

State of Colorado  
Energy & Carbon Management Commission1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number:

403653381

Receive Date:

01/22/2024

Report taken by:

Candice (Nikki) Graber

## Site Investigation and Remediation Workplan (Initial 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 COGCC 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: KP KAUFFMAN COMPANY INC | Operator No: 46290       | Phone Numbers              |
| Address: 1700 LINCOLN ST STE 4550         |                          | Phone: (720) 868-9848x0110 |
| City: DENVER                              | State: CO                | Zip: 80203                 |
| Contact Person: John Peterson             | Email: jpeterson@kpk.com | Mobile: (303) 550-8872     |

## PROJECT, PURPOSE &amp; SITE INFORMATION

## PROJECT INFORMATION

Remediation Project #: Initial Form 27 Document #: 403653381

## 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

No Multiple Facilities

|  |                     |                        |   |
|--|---------------------|------------------------|---|
| Facility Type: LOCATION                  | Facility ID: 478843 | API #:                 | County Name: WELD                         |
| Facility Name: Facility 9                | Latitude: 40.090170 | Longitude: -104.882480 |   |
| ** correct Lat/Long if needed: Latitude: |                     | Longitude:             |   |
| QtrQtr: SWSW                             | Sec: 34             | Twp: 2N                | Range: 6W Meridian: 6 Sensitive Area? Yes |

## SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use Cropland

Is domestic water well within 1/4 mile? No

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

County Road 14 is 1,000 ft N of site. County Road 19 is 1,100 ft E of site. 55 water wells are within 1/2-mile radius of site; nearest domestic water well is 1,570 ft SE of site (DWR and ECMC GIS tool). An unnamed ditch is located approximately 100' east of the site; Brantner Ditch is 1,150 ft SE of site. Nearest wetland is 265' ft S of site. Nearest 100-year floodplain is 2090' feet S of site. Site is located approximately 2450' from the nearest High Priority Habitat. No springs or livestock within a mile. Depth to groundwater of 3.23 feet measured in Kerr McGee monitoring well BH9 located onsite in July 2023 (Document #403562218).

**DENIED**

## 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   |
|--------------|----------------|------------------|------------------|
| UNDETERMINED | SOILS          | TBD              | Pressure testing |

### INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

On November 11, 2022, Kerr McGee Oil & Gas Onshore Lp (KMG) submitted a Form 27 Site Investigation and Remediation Workplan (Document #403203869) for remediation project no 9246. KMG presented data indicating that groundwater impacts above Table 915-1 discovered in a newly installed monitoring well were associated with KPK's Facility 9 flowline header (Facility ID 478843) or Dwight G Hanks Tank Battery (Facility ID 443044), both located directly adjacent to the impacted monitoring well. KPK is submitting this Form 27 Site Investigation and Remediation Workplan (Document #403653381) proposing investigation at Facility 9 flowline header and Dwight G Hanks Tank Battery in response to a Warning Letter received by KPK from the ECOM dated 1.9.24. KPK reviewed historical data collected through July 2023 associated with Remediation Project #9246. KMG installed 27 monitoring wells (25 remaining) across the site as part of the investigation of the Hanks Pooling Unit #1 release. In July 2023, the depth to groundwater ranged from approximately 2' to 6' bgs, and the groundwater flow direction was to the east/southeast.

KMG monitoring well BH23 reported exceedances for benzene and 1,2,4-TMB. BH23 was installed approximately 5 feet from KPK's Dwight G. Hanks B 1 flowline and roughly 25 feet south of KMG's Hank's Pooling Unit #1 wellhead that was removed around 2013 according to aerial photographs (see attached figure).

KMG monitoring well BH24 reported chloride exceedances. BH24 is located upgradient of KPK's facilities. The elevated chloride results likely represent background concentrations. See attached figures.

### 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 ):

#### Proposed Groundwater Sampling

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

#### 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 ):

KPK will perform a pressure test on the Dwight G. Hanks B 1 flowline to ensure the flowline is not leaking.

## SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

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

### NA / ND

\_\_\_\_\_ Highest concentration of TPH (mg/kg) \_\_\_\_\_  
\_\_\_\_\_ Highest concentration of SAR \_\_\_\_\_  
\_\_\_\_\_ BTEX > 915-1 \_\_\_\_\_  
\_\_\_\_\_ Vertical Extent > 915-1 (in feet) \_\_\_\_\_

### 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?

☐ 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?

KPK will perform a pressure test on the Dwight G. Hanks B 1 flowline to ensure the flowline is not leaking.

## REMEDIAL ACTION PLAN

### SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

If the pressure test fails and the source of the impacts is determined to belong to KPK, a soil and groundwater investigation will be completed to define impacts and determine an appropriate method of remediation. Contaminated soils will be excavated and transported off-site to a licensed disposal facility.

### 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.

If the pressure test fails and the source of the impacts is determined to belong to KPK, a soil and groundwater investigation will be completed to define impacts and determine an appropriate method of remediation.

### 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

\_\_\_\_\_ Natural Attenuation

\_\_\_\_\_ Other \_\_\_\_\_

\_\_\_\_\_ Name of Licensed Disposal Facility or COGCC 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.

If the pressure test fails and the source of the impacts is determined to belong to KPK, a groundwater investigation will be completed to define impacts and determine an appropriate method of remediation.

## 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

### 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.

KPK has sufficient insurance and bonding to fully address the anticipated costs of Remediation, including the remaining estimated costs for this project. KPK has general liability insurance and financial assurance in compliance with ECMC rules. The cost for remediation is a preliminary estimate only and is based only on analytical costs to conduct closure sampling at this time, costs may change upwards based on site-specific information. KPK makes no representation or guarantees as to the accuracy of the preliminary estimate.

Operator anticipates the remaining cost for this project to be: \$ 2000

### 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

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

Volume of E&P Waste (liquid) in barrels

E&P waste (liquid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

# 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.

If impacts are determined to be KPK's responsibility and investigation/remediation are required, 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. 02/01/2024

Proposed date of completion of Reclamation. 02/01/2024

## 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. \_\_\_\_\_

Actual Spill or Release date, or date of discovery. \_\_\_\_\_

## SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 02/01/2024

Proposed site investigation commencement. 02/01/2024

Proposed completion of site investigation. 02/01/2024

## 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: Katherine Kahn

Title: Senior Hydrogeologist

Submit Date: 01/22/2024

Email: kkahn@quandaryconsultants.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: \_\_\_\_\_

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

Remediation Project Number: \_\_\_\_\_

**COA Type****Description**

|       |   |
|-------|---|
|       | <p>Operators submittal does not meet the requirements outlined in ECMC warning letter Document #403648075. Operator is required to "submit a Form 27 Site Investigation and Remediation Workplan with a workplan and timeline to investigate if impacts are present at Operators Facility 9 flowline header and Dwight G Hanks Tank Battery."</p> <p>Operator shall submit a revised workplan in 14 days in accordance with the warning letter. This shall include a soil and groundwater investigation and a specific timeline.</p> <p>The warning letter will not be closed out until this requirement is met</p> |
| 1 COA |   |

**Attachment Check 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**

|           |                           |
|-----------|---------------------------|
| 403653381 | FORM 27-INITIAL-SUBMITTED |
| 403660597 | SITE MAP                  |
| 403662654 | SITE MAP                  |

Total Attach: 3 Files

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

|  |  |                     |
|--|--|---------------------|
|  |  | Stamp Upon Approval |
|--|--|---------------------|

Total: 0 comment(s)