### State of Colorado Oil and Gas Conservation Commission 1120 Lincoln Street, Suite 801, Denver, Colorado 80203

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Receive Date:

08/12/2021

Report taken by: CHRIS CANFIELD

Site Investigation	n and Remediation	Workplan	(Supplemental	Form)
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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 INFORMATON**

Name of Operator: KP KAUFFMAN COMPAN	IY INC	Operator No:	46290	Phone Numbers
Address: 1675 BROADWAY, STE 2800			Pł	none: (303) 8254822
City: DENVER	State: CO	Zip:80202	M	obile: ( )
Contact Person: Jeff Rickard		Email: jr	ickard@kpk.c	om
PROJEC	CT, PURPOSE & SI		ΓΙΟΝ	
PROJECT INFORMATION				
Remediation Project #: 16131	Initial Form 27	7 Document #:	40253	6186
PURPOSE INFORMATION		_		
Rule 913.c.(1): Pit or Cuttings Trench closure.				
Rule 913.c.(2): Buried or partially buried vess	el closure, which will be by re	moval.		
Rule 913.c.(3): Remediation of Spill and Relea	ases 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 W	aste Management Facilities p	oursuant to Rule 907.	٦.	
Rule 913.c.(6): Remediation of impacted Grou	undwater pursuant to Rule 91	5.e.(3).D, and the cor	taminant conce	entrations in Table 915-1.
Rule 913.c.(7): Investigation and remediation	of natural gas in soil or Groui	ndwater.		
Rule 913.c.(8): When requested by the Direct	or due to any potential risk to	soil, Groundwater, or	surface water.	
Rule 913.c.(9): Decommissioning of Oil and G	as Facilities.			
Rule 913.g: Changes of Operator.				
Rule 915.b: Request to leave elevated inorga	nics in situ.			
X Other: Request to temp. backfill				
	Multiple Facilities			
Facility Type: SPILL OR RELEASE Facility I	D: 478086 API #:	C	ounty Name: W	/ELD
Facility Name: UPRR 43 PAN AM G Con	solidation #2 Latitud	de: 40.014968	Longitu	ide: -104.905802
** corre	ect Lat/Long if needed: Latitud	de:	Longitu	ıde:
QtrQtr: SESE Sec: 29	Twp: 1N Range:	67W Meridi	an: 6	Sensitive Area? Yes
SITE CONDITIONS				
General soil type - USCS Classifications SC	Most Sensitive	Adjacent Land Use	Residential/Cro and	.pl
Is domestic water well within 1/4 mile? Yes	Is surface wate	er within 1/4 mile? Y	es	
Is groundwater less than 20 feet below ground surface	? Yes	_		

### SITE INVESTIGATION PLAN

<u>TYPE OF WASTE:</u>	
X E&P Waste	Other E&P Waste
X Produced Water	Workover Fluids
XOil	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

**X** 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

X 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

X 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

ation of TPH (mg/kg)
ation of TPH (mg/kg)
ation of SAR
915-1 (in feet)
ation of Benzene (µg/l)
ation of Toluene (µg/l)
ation of Ethylbenzene (µg/l)
ation of Xylene (µg/l)
ation of Methane (mg/l)

### **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.

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		Ex Si	tu
	Bioremediation ( or enhanced bioremediation )	Yes	Excavate and offsite disposal
	Chemical oxidation		If Yes: Estimated Volume (Cubic Yards) 100
	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
	vater Remediation Summary Bioremediation ( or enhanced bioremediation )		
(	Chemical oxidation		
	Air sparge / Soil vapor extraction		
	an openge / con vapor oxitabilon		
	Natural Attenuation		
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# **REMEDIATION PROGRESS UPDATE**

PERIODIC REPORTING Approved Reporting Schedule:		
Quarterly       Semi-Annually       Annually       X Other       E&P Waste Disposal Update         Request Alternative Reporting Schedule:	PEF	RIODIC REPORTING
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 has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent 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		Approved Reporting Schedule:
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   Other     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:   None   Volume of E&P Waste (solid) in cubic yards   48   E&P waste (solid) description   Hydrocarbon impacted soils   COGCC Disposal Facility ID #, if applicable:   0   E&P waste (liquid) description   COGCC Disposal Facility ID #, if applicable:		Quarterly Semi-Annually Annually X Other E&P Waste Disposal Update
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		Request Alternative Reporting Schedule:
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COGCC Disposal Facility ID #, if applicable:		Volume of E&P Waste (solid) in cubic yards 48
Non-COGCC Disposal Facility:       Denver Regional Landfill         Volume of E&P Waste (liquid) in barrels       0         E&P waste (liquid) description       0         COGCC Disposal Facility ID #, if applicable:       0		E&P waste (solid) description Hydrocarbon impacted soils
Volume of E&P Waste (liquid) in barrels       0         E&P waste (liquid) description       0         COGCC Disposal Facility ID #, if applicable:       0		COGCC Disposal Facility ID #, if applicable:
E&P waste (liquid) description COGCC Disposal Facility ID #, if applicable:		Non-COGCC Disposal Facility: Denver Regional Landfill
COGCC Disposal Facility ID #, if applicable:		Volume of E&P Waste (liquid) in barrels 0
		E&P waste (liquid) description
Non-COGCC Disposal Facility:		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 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 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? Yes		
SITE RECLAMATION DATES		
Proposed date of commencement of Reclamation.		
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. 09/19/2020

Actual Spill or Release date, or date of discovery. 09/19/2020

#### SITE INVESTIGATION DATES

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

Proposed site investigation commencement. 09/19/2020

Proposed completion of site investigation.

#### **REMEDIAL ACTION DATES**

Proposed start date of Remediation. 09/19/2020

Proposed date of completion of Remediation.

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			
interfered with at this time. Samples of the West, East, North wa	In season is over. There is an irrigation line to the south that is active and cannot be alls and the bottom were taken under witness of the COGCC and are all under table 915 in are naturally occurring with BG samples at a future date)(Report attached).		
KPK believes it is safer to temporally backfill the excavation as o	KPK believes it is safer to temporally backfill the excavation as opposed to fencing while we are on hold for irrigation season.		
I hereby certify all statements made in this form are to the	best of my knowledge true, correct, and complete.		
Signed:` Jeff Rickard	Title: Regulatory		
Submit Date:` 08/12/2021	Email: jrickard@kpk.com		
Based on the information provided herein, this Application for Rules and applicable orders and is hereby approved.	or Site Investigation and Remediation Workplan complies with COGCC		
COGCC Approved: CHRIS CANFIELD	Date: 08/27/2021		
Remediation Project Number: 16131			

### **Condition of Approval**

<u>COA Type</u>	Description
	Operator shall submit Quarterly Updates every 90 days including a detailed project summary and status, as required by Rule 913.e. Quarterly updates shall include a current map of the subject location including current excavation limits, soil boring locations, and monitoring well locations. GPS data used to create the map must comply with COGCC Rule 216. Operator will include historical and recent soil analytical data in a table format in Quarterly updates. Operator shall submit field notes of all field activities reported during a Quarterly Update.
	Operator will provide notice to COGCC EPS Kari Brown (kari.oakman@state.co.us) at least 48 hours prior to backfill or any sampling events preformed on location.
	COGCC does not approve the operator's request to temporarily backfill the excavation. The operator has stated that their request was in consideration of irrigation at the subject location. That is not consistent with recent communication COGCC has had with the surface owner and the owner of adjacent property, both of whom said they have not irrigated since June 2021 and do not anticipate irrigating again during 2021.
	Operator shall submit an Implementation Schedule as is required by required by Rule 913.d. The schedule will include planned dates and duration(s) of activities during the next quarterly reporting period. Changes to schedule for cause, must be requested at least 14 days in advance.
	As required by Rule 915.e.(1)A, Field measurements and field tests will be conducted using appropriate equipment, calibrated and operated according to manufacturer specifications, by personnel trained and familiar with the equipment. Operators will provide all field measurements and tests to the Director upon request, including but not limited to field notes, field screening logs, soil boring logs, monitor well construction Logs, pump test reports, photographs, and soil vapor screening results.
5 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
402778012	FORM 27-SUPPLEMENTAL-SUBMITTED
402778020	ANALYTICAL RESULTS

Total Attach: 2 Files

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# **General Comments**

<u>User Group</u>	Comment	Comment Date
		Stamp Upon Approval
Total: 0 comment(s)		