

State of Colorado Oil and Gas Conservation Commission

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403221853

Receive Date:

11/10/2022

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 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: <u>KP KAUFFMAN COMPANY INC</u>	Operator No: <u>46290</u>	Phone Numbers
Address: <u>1700 LINCOLN ST STE 4550</u>		Phone: <u>(970) 261-3567</u>
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80203</u>
Contact Person: <u>Craig Meis</u>	Email: <u>cmeis@kpk.com</u>	Mobile: <u>()</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 18932 Initial Form 27 Document #: 402720755

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: <u>SPILL OR RELEASE</u>	Facility ID: <u>479267</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Longmont Farms Unit #5 Flowline</u>		Latitude: <u>40.105497</u>	Longitude: <u>-104.994215</u>
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SWSW</u>	Sec: <u>27</u>	Twp: <u>2N</u>	Range: <u>68W</u>
Meridian: <u>6</u>		Sensitive Area? <u>Yes</u>	

SITE CONDITIONS

General soil type - USCS Classifications SC Most Sensitive Adjacent Land Use Single-family residences

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

Approximately 22 residences, possibly 9 habitable structures are within a quarter mile of the well; Tipple Parkway is approximately 1,170 feet south of the site; SURFACE WATER: The site is 1,330 feet south-southwest of Sullivan Ditch which is a USFWS-mapped riverine wetland (R4SBCx). The 100 year floodplain is not mapped within 1/4 mile of the site; High Priority habitat is approximately 3,955 feet southwest of the site; a Bald Eagle Roost site is not located within 1/4 mile of the site; a Bald Eagle Active Nest site half mile buffer is 3,955 feet southwest of the site. There is 1 domestic water well within a quarter mile of the site.

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	Unimpacted	Temporary Monitoring Wells
Yes	SOILS	5250 sq ft	Analytical

INITIAL ACTION SUMMARY

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

KPK was notified of a release at the site, and immediately dispatched crews, to shut in the line. The well shut in and flowline depressurized. Additional crews were dispatched, and Free product was removed utilizing a Hyrdovac, and excavation commenced to eliminate hydrocarbons transporting across the site. Excavation efforts will take place to define the vertical and horizontal extent of the release.

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):

Final vertical and horizontal extent of excavation was based on limits of excavation and on results from grab soil samples and photoionization detector (PID) field screening. 10 confirmation soil samples were collected on 6/21/2021 as described in the Rule 915.e.(2) Guidance Document and were analyzed for TPH (C6-C36), Table 915-1 Organic Compounds in Soil, Table 915-1 metals, and Table 915-1 Soil Suitability for Reclamation (Electrical conductivity, Sodium adsorption ratio, and pH by saturated paste method, boron (hot water soluble). 3 background soil samples were collected and analyzed for arsenic to assess naturally occurring arsenic concentrations. COGCC was provided with a 48 hr notice prior to the sampling event.

Proposed Groundwater Sampling

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

On 6/17/2021, APEX Consulting Services, Inc. installed a temporary monitoring well to 17.5 (refusal) feet bgs. Groundwater was not encountered during probing activities. The temporary well was checked for groundwater on 6/21, 7/6, and 7/19/2021; no groundwater was observed in the well on these dates. Therefore, the pathway from soil to groundwater is incomplete.

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 13

Number of soil samples exceeding 915-1 0

Was the areal and vertical extent of soil contamination delineated? Yes

Approximate areal extent (square feet) 5250

NA / ND

ND Highest concentration of TPH (mg/kg)

-- Highest concentration of SAR 1.29

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 13

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?

3 background soil samples were collected and analyzed for arsenic to assess naturally occurring arsenic concentrations.

☐ 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.

The source of the impacts was shut in when the release was discovered. Free product was removed utilizing a Hyrdovac, and excavation commenced to eliminate hydrocarbons transporting across the site. All impacted soil was excavated and hauled to a certified disposal location. No groundwater was encountered during the source removal. Waste disposal manifests have been provided with this submission. MarCom will provide the required 48-hour notification to COGCC prior to beginning work.

REMEDATION 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.

Final vertical and horizontal extent of excavation was based on limits of excavation and on results from grab soil samples and photoionization detector (PID) field screening. Confirmation soil samples were collected as described in the Rule 915.e.(2) Guidance Document and will be analyzed for TPH (C6-C36), Table 915-1 Organic Compounds in Soil, Table 915-1 metals, and Table 915-1 Soil Suitability for Reclamation (Electrical conductivity, Sodium adsorption ratio, and pH by saturated paste method, boron (hot water soluble). Samples were collected in accordance to COGCCs table 915-1 sample collection guidelines table . COGCC was provided with a 48 hr. notice prior to the sampling event.

Since backfill has been approved, KPK was backfilled up to the flowline to make necessary repairs. KPK installed a new section of 3-inch fiberglass pipe to reconnect flowline. Flowline was pressure tested following the completion of repair work. A copy of the flowline pressure test is attached with this submission.

KPK will collect a composite sample from stockpiled material to determine if soil can be used for backfilling. KPK will analyze the sample for full Table 915 -1 compliance. if there are exceedances (taking into account background sample results), KPK will dispose of soil at a certified disposal facility.

Soil Remediation Summary

☐ In Situ

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Air sparge / Soil vapor extraction

_____ Natural Attenuation

_____ Other _____

☒ Ex Situ

Yes _____ Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards) _____ 2100

Name of Licensed Disposal Facility or COGCC Facility ID # _____

No _____ Excavate and onsite remediation

_____ Land Treatment

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Other _____

Groundwater Remediation Summary

No _____ Bioremediation (or enhanced bioremediation)

No _____ Chemical oxidation

No _____ Air sparge / Soil vapor extraction

No _____ Natural Attenuation

No _____ 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 groundwater is encountered during decommissioning and/or abandonment activities, a grab sample will be collected as soon as practical. If contaminated soil is in contact with groundwater or if free product/hydrocarbon sheen are observed, the release will be reported in accordance with Rule 912.b. Groundwater samples will be submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene by EPA Method 8260. A Groundwater Monitoring plan with a total of 5 wells, 1 upgradient, 2 cross gradient, 1 down gradient, and 1 at source (Additional wells may be necessary) will be submitted for approval, and Groundwater monitoring will continue until 4 clean consecutive quarters is achieved. COGCC will be provided a 72 Hour notice prior to the installation of Monitoring wells.

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 COGCC 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: \$ 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:

No beneficial use

Volume of E&P Waste (solid) in cubic yards 2100

E&P waste (solid) description Hydrocarbon Impacted Soil

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility: Front Range Landfill

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

E&P waste (liquid) description N/A

COGCC Disposal Facility ID #, if applicable:

Non-COGCC 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?

Does the previous reply indicate consideration of background concentrations?

Does Groundwater meet Table 915-1 standards?

Is additional groundwater monitoring to be conducted? _____

Operator shall comply with the COGCC 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.

KPK will reclaim the site for its previous intended use (oil and gas facility). Any removed base material will be replaced and recompacted per COGCC guidelines. Any impacted areas off of the well pad/lease road will be reclaimed according to 1100 series and landowner preferences.

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. 12/26/2022

Proposed date of completion of Reclamation. 01/23/2023

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. 01/20/2021

Actual Spill or Release date, or date of discovery. 01/19/2021

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 06/09/2021

Proposed site investigation commencement. 06/09/2021

Proposed completion of site investigation. 06/21/2021

REMEDIAL ACTION DATES

Proposed start date of Remediation. 08/13/2021

Proposed date of completion of Remediation. 08/25/2021

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

This Form 27 is being submitted as a quarterly update and to address previous COAs. KPK completed a pressure test on the replaced flowline. Results from the pressure test are attached with this submission. All current manifests have been combined and attached with this submission. The soil disposal totals have been updated to reflect the manifests. The implementation schedule was not fully updated since site investigation is complete and impacts have been removed. The reclamation schedule has been updated to reflect backfill is still required and the well pad needs to be reclaimed to COGCC standards for a well pad. The Flowline integrity test has been provided, pressure held steady at the average operating PSI for this line.

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

Signed: Josiah Reamy

Title: Project Manager

Submit Date: 11/10/2022

Email: PrimaryContractor@MarComLLC.net

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: Candice (Nikki) Graber

Date: 02/21/2023

Remediation Project Number: 18932

COA Type**Description**

	Per COA on Doc #403058155: Operator has updated the initial action summary to indicate free product was removed via hydrovac; however no data has been provided in Waste Disposal Information section for fluids removed nor have waste manifests been provided for the disposal free product. Operator shall populate the applicable information on the subsequent Supplemental Form 27.
	Per COA on Doc #403058155: ""Operator has updated section with proposed completion dates prior to 2022, despite not having completed site investigation nor remediation. Operator shall update the Implementation schedule on the next Supplemental Form 27."" Note: The proposed completion of site investigation is listed as 6/30/2021 despite ongoing site investigation activities.
	Per COA on Doc #402777901: "No additional/stockpile soil samples were taken despite operator stating: "KPK will collect a composite sample from stockpiled material to determine if soil can be used for backfilling. KPK will analyze the sample for full Table 915-1 compliance. if there are exceedances (taking into account background sample results), KPK will dispose of soil at a certified disposal facility"." Operator shall specify if the stockpile was used for backfill or properly disposed as E&P waste.
	Operator indicates the aerial and vertical extent of soil contamination has been delineated despite pH and metals exceedances in multiple sidewall soil samples. Operator shall update this information on the subsequent Supplemental Form 27.

4 COAs

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**

403221853	FORM 27-SUPPLEMENTAL-SUBMITTED
403222085	OTHER
403222088	DISPOSAL MANIFESTS
403222104	PHOTO DOCUMENTATION

Total Attach: 4 Files

General Comments

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

Total: 0 comment(s)