

# State of Colorado Oil and Gas Conservation Commission

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Document Number:

403139473

Receive Date:

08/19/2022

Report taken by:

Candice (Nikki) Graber

## 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>	<b>Phone Numbers</b>
Address: <u>1700 LINCOLN ST STE 4550</u>		Phone: <u>(208) 604-5397</u>
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80203</u>
Contact Person: <u>Vanessa Morgan</u>	Email: <u>PrimaryContractor@marcomllc.net</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 Farm

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

## 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	Unknown at this time	Monitoring wells were dry
Yes	SOILS	Unknown at this time	Excavation

### 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. 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 will be based on limits of excavation and on results from grab soil samples and photoionization detector (PID) field screening. Confirmation soil samples will be 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). At a minimum, one grab sample will be collected from each side of the excavation walls as well as from the base of the excavation area. If needed, extent borings may be installed, and soil samples collected to evaluate the extent of soil impacts.

#### Proposed Groundwater Sampling

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

The temporary well was checked for the presence of groundwater on June 21, July 6 and July 19, 2021. Groundwater was not present in the temporary well on any of the aforementioned dates. If encountered, a grab groundwater sample will be collected from the excavation. Groundwater samples will be analyzed for Table 915-1 Organic Compounds in Groundwater and Table 915-1 inorganic parameters.

#### 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 ):

Additional investigation is required to determine the extent of the impacts. Once excavation has begun it may be warranted to delineate the extent of the excavation utilizing Geoprobng or drilling equipment, depending on excavation status, and analytical results.

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

Number of soil samples collected 13

Number of soil samples exceeding 915-1 9

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 1

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 samples collected on 6/21/2021.

☐ 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?

Additional investigation is required to determine the extent of the impacts. Once excavation has begun it may be warranted to delineate the extent of the excavation utilizing Geoprobe or drilling equipment, depending on excavation status, and analytical results.

## 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 will be excavated and hauled to a certified disposal location. All removed groundwater will be disposed of at a certified disposal location. Waste disposal manifests will be provided with the next form submittal.

## REMEDIAL ACTION 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 remove all impacted media and replace with clean media. KPK does not anticipate groundwater impacts at this time, however if ground water impacts are observed after sampling, KPK will update this project with a remediation plan.

Flowline failure occurred due to 3-inch fiberglass pipe failure. Reason(s) for failure is unknown. 3-inch fiberglass pipe failed in the 12 o'clock position, where a fracture in the pipe was observed. An estimated 30 ft. section of fiberglass pipe has been removed for excavation activities.

Following the approval to backfill, KPK will backfill up to the flowline to make necessary repairs. KPK will install new section of 3-inch fiberglass pipe to reconnect flowline. Flowline will be pressure tested following the completion of repair work.

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

☒ Ex Situ

\_\_\_\_\_ Bioremediation ( or enhanced bioremediation )

Yes \_\_\_\_\_ Excavate and offsite disposal

\_\_\_\_\_ Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_ 1800

\_\_\_\_\_ Air sparge / Soil vapor extraction

Name of Licensed Disposal Facility or COGCC Facility ID # \_\_\_\_\_

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

\_\_\_\_\_ Excavate and onsite remediation

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

\_\_\_\_\_ 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.

The temporary well was checked for the presence of groundwater on June 21, July 6 and July 19, 2021. Groundwater was not present in the temporary well on any of the aforementioned dates.

## 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? Yes

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

No beneficial use identified.

Volume of E&P Waste (solid) in cubic yards 1800

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

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.

Upon receiving confirmation sampling analytical that shows all impacts have been removed, KPK will submit request for Backfill to the state. Upon completion of the backfill KPK will consult with the landowner on seeding preference. Reclamation will commence following 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? \_\_\_\_\_

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. 10/31/2022

Proposed date of completion of Reclamation. 11/30/2022

## 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. 01/19/2021

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. 06/30/2021

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 08/13/2021

Proposed date of completion of Remediation. 12/30/2022

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**

Will continue to add disposal manifests as they are received. Updated attachments will be submitted in next Form 27 submittal.

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

Signed: Vanessa Morgan

Title: Env. Scientist II

Submit Date: 08/19/2022

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: 11/16/2022

Remediation Project Number: 18932

**COA Type****Description**

	<p>COGCC does not approve of:</p> <p>"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."</p> <p>Operator shall specify the volume of soil to be utilized as backfill and the number of composite samples to be taken.</p>
	<p>This Form 27 is being approved as submitted. However, the estimated cost of completion does not reflect the work proposed here (excavation, disposal, and backfill) the next Form 27 Supplemental must be populated with the Adequacy of Operator's General Liability Insurance and Financial Assurance data field under the Remediation Progress Update tab as required by Rules 703.b and 705.b.</p>
	<p>Operator shall notify Nikki Graber (nikki.graber@state.co.us) prior to initiating excavation activities.</p>
	<p>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". "</p>
	<p>Per COA on Doc #403058155: "Operator shall update the Remediation Summary section on the next Supplemental Form 27 to reflect site history."</p>
	<p>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."</p> <p>Note: The proposed completion of site investigation is listed as 6/30/2021 despite ongoing site investigation activities.</p>
	<p>Various constituents in multiple soil samples were reported as ND; however, the laboratory reporting limit exceeded the respective Table 915-1 allowable limit for Protection of Groundwater Soil Screening Level Concentration. Operator shall report values as less than the respective laboratory reporting limit on laboratory analytical summary tables.</p>
	<p>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.</p>
	<p>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.</p>
	<p>Operator's root cause "Reason(s) for failure is unknown." Is not considered adequate. Operator shall provide all investigative data on the next Supplemental Form 27</p>

	All unaddressed COAs/CAs from previously approved forms/inspections still apply. Additionally, all COAs applied to the GRIP apply to this remediation project.
11 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.

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
403139473	FORM 27-SUPPLEMENTAL-SUBMITTED
403139609	ANALYTICAL RESULTS
403139610	MAP
403140059	DISPOSAL MANIFESTS
403141589	ANALYTICAL RESULTS

Total Attach: 5 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Environmental	Note: Operator indicated background samples collected to date were from 2' bgs. Background samples must be obtained from similar depths and soil horizons or lithologic materials for comparison to confirmation soil samples.	11/16/2022

Total: 1 comment(s)