

State of Colorado  
Oil and Gas Conservation Commission

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Document Number:  
403071877

Receive Date:

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Report taken by:

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 Phone: <u>(720) 434-2215</u> Mobile: <u>( )</u>
Address: <u>1700 LINCOLN ST STE 4550</u>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80203</u>
Contact Person: <u>Ray Gorka</u>	Email: <u>rgorka@kpk.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 15825 Initial Form 27 Document #: 402444755

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: Quarterly Update

SITE INFORMATION

No  Multiple Facilities

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>474780</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Cosslett #3</u>	Latitude: <u>40.080399</u>	Longitude: <u>-104.956453</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESW</u>	Sec: <u>1</u>	Twp: <u>1N</u>	Range: <u>68W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

SITE CONDITIONS

General soil type - USCS Classifications SC

Most Sensitive Adjacent Land Use Cropland followed by single-family residences to the northwest

Is surface water within 1/4 mile?

Is domestic water well within 1/4 mile? Yes

No

Is groundwater less than 20 feet below ground surface? Yes

**Other Potential Receptors within 1/4 mile**

Approximately 41 residences and no possible habitable structures are within a quarter mile of the well; The roadway for Liberty Ridge is located approximately 720 feet northeast of the site; County Road 11 is located approximately 1,310 feet west of the site; SURFACE WATER: Godding Hollow, a USFWS-mapped emergent wetland, is located approximately 2,405 feet west of the site. An additional mapped emergent wetland is located approximately 780 feet east-northeast of the site. The 100 year floodplain is west approximately 4,300 feet of the site. High Priority habitat is not mapped within 1/4 mile of the site; No Bald Eagle Roost sites or Bald Eagle Active Nest site half mile buffers are located within 1/4 mile of the site. There are 2 domestic water wells within a quarter mile of the site.

# SITE INVESTIGATION PLAN

## TYPE OF WASTE:

- |                                                    |                                                      |                                        |
|----------------------------------------------------|------------------------------------------------------|----------------------------------------|
| <input checked="" type="checkbox"/> E&P Waste      | <input type="checkbox"/> Other E&P Waste             | <input type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids             | _____                                  |
| <input checked="" type="checkbox"/> Oil            | <input type="checkbox"/> Tank Bottoms                |                                        |
| <input type="checkbox"/> Condensate                | <input type="checkbox"/> Pigging Waste               |                                        |
| <input type="checkbox"/> Drilling Fluids           | <input type="checkbox"/> Rig Wash                    |                                        |
| <input type="checkbox"/> Drill Cuttings            | <input type="checkbox"/> Spent Filters               |                                        |
|                                                    | <input type="checkbox"/> Pit Bottoms                 |                                        |
|                                                    | <input type="checkbox"/> Other (as described by EPA) | _____                                  |

## DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	TBD	Excavate/sample

## 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 by Occidental Petroleum about the Cosslett #3 flowline release. Upon notification of the release, KPK immediately shut-in the flowline. Excavation equipment was brought in to remove surface staining only. Additional excavation could not be performed due to co-located flowlines in the area. A hydrovac unit will be needed to continue excavation activities. No pooled liquids were present upon arrival at the location of the release. Based on the observation of minimal surface staining, it is estimated that the release was less than 1 bbl of fluid. Flowline failure occurred due to ground settling as a result of recent installation of flowline by separate operator. Damaged section of flowline will be repaired and flowline will be pressure tested before being brought back into service.

## 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. COGCC will be provided with a 48 hr notice prior to any sampling event.

### Proposed Groundwater Sampling

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

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.

### 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 may be required to determine the extent of the impacts. Once excavation has begun it may be warranted to delineate further the extent of the excavation utilizing Geoprobng or drilling equipment, depending on excavation status, and analytical results. If Geoprobng is necessary to determine the extent of impacts step out borings from the original proposed plan may be warranted to find the full extent of the impacts. If Geoprobng is necessary a supplemental Form 27 will be submitted with a proposed boring plan.

# 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?

Additional investigation may be required to determine the extent of the impacts. Once excavation has begun it may be warranted to delineate further the extent of the excavation utilizing Geoprobng or drilling equipment, depending on excavation status, and analytical results. If Geoprobng is necessary to determine the extent of impacts step out borings from the original proposed plan may be warranted to find the full extent of the impacts. If Geoprobng is necessary a supplemental Form 27 will be submitted with a proposed boring plan.

## 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. No free product/pooled liquids were present upon arrival at the release location. Additional excavation will required a HydroVac due to the amount of flowlines and other utilities in the surrounding area. 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. MarCom will provide the required 48-hour notification to COGCC prior to beginning work.

## REMEDICATION 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 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). Samples will be collected in accordance to COGCCs table 915-1 sample collection guidelines table . If needed, extent borings may be installed, and soil samples collected to further evaluate the extent of soil impacts. COGCC will be provided with a 48 hr. notice prior to any sampling event.

## Soil Remediation Summary

In Situ

Ex Situ

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

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

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

\_\_\_\_\_ If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_ 120

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

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

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

No \_\_\_\_\_ Excavate and onsite remediation

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

\_\_\_\_\_ 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? 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 \_\_\_\_\_ 120

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 sample 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? 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. 02/06/2023

Proposed date of completion of Reclamation. 03/06/2023

## 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. 03/11/2020

Actual Spill or Release date, or date of discovery. 03/11/2020

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/11/2020

Proposed site investigation commencement. 08/17/2020

Proposed completion of site investigation. 12/26/2022

### REMEDIAL ACTION DATES

Proposed start date of Remediation. 01/02/2023

Proposed date of completion of Remediation. 01/30/2023

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 has not completed additional excavation work or confirmation sampling as of the date of this Form 27 submittal. The implementation schedule has been updated to reflect a realistic time-frame to complete excavation and confirmation sampling. Schedule will be updated if confirmation sample analytics or field screening results indicate extensive excavation will be required to remove impacted soils.

**OPERATOR COMMENT**

Operator has not completed additional excavation work or confirmation sampling as of the date of this Form 27 submittal. Operator will need to utilize a HydroVac in the existing excavation based on co-located flowlines in the area. 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 further evaluate the extent of soil impacts. COGCC will be provided with a 48 hr notice prior to any sampling event. All existing waste manifests are attached. A site map and topographic map are attached. Photo documentation, updated site maps, analytical results, and waste manifests will be provided in a supplemental Form 27. The implementation schedule has been updated to reflect current site conditions.

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: \_\_\_\_\_

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: \_\_\_\_\_

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

Remediation Project Number: 15825

**COA Type****Description**

COA Type	Description
0 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**

403072021	DISPOSAL MANIFESTS
403212330	SITE MAP
403212331	MAP

Total Attach: 3 Files

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

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)