

State of Colorado
Energy & Carbon Management Commission1120 Lincoln Street, Suite 801, Denver, Colorado 80203
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403748934

Receive Date:

04/11/2024

Report taken by:

Laurel Anderson

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 ECOM 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) 8689848x0110
City: DENVER	State: CO	Zip: 80203
Contact Person: John Peterson	Email: jpeterson@kpk.com	Mobile: (303) 5508872

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 35566 Initial Form 27 Document #: 403748934

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: SPILL OR RELEASE	Facility ID: 485956	API #: _____	County Name: WELD
Facility Name: Facility 8 @ Pehr 12-1	Latitude: 40.076797	Longitude: -104.848633	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NESE	Sec: 2	Twp: 1N	Range: 6W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications MH Most Sensitive Adjacent Land Use Cropland

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

Distance to potential receptors is as follows:

Water well: approximately 611 feet northeast of spill.

Surface water: unnamed pond located approximately 475 feet northeast of spill.

Wetlands: freshwater pond located approximately 971 feet east of spill.

Livestock: approximately approximately 689 feet northeast of spill.

Occupied building: approximately 580 feet southeast of spill.

100 year floodplain: approximately 2700 feet east of spill.

High priority habitat: Mule deer migration corridor located approximately 2630 feet east of spill.

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	GROUNDWATER	TBD	TBD
Yes	SOILS	TBD	Field screening and soil analytical results

INITIAL ACTION SUMMARY

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

Xcel Damage Prevention employee contacted KPK about the spill on 1.26.24. KPK personnel immediately went to the site, shut in the wellheads, and isolated the flowline. KPK mobilized a vac truck to evacuate the flowline. The Hydro-Vac removed fluids/stained soil for offsite disposal. The spill is located between the Kerr McGee Pehr Pooling Unit 1 battery and CR 23. KPK installed a snow fence around the spill. Surface staining was approximately 72 ft² (6'x12'). See attached pictures. The spill occurred approximately 20 ft east of CR 23 and roughly 0.2 miles south of Highway 52. Cropland is east of the Kerr McGee battery. KPK notified Weld County, the landowner, and ECMC of the spill. If impacts are determined to be within the CR 23 right-of-way, KPK will notify Weld County and obtain the necessary plans/permits to complete the remediation work. KPK will provide notice to ECMC at least 48 hours prior to excavation backfill, soil boring/monitoring well installation, or any sampling events.

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):

After further excavation and field screening is completed, KPK proposes the collection of 4 sidewall soil samples and 1 bottom hole soil sample within the excavation. Please reference attached proposed sampling location figure. Also, KPK will collect 5 additional soil samples from borings for monitoring wells and will submit samples with either the highest PID or nearest interval to the groundwater table for analysis under table 915-1 requirements.

Proposed Groundwater Sampling

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

KPK plans to install 5 groundwater monitoring wells (4 surrounding, 1 in excavation center) at this location. Wells will be installed, developed, purged, and sampled on a quarterly basis until 4 consecutive quarters show that concentrations are below table 915-1 levels.

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):

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

NA / ND

Number of soil samples collected 8

Number of soil samples exceeding 915-1 8

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

Approximate areal extent (square feet) 92

NA Highest concentration of TPH (mg/kg)

-- Highest concentration of SAR 10.5

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 0

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet) 7

Number of groundwater monitoring wells installed 0

Number of groundwater samples exceeding 915-1 0

NA Highest concentration of Benzene (µg/l)

NA Highest concentration of Toluene (µg/l)

NA Highest concentration of Ethylbenzene (µg/l)

NA Highest concentration of Xylene (µg/l)

NA Highest concentration of Methane (mg/l)

Surface Water

0 Number of surface water samples collected

0 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 samples were collected at 4 locations. Each location collected a sample at 0-5 feet and 5-10 feet (8 total background samples). Background samples were analyzed for 915-1 inorganics and results show background samples exceeded table 915-1 in arsenic, barium, lead, selenium, EC, SAR, pH, and Boron. See attached tables.

☐ 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 plans to continue excavation efforts to remove and properly dispose of all impacted soils. Field screening will be completed by using a PID and excavating soil. Once PID readings no longer detect hydrocarbons, confirmation soil samples will be collected at each of the 4 sidewalls and 1 from the excavation floor for lab analysis. Once excavation is complete, KPK plans to install 5 monitoring wells around and in the excavation (4 surrounding, 1 in the excavation).

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

The source area will be removed via excavation. All excavated soil will be properly disposed of at Front Range Landfill. Manifests will be attached to subsequent forms as they are generated. Field screening and lab analytical data in reference to table 915-1 will be used to determine that all soil impacts have been removed.

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.

KPK will continue excavating and removing all impacted soil within the current excavation and properly dispose of all waste at a certified disposal facility. As data are collected, technical and economic evaluations will occur, a remedy selected and implemented, and a schedule provided.

Soil Remediation Summary

☐ In Situ

☒ Ex Situ

Bioremediation (or enhanced bioremediation)

Yes Excavate and offsite disposal

Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) 50

Air sparge / Soil vapor extraction

Name of Licensed Disposal Facility or ECMC Facility ID #

_____ Natural Attenuation
_____ Other _____

_____ No 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.

KPK plans to install 5 groundwater monitoring wells (4 surrounding, 1 in excavation center) at this location. Wells will be installed, developed, purged, and sampled on a quarterly basis until 4 consecutive quarters show that concentrations are below table 915-1 levels. Proposed groundwater monitoring well locations are included in an attached figure.

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 Site Investigation 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.

Additional tasks include excavation/scraping, soil sampling, backfilling of excavation, groundwater monitoring, and reclamation. 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, costs may change upwards or downward 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: \$ 50000

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? Yes

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

NA

Volume of E&P Waste (solid) in cubic yards 1

E&P waste (solid) description petroleum impacted soil

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility: Front Range Landfill

Volume of E&P Waste (liquid) in barrels 0

E&P waste (liquid) description

ECMC Disposal Facility ID #, if applicable:

Non-ECMC 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.

The site will be reclaimed in accordance with ECMC 1000 Series Reclamation Rules. The surface owner will be consulted as well on reclamation efforts.

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? No

If YES, does the seed mix comply with local soil conservation district recommendations? _____

Did the local soil conservation district provide the seed mix? No

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. 07/02/2025

Proposed date of completion of Reclamation. 09/02/2025

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. 01/26/2024

Actual Spill or Release date, or date of discovery. 01/26/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/26/2024

Proposed site investigation commencement. 01/26/2024

Proposed completion of site investigation. 08/30/2024

REMEDIAL ACTION DATES

Proposed start date of Remediation. 08/30/2024

Proposed date of completion of Remediation. 08/30/2025

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

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

Signed: Cullen Chew

Title: Environmental Coordinator

Submit Date: 04/11/2024

Email: cchew@kpk.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: Laurel Anderson

Date: 05/29/2024

Remediation Project Number: 35566

COA Type**Description**

	If field screening is to be used in conjunction with laboratory reports to define the horizontal and vertical impacts, operator shall provide field screening readings when submitting the Form 27 Supplemental Site Investigation. PID's shall be calibrated according to manufacture specifications.
	Per COA on Form 19i Doc #403668567: "In accordance with 913.d.(1) Operator will investigate impacts to soil, Groundwater, and surface water as soon as the impacts are discovered."
	<p>Per COA on Form 19s Doc #403672604: "Operator states:"KPK notified Weld County of the spill on 1.26.24. If impacts are determined to be within the County Road 23 right-of-way, KPK will notify Weld County and obtain the necessary plans/permits to complete the remediation work." in response to a COA on Form 19 Initial (Doc #403668567). Operator has also indicated the spill occurred approximately 20 feet east of County Road 23. Weld County. The Weld County Road right-of-way extends 30 feet on each side of County Road 23; therefore, impacts are present within the Weld County right-of-way. Operator shall notify Weld County and obtain a Weld County Right-Of-Way Use Permit if needed."</p> <p>Operator shall provide documentation of correspondence with Weld County and copies of any required plans/permits on subsequent Supplemental Form 27.</p>
	<p>Per COA on Form 19i Doc #403668567: "Operator shall properly dispose of oily waste in accordance with Rule 905.e and attach all waste manifests, gate tickets/receipts for oily waste hauled off site for disposal to the next Supplemental Form 19 per Rule 905.b.(3)."</p> <p>Operator has not provided waste manifests for E&P waste removed during initial spill response activities witnessed by ECMC. Operator shall provide this information on the next quarterly report (due July 10, 2024).</p> <p>Note: Operator has indicated 50 cubic yards of soil has been excavated and disposed offsite.</p>
	Operator shall collect confirmation soil samples as described in Table 1 of the Rule 915.e.(2) Guidance Document (Published 1/11/2021).

5 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**

403748934	FORM 27-INITIAL-SUBMITTED
403749371	ANALYTICAL RESULTS
403749702	ANALYTICAL RESULTS

403749703	ANALYTICAL RESULTS
403749704	MAP
403749754	PHOTO DOCUMENTATION

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)