FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number: 404252935
Receive Date: 08/08/2025
Report taken by: Alexander Ahmadian

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 INFORMATON

Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP Operator No: 47120
Address: P O BOX 173779
City: DENVER State: CO Zip: 80217-3779
Contact Person: Macy Kiel Email: DJRemediation_Forms@oxy.com

Phone Numbers
Phone: (970) 515-1110
Mobile: ( )

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 36648 Initial Form 27 Document #: 403867605

PURPOSE INFORMATION

- [ ] Rule 913.c.(1): Pit or Cuttings Trench closure.
- [X] 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.
- [X] 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 #: 123-11205 County Name: WELD
Facility Name: T.P.HOLTON GAS UNIT TRUE 1 Latitude: 40.083130 Longitude: -104.825280
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SWNW Sec: 6 Twp: 1N Range: 66W Meridian: 6 Sensitive Area? Yes

Facility Type: TANK BATTERY Facility ID: 446192 API #: County Name: WELD
Facility Name: T.P.HOLTON GAS UNIT TRUE-61N66W 6SWNW Latitude: 40.082811 Longitude: -104.825278
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SWNW Sec: 6 Twp: 1N Range: 66W 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

South Platte River 1170 feet (ft) east. An area with wetland characteristics is located approximately 770 ft south. Water well 320 ft northwest. Pearson Park 190 ft east. Occupied Buildings 330 ft northwest. Livestock 390 ft northwest. Commercial Buildings 1050 ft northeast. State Highway 1110 ft south. The site is located in a 100 year floodplain. The site is located within a Mule Deer Migration Corridor and within a ¼ mile of the boundary of an Aquatic Native Species Conservation Waters, a Mule Deer Severe Winter Range, and a Mule Deer Winter Concentration High Priority Habitat (HPH) areas. Groundwater at approximately 5 ft below ground surface (bgs).

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- [X] **E&P Waste**
  - [X] Produced Water
  - [X] Oil
  - [X] Condensate
  - [ ] Drilling Fluids
  - [ ] Drill Cuttings
- [ ] **Other E&P Waste**
  - [ ] Workover Fluids
  - [ ] Tank Bottoms
  - [ ] Pigging Waste
  - [ ] Rig Wash
  - [ ] Spent Filters
  - [ ] Pit Bottoms
  - [ ] Other (as described by EPA)
- [ ] **Non-E&P Waste**

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	GROUNDWATER	TBD	Groundwater Samples/Laboratory Analytical Results
UNDETERMINED	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 Holton, TP GU True 1 wellhead on October 9, 2024. Visual inspection and field screening of soil around the wellhead and associated pumping equipment were conducted following cut and cap operations, and a soil sample [B01(True 1)@6'] was submitted for analysis of full list ECMC Table 915-1 constituents, to determine if a release occurred. The flowline associated with the wellhead was removed between October 9 and December 16, 2024, and soil samples were collected from the locations where the flowline risers were disconnected from the wellhead and from the separator and from where the flowline changed directions. The samples were submitted for laboratory analysis of full list Table 915-1 constituents to determine if a release occurred.

Decommissioning activities were completed at the Holton Tp Gu True 1 facility on December 16, 2024. Groundwater was encountered during excavation activities at 5 ft bgs. Visual inspection and field screening of soil at one aboveground storage tank (AST), one produced water vessel (PWV), and one separator were conducted following removal activities. Soil samples were submitted for analysis of full list Table 915-1 constituents to determine if a release occurred.

Analytical results indicated that all samples collected during wellhead cut and cap, flowline removal, and facility decommissioning activities were in compliance with Table 915-1 standards or within background levels x1.25 for Table 915-1 metals.

The wellhead, flowline, and facility are depicted on Figures 1 through 3. The PID readings and soil sample results are summarized in Tables 1 and 2, respectively.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

[X] Will soil samples be collected as part of this investigation? (Number, type (grab/composite), analyses, and locations of samples):

Between October 9, 2024 and February 26, 2025, soil samples were collected from the base of the cut and cap excavation, from the locations where the flowline risers were disconnected from the wellhead and from the separator, from where the flowline changed directions, and from the locations of the former AST, PWV (above and below the liner), and separator. The samples were submitted for laboratory analysis of full list ECMC Table 915-1 constituents, using ECMC-approved methods. Laboratory analytical results for all soil samples were within the ECMC Table 915-1 allowable levels or background levels x1.25 for Table 915-1 metals. The laboratory reports are attached.

Proposed Groundwater Sampling

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

Groundwater was encountered in the PWV excavation at approximately 5 ft bgs. One groundwater sample was collected for analysis of full list Table 915-1 constituents in groundwater. One background groundwater sample was collected for Table 915-1 inorganic constituents. Results indicate that groundwater is in compliance with Table 915-1 allowable levels or background levels. Due to the compliant organic detections in groundwater, monitoring wells were installed to verify that no dissolved-phase impacts are present. The groundwater and background groundwater sample locations are depicted on Figure 3. The groundwater analytical results are summarized in Table 3.

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 October 9, 2024, visual inspection and field screening of soil were conducted at 4 sidewall locations within the cut and cap excavation area, 4 locations at the ground surface adjacent to the cut and cap excavation, 2 flowline potholes, the drain and footprint of the AST, and three sidewalls of the PWV 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 October 23, 2024, a soil gas survey was conducted at three soil vapor points (SVPs) installed adjacent to the former wellhead location following cut and cap operations. Two SVPs were blocked and could not be screened. GEM 5000 field readings were all non-detect for methane at all other SVPs. The soil vapor point locations are depicted on Figure 1.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected: 22
Number of soil samples exceeeding 915-1: 14
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: 5.31
BTEX > 915-1: No
Vertical Extent > 915-1 (in feet): 0

Groundwater

Number of groundwater samples collected: 11
Was extent of groundwater contaminated delineated? No
Depth to groundwater (below ground surface, in feet): 5
Number of groundwater monitoring wells installed: 5
Number of groundwater samples exceeding 915-1: 0

-- — Highest concentration of Benzene (µg/l): 1.45
-- — Highest concentration of Toluene (µg/l): 92.2
-- — Highest concentration of Ethylbenzene (µg/l): 5.55
-- — Highest concentration of Xylene (µg/l): 14.8
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?

One tank battery background sample was collected from the fill material used to construct the tank battery. Eleven background soil samples were collected from native material adjacent to the wellhead cut and cap excavation. The background soil samples were submitted for laboratory analysis of pH, electrical conductivity (EC), sodium adsorption ratio (SAR), boron, and ECMC Table 915-1 metals, using ECMC-approved methods. Laboratory analytical results indicate that levels of arsenic, barium, cadmium, lead, and selenium are high in the soil used to construct the tank battery and SAR, pH, arsenic, barium, cadmium, hexavalent chromium, copper, lead, and selenium are naturally high in the native soil.

One background groundwater sample was collected for Table 915-1 inorganic constituents in groundwater. The background groundwater analytical results are summarized in Table 3.

The background sample locations are depicted on Figures 1 and 3.

☐ 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.

Laboratory analytical results for all soil samples collected during wellhead cut and cap, flowline removal, and facility decommissioning activities were within the ECMC Table 915-1 allowable levels or background levels x1.25. As a result, no soil was removed during decommissioning activities. The excavation areas were backfilled and contoured to match pre-existing site conditions.

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.

Laboratory analytical results for all soil samples collected during wellhead cut and cap, flowline removal, and facility decommissioning activities were within the ECMC Table 915-1 allowable levels or background levels x1.25. Groundwater was encountered in the PWV excavation at 5 ft bgs. Groundwater is in compliance with Table 915-1 allowable levels or background levels.

Due to the compliant organic detections in groundwater in the PWV excavation, monitoring wells (MW01 through MW05) were installed on February 26, 2025 to verify that no dissolved-phase impacts were present. Four soil samples (SB01 through SB04) were collected from each soil boring advanced during monitoring well installation outside of the excavation backfill material. The soil samples were submitted for analysis of full list Table 915-1 constituents. Laboratory analytical results indicated that levels of arsenic, copper, and lead exceeding the Table 915-1 allowable levels and background levels were present at the SB03 location; however, given the presence of elevated arsenic, copper, and lead in the existing background samples for the site, the lack of organic detections above the laboratory reporting limits in that location, and the location of SB03 approximately 50 feet away from the compliant excavation extent, the inorganic results at SB03 are indicative of background conditions and not an indication of a spill or release associated with E&P activities. The soil analytical results are summarized in Table 2 and the boring logs are attached.

Soil Remediation Summary

☐ **In Situ**

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Air sparge / Soil vapor extraction

_____ Natural Attenuation

_____ Other _____

☐ **Ex Situ**

_____ 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.

Due to the compliant organic detections in groundwater, five monitoring wells were installed on February 26, 2025 to verify that no dissolved-phase impacts are present. Quarterly groundwater monitoring of wells MW01 through MW05 commenced on March 5, 2025. Upgradient monitoring well MW04 was chosen as a local background for determining inorganic constituent compliance at the site. Based on the March and June 2025 analytical results, all samples were within the ECMC Table 915-1 allowable levels for all constituents and no organic constituents were detected above the laboratory reporting limits from any samples collected from the monitoring wells. The monitoring well locations are depicted on Figure 4. A groundwater elevation contour map generated using the June 2025 gauging data is included as Figure 5. The groundwater analytical results are summarized in Table 3 and the laboratory analytical reports from the March and June 2025 monitoring events are attached.

Groundwater monitoring will continue on a quarterly basis until a No Further Action request is warranted.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

[X] 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: [X] Groundwater Monitoring [ ] Land Treatment Progress Report [ ] O&M Report

[ ] Other

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: $ 10000

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.

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. 05/29/2024

Actual Spill or Release date, or date of discovery.

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 10/09/2024

Proposed site investigation commencement. 10/09/2024

Proposed completion of site investigation. 12/31/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation.

Proposed date of completion of Remediation.

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

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

Signed: Macy Kiel Title: HSE Advisor

Submit Date: 08/08/2025 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: Alexander Ahmadian Date: 08/27/2025

Remediation Project Number: 36648

COA Type	Description
	Background samples were collected from areas on-location and are not representative of background conditions near the facility. These samples shall be omitted from future background determination calculations. Operator shall obtain additional background samples from locations sufficiently away from the impacted area to reflect conditions not impacted by oil and gas activity, from similar depths, and soil horizons or lithologic materials for comparison to confirmation soil samples.
	ECMC has denied this Form. Verification samples of this magnitude are not considered valid. If the Operator chooses to use verification samples for every sample point or chooses to use multiple verification samples for a single sample point, then the Operator must explain their scientific justification for running multiple reruns/resamples. Operator shall omit the use of verification samples until scientific justification is provided.
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
404252935	FORM 27-SUPPLEMENTAL-SUBMITTED
404252946	LOGS
404252948	LABORATORY ANALYTICAL REPORT
404252949	LABORATORY ANALYTICAL REPORT
404252950	LABORATORY ANALYTICAL REPORT
404252951	LABORATORY ANALYTICAL REPORT
404252952	GROUND WATER ELEVATION MAP
404252953	SOIL SAMPLE LOCATION MAP
404252954	SITE MAP
404252955	SOIL SAMPLE LOCATION MAP
404252956	SOIL SAMPLE LOCATION MAP
404256443	ANALYTICAL DATA SUMMARY TABLE(S)

Total Attach: 12 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)