) is still in process with the ECMC.

The flowline's status was changed to abandoned in place due to the proximity of active lines, in accordance with Rule 1105.d.(2)c., as approved in Form 44 Document #404074967. Kerr-McGee will remove the flowline at a later date when the co-located active flowlines are decommissioned and removed. A Form 27-Site Investigation and Remediation Workplan (Initial) will be submitted to the ECMC for approval prior to commencement of flowline removal activities.

Based on the data presented herein, the elevated pH observed in WH-B01@6' is likely due to residual splash-over cement from the plugging and abandonment process. Given that the observed elevated pH has been delineated and has been proven to be isolated, is located below the root zone, and there are no other indications that a release occurred at this location (organics non-detect and no other inorganic exceedances), soil removal or additional remediation activities are not necessary. As such, assessment is complete at this site, and no further activities are required. Kerr-McGee 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: Erik Mickelson

Title: Environmental Lead

Submit Date: 11/03/2025

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: 03/12/2026

Remediation Project Number: 39909

COA Type**Description**

	ECMC has removed the closure request. Operator shall collect soil samples from flowline locations as proposed in approved Form 27 doc no 404072367. These samples can be obtain via hand auger boring.
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**

404374239	FORM 27-SUPPLEMENTAL-SUBMITTED
404392031	LABORATORY ANALYTICAL REPORT
404392033	LABORATORY ANALYTICAL REPORT
404392035	LOGS
404392039	PHOTO DOCUMENTATION
404404562	SITE MAP
404404563	SOIL SAMPLE LOCATION MAP
404404564	SOIL SAMPLE LOCATION MAP
404404565	SOIL SAMPLE LOCATION MAP
404404567	SOIL SAMPLE LOCATION MAP
404404572	ANALYTICAL DATA SUMMARY TABLE(S)
404404575	LABORATORY ANALYTICAL REPORT

Total Attach: 12 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)