

# State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

402536186

Receive Date:

11/19/2020

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 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.

Refer to Rules 340, 905, 906, 907, 908, 909, and 910

### OPERATOR INFORMATION

Name of Operator: <u>KP KAUFFMAN COMPANY INC</u>	Operator No: <u>46290</u>	<b>Phone Numbers</b>
Address: <u>1675 BROADWAY, STE 2800</u>		Phone: <u>(303) 825-4822</u>
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Max Knop</u>	Email: <u>mknop@kpk.com</u>	Mobile: <u>(720) 317-8161</u>

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 16131Initial Form 27 Document #: 402536186

#### PURPOSE INFORMATION

- |  |  |
|--|--|
| <input type="checkbox"/> 901.e. Sensitive Area Determination                                       | <input type="checkbox"/> 909.c.(5), Rule 910.b.(4): Remediation of impacted ground water                   |
| <input type="checkbox"/> 909.c.(1), Rule 905: Pit or PW vessel closure                             | <input type="checkbox"/> Rule 909.e.(2)A.: Notice completion of remediation in accordance with Rule 909.b. |
| <input checked="" type="checkbox"/> 909.c.(2), Rule 906: Spill/Release Remediation                 | <input type="checkbox"/> Rule 909.e.(2)B.: Closure of remediation project                                  |
| <input type="checkbox"/> 909.c.(3), Rule 907.e.: Land treatment of oily waste                      | <input type="checkbox"/> Rule 906.c.: Director request   |
| <input type="checkbox"/> 909.c.(4), Rule 908.g.: Centralized E&P Waste Management Facility closure | <input type="checkbox"/> Other _____   |

#### SITE INFORMATION

N Multiple Facilities ( in accordance with Rule 909.c. )

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>478086</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>UPRR 43 PAN AM G Consolidation #2</u>		Latitude: <u>40.014968</u>	Longitude: <u>-104.905802</u>
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SESE</u>	Sec: <u>29</u>	Twp: <u>1N</u>	Range: <u>67W</u>
Meridian: <u>6</u>		Sensitive Area? <u>Yes</u>	

#### SITE CONDITIONS

General soil type - USCS Classifications SCMost Sensitive Adjacent Land Use Residential/CroplandIs domestic water well within 1/4 mile? YesIs surface water within 1/4 mile? YesIs groundwater less than 20 feet below ground surface? Yes

Other Potential Receptors within 1/4 mile

# 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	None	Groundwater Sampling
Yes	SOILS	25'(n-s) x 15'(e-w) x 6' BGS	Extent of 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.

Landowner notified KPK at 2:15 pm on 9/19/2020, via the emergency contact line that an active flowline release was observed. KPK shut-in and depressurized flowline system within 2-hours of notification. Equipment was brought in same day to remove standing liquids and contain flowline release at ground surface level.

## 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 ):

The total horizontal and vertical extent has not been established. Extent of impact will be based on limits of final excavation. Final vertical and horizontal extent of the excavation will be based on results from collected grab soil samples from the excavation walls. All soil Samples will be analyzed for TPH-GRO, DRO & ORO (EPA Method 8215), and BTEX (EPA Method 8260) and verified complaint with COGCC Tale 910-1.

### Proposed Groundwater Sampling

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

Groundwater was encountered during excavation. One (1) groundwater sample was collected and analyzed for BTEX (EPA Method 8260). Analytical results verified groundwater sample complaint with COGCC Table 910-1.

COA requirement of Field Inspection Doc#689501092, one (1) sample collected from the private water well (DWR Permit 302477) and verified compliant with COGCC Table 910-1.

### Proposed Surface Water Sampling

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

COA requirement of Field Inspection Doc#689501092, three (3) surface water samples from Big Dry Creek (upstream, downstream, and at location of spill) were collected and verified compliant with COGCC Table 910-1.

## 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 exceeding 910-1             
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 > 910-1             
           Vertical Extent > 910-1 (in feet)           

### Groundwater

Number of groundwater samples collected 2  
Was extent of groundwater contaminated delineated? Yes  
Depth to groundwater (below ground surface, in feet) 5'  
Number of groundwater monitoring wells installed 0  
Number of groundwater samples exceeding 910-1 0

ND Highest concentration of Benzene (µg/l)             
ND Highest concentration of Toluene (µg/l)             
ND Highest concentration of Ethylbenzene (µg/l)             
ND Highest concentration of Xylene (µg/l)             
NA Highest concentration of Methane (mg/l)           

### Surface Water

3 Number of surface water samples collected  
0 Number of surface water samples exceeding 910-1  
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.

All impacted soil will be excavated and hauled to a certified disposal location.

## 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.

Excavation will be performed to remove all impacted soil. Impacted soil will be disposed of at the Denver Regional Landfill in Erie, CO. Excavation activities are ongoing. Remaining excavation work to remove impacted soil is estimated to be conducted through Nov-Dec 2020. Following the completion of excavation activities, soil samples will be collected.

## 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) \_\_\_\_\_ 100  
\_\_\_\_\_ Name of Licensed Disposal Facility or COGCC Facility ID # \_\_\_\_\_  
\_\_\_\_\_ 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.

## REMEDIATION PROGRESS UPDATE

### PERIODIC REPORTING

**Frequency:** ☐ Quarterly ☐ Semi-Annually ☐ Annually ☐ Other \_\_\_\_\_

**Report Type:** ☐ Groundwater Monitoring ☐ Land Treatment Progress Report ☐ O&M Report  
☐ Other \_\_\_\_\_

### WASTE DISPOSAL INFORMATION

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

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

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

E&P waste (solid) description \_\_\_\_\_

COGCC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-COGCC Disposal Facility: \_\_\_\_\_

Volume of E&P Waste (liquid) in barrels \_\_\_\_\_

E&P waste (liquid) description \_\_\_\_\_

COGCC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-COGCC 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.

Upon obtaining complaint confirmation soil samples, the excavation area will be backfilled using clean fill dirt, recontoured, and seeded.

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 approve the seed mix? ☐ No \_\_\_\_\_

If NO, does the seed mix comply with local soil conservation district recommendations? ☐ Yes \_\_\_\_\_

## IMPLEMENTATION SCHEDULE

### PRIOR DATES

Date of Surface Owner notification/consultation, if required. 09/19/2020

Actual Spill or Release date, if known. 09/19/2020

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 09/19/2020

Date of commencement of Site Investigation. 09/19/2020

Date of completion of Site Investigation. \_\_\_\_\_

### REMEDIAL ACTION DATES

Date of commencement of Remediation. 09/19/2020

Date of completion of Remediation. \_\_\_\_\_

### SITE RECLAMATION DATES

Date of commencement of Reclamation. \_\_\_\_\_

Date of completion of Reclamation. \_\_\_\_\_

**OPERATOR COMMENT**

--

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

Signed: ` Max Knop \_\_\_\_\_

Title: Gen Mangr of Air Quality \_\_\_\_\_

Submit Date: ` 11/19/2020 \_\_\_\_\_

Email: mknop@kpk.com \_\_\_\_\_

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: CHRIS CANFIELD \_\_\_\_\_

Date: 11/23/2020 \_\_\_\_\_

Remediation Project Number: 16131 \_\_\_\_\_

**COA Type****Description**

--	--

**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**

402536186	FORM 27-INITIAL-SUBMITTED
402536253	GROUND WATER SAMPLE LOCATION
402536254	ANALYTICAL RESULTS

Total Attach: 3 Files

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

		Stamp Upon Approval
--	--	---------------------

Total: 0 comment(s)