FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

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Report taken by: Kari Brown

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 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: KP KAUFFMAN COMPANY INC Operator No: 46290
Address: 1700 LINCOLN ST STE 4550
City: DENVER State: CO Zip: 80203
Contact Person: Cullen Chew Email: cchew@kpk.com

Phone Numbers
Phone: (720) 8689848
Mobile: (205) 9144843

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 41833 Initial Form 27 Document #: 404203497

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.
- [X] 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.
- [X] 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: 489684 API #: County Name: WELD
Facility Name: Hazel McHale #2 Flowline Latitude: 40.107451 Longitude: -104.850132
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: NESE Sec: 26 Twp: 2N Range: 67W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM
Most Sensitive Adjacent Land Use wetland
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

Distances to potential receptors are as follows:
Water well: located approximately 405' northwest of spill
Surface water: an unnamed pond is located approximately 441' west of the spill, unnamed ditch located approximately 1015' east of spill
Wetlands: freshwater emergent wetland located approximately 30' south of spill, USACE has been notified of this spill
Livestock: pens are located approximately 590' northwest of spill
Occupied building: residence located approximately 407' south of spill
Bald Eagle Nest Half Mile Buffer Zone is within the spill location. The nest is located approximately 2200' southeast of the spill location. Communications concerning the nest with CPW have been provided in previous form 19's

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
Yes	GROUNDWATER	TBD	TBD
Yes	SOILS	2634 sq ft	Visual observations and field screening 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.

On March 28, 2025, the landowner notified KPK & the Fort Lupton Fire Department of a spill associated with the Hazel McHale #2 flowline. KPK immediately shut in the well & evacuated the flowline. KPK excavated the impacted soil adjacent to the line failure to complete repairs & remove the impacted soil for remediation purposes. At that time approximately 10yd3 of impacted soil was generated, stockpiled on plastic. An estimated 25-gallons (.79 bbls) of free liquids were evacuated utilizing a vacuum truck for off-site disposal purposes. Free liquids were mixed with contaminated soil for solid waste disposal. Volume was estimated at the time of the initial excavation. On 4/1/25, KPK personnel assessed the excavation, field screened eight locations & collected GPS coordinates of the sample locations. See attached figures. An estimated 1248 yd3 of impacted soil has been generated & based on the assessment results, further excavation/assessment is required to determine the extents of soil impacts. Manifests attached.

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):

KPK will collect sidewall soil samples from the excavation per Table 1 of Rule 915.e.(2). Approximately 11 sidewall samples are proposed based on the current size of the excavation. KPK will also complete soil borings to install 5 monitoring wells. Soil samples will be collected from each boring from the interval showing the highest PID reading or nearest to the water table. All soil samples will be analyzed for full Table 915-1. See attached figure for proposed soil boring locations.

Proposed Groundwater Sampling

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

KPK proposes installing a minimum of 5 wells in (1 source well) and surrounding the excavation in each cardinal direction (4 wells N,E,S,W). Groundwater samples will be collected on a quarterly basis and submitted for the full Table 915-1 analysis. See attached figure for proposed monitoring well locations.

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

Number of soil samples collected 0

Number of soil samples exceeeding 915-1 0

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

Approximate areal extent (square feet) 2634

NA / ND

NA Highest concentration of TPH (mg/kg)

NA Highest concentration of SAR

BTEX > 915-1 No

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) 10

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?

☐ 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

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Source is to be removed via excavation. Contaminated soil has been hauled off site and disposed of at a proper disposal facility. Manifests generated are included as an attachment. KPK will perform confirmation sampling of the excavation in accordance with Table 1 of 915.e.(2) and will continue removing contamination where necessary via excavation. Additionally, KPK will apply COGAC to the groundwater in the excavation and backfill once the removal of soil impacts has been verified via laboratory analytical results under Table 915-1.

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 plans to collect confirmation samples surrounding the excavation in accordance with Table 1 of 915.e.(2). to be analyzed for full Table 915-1 constituents. Excavation will continue until confirmation samples are below Table 915-1 Protection of Groundwater Soil Screening Level Concentrations. Additionally, KPK plans to collect soil samples from soil borings completed to install groundwater monitoring wells. KPK will install a minimum of 5 monitoring wells in (1 well) and surrounding the excavation in each cardinal direction (4 wells N, E, S, W). Groundwater will be monitored on a quarterly basis until 4 consecutive quarters of clean results are achieved. When impacts to groundwater are delineated, remedial technologies will be evaluated.

Soil Remediation Summary

☐ **In Situ** ☒ **Ex Situ**

Bioremediation (or enhanced bioremediation)

Yes Excavate and offsite disposal

Chemical oxidation

Air sparge / Soil vapor extraction

Natural Attenuation

Other

If Yes: Estimated Volume (Cubic Yards) 1248

Name of Licensed Disposal Facility or ECMC Facility ID #

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 will install 5 monitoring wells in (1 well) and surrounding the excavation in each cardinal direction (4 wells N, E, S, W). Groundwater monitoring wells will be surveyed to determine the direction of groundwater flow and monitored on a quarterly basis for Table 915-1 analytes until 4 consecutive quarters of clean results are achieved. See attached figure for proposed monitoring well locations.

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: [ ] 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 estimates that this project is 30% complete. Remaining tasks include additional excavation, confirmation soil sampling, water monitoring well installation, backfill, 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: $ 80000

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:

No beneficial use.

Volume of E&P Waste (solid) in cubic yards 1248

E&P waste (solid) description petroleum impacted soil

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility: Buffalo Ridge Landfill

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

E&P waste (liquid) description petroleum impacted water

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.

Reclamation will occur based the 1000 series reclamation rules.

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. 10/24/2025

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. 03/29/2025

Actual Spill or Release date, or date of discovery. 03/28/2025

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/28/2025

Proposed site investigation commencement. 03/28/2025

Proposed completion of site investigation. 10/24/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 03/28/2025

Proposed date of completion of Remediation. 10/24/2026

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

Regarding the difference in excavation extent size and shape across the figures:

The areas to the west and south of the large excavation were not impacted, however, access was created at those locations to reach deeper depths with available equipment until KPK could mobilize a trac-hoe to the site for deeper access. The non contaminated soil was treated as contaminated and disposed of.

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: 06/09/2025 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: Grace Rollins Date: 07/31/2025

Remediation Project Number: 41833

COA Type	Description
	ECMC does not approve the proposed schedule. Given the proximity to the residence, the Operator shall implement the proposed work plan upon approval of this Form 27.
	Location and/or its associated flowlines lie within the following mapped High Priority Habitat(s): -Bald Eagle Nest Half Mile Buffer Please note that Approval of this Form 27 does not supersede any Federal, State or Local regulations. ECMC recommends continued consultation with Colorado Parks and Wildlife.
	Operations have impacted/encroached on the wetland. Operator shall consult with the US Army Corps of Engineers regarding compliance with Sections 401 and 404 of the Clean Water Act. Operator shall submit all communications/permits obtained to the ECMC via Form 4 Sundry.
	Based on the area of the excavation, at least six floor samples are needed. Due to the presence of groundwater within the excavation and the lack of slope stability observed at the location, floor samples may be collected via soil boring following backfill of the excavation. Soil samples shall be collected at a depth to ensure samples are representative conditions of in-situ soil beneath the backfill of the excavation.
	Based on the area of the excavation, at least two source monitoring wells are needed within the boundaries of the excavation. Based on the topography and anticipated direction of groundwater flow at the location, additional monitoring wells are needed along the southern and eastern boundaries of the excavation.
	Operator shall submit a minimum of one soil sample for laboratory analysis of complete Table 915-1 Parameters from each soil boring advanced during monitoring well installation. The sample collected will be from the interval(s) displaying the highest degree of impacts or in the absence of apparent impacts from beneath the previous excavation extent, the interval in which organic compounds were previously detected, and/or the soil-groundwater interface.
	Operator shall provide boring logs in accordance with standard environmental practices. This includes at a minimum; lithology description, USCS classifications, PID readings, sample collection depths, depth to water, and well construction.
	Operator will adhere to Table 915-1 Cleanup Concentrations and begin sampling for the Organic Compounds in Groundwater (benzene, toluene, ethylbenzene, xylenes, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene) and the Groundwater Inorganic Parameters (total dissolved solids, chloride, sulfate).
	Per the COA on Form 19 Document Number 404145889: “Operator shall provide an explanation of how the volume of liquids spilled was calculated on the subsequent Form 19 Supplemental Report.” Operator shall provide this information on the subsequent Supplemental Form 27.

	Operator will provide notice to ECMC DJ Basin Environmental Supervisor Nikki Graber and to ECMC Area EPS via email at least 48 hours prior to any sampling events performed on location.
	Spill ID 489684 remains open. The Form 19 Supplemental requesting closure was due by 06/26/2025. Operator shall submit a Form 19 Supplemental requesting closure immediately upon approval of this Form 27.
	In accordance with Rule 913.e.(3), Operator will adopt a quarterly reporting schedule (every 90 days). ECMC selected Quarterly under Remediation Progress Update.
12 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
404203497	FORM 27-INITIAL-SUBMITTED
404219961	DISPOSAL MANIFESTS
404220367	MAP
404233846	PHOTO DOCUMENTATION

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date
Environmental	Note: Based on the scope of work proposed and the reclamation required, ECMC does not believe Operator's anticipated remaining cost for this project is adequate.	07/31/2025

Total: 1 comment(s)