

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:
403061877
Receive Date:
06/14/2022
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>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80203</u>
Contact Person: <u>Levi Kirk</u>	Email: <u>primarycontractor@marcomllc.net</u>	Phone: <u>(970) 237-1415</u>
		Mobile: <u>()</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 18594 Initial Form 27 Document #: 402707643

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

Yes Multiple Facilities

Facility Type: <u>PIT</u>	Facility ID: <u>118555</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>PAUL HEINZE1</u>	Latitude: <u>40.034628</u>	Longitude: <u>-104.916813</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESW</u>	Sec: <u>20</u>	Twp: <u>1N</u>	Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>
Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>479232</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Paul Heinze #1 Flowline</u>	Latitude: <u>40.035140</u>	Longitude: <u>-104.917660</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESW</u>	Sec: <u>20</u>	Twp: <u>1N</u>	Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

Facility Type: SPILL OR RELEASE Facility ID: 480128 API #: _____ County Name: WELD
Facility Name: Paul Heinze #1 Flowline (No. 2) Latitude: 40.035030 Longitude: -104.917750
** correct Lat/Long if needed: Latitude: _____ Longitude: _____
QtrQtr: NESW Sec: 20 Twp: 1N Range: 67W Meridian: 6 Sensitive Area? No

SITE CONDITIONS

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use Cropland

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

Bald Eagle nesting within half Mile, we are currently working on contracting a wildlife biologist to be on site during work, as request by Brandon Marrett with Colorado Parks and Wildlife (CPW), and consult with him before any work moves forward.

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
UNDETERMINED	GROUNDWATER	Unknown	Undetermined
Yes	SOILS	Unknown	Undetermined

INITIAL ACTION SUMMARY

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

Associated well (Paul Heinze #1) has been shut-in since discovery of the release. Excavation and disposal of impacted soil has been an ongoing process since the discovery 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 collected grab soil samples. All soil samples will be analyzed and verified compliant with COGCC Table 915-1. 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. MarCom LLC conducted field screenings at site on 5/17/2022 and determined further excavation was required. Following the consultation with CPW MarCom would like to propose conducting Geoprobng at the site to determine the extent of impacts. A map is attached with the proposed probing locations.

Proposed Groundwater Sampling

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

KPK contracted Apex Consulting Services to install a temporary groundwater monitoring well to collect at least one (1) groundwater sample. Groundwater characterization will be made based on the analytical results (Table 915-1) of the collected groundwater sample(s).

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):

Further excavation is required and will be conducted following the delineation of impacts at the site.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

NA / ND

Number of soil samples collected 0

 Highest concentration of TPH (mg/kg)

Number of soil samples exceeding 915-1

 Highest concentration of SAR

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

BTEX > 915-1 _____

Approximate areal extent (square feet) _____

Vertical Extent > 915-1 (in feet) _____

Groundwater

Number of groundwater samples collected _____ 0

_____ Highest concentration of Benzene (µg/l) _____

Was extent of groundwater contaminated delineated? No _____

_____ Highest concentration of Toluene (µg/l) _____

Depth to groundwater (below ground surface, in feet) _____

_____ Highest concentration of Ethylbenzene (µg/l) _____

Number of groundwater monitoring wells installed _____

_____ Highest concentration of Xylene (µg/l) _____

Number of groundwater samples exceeding 915-1 _____

_____ 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?

A site specific at depth background plan will be submitted on a supplemental form 27 following the completion of further excavation.

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?

MarCom proposes conducting Geoprobng at the site to delineate the extent of the impacts, each boring will be logged for lithology, and soil samples will be collected at highest PID and bottom hole, additionally soil samples need to be collected.

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? Yes _____

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

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, further source removal is required at the site, as currently there is a produced water concrete vault that needs removing, but work will not move forward with out consulting CPW.

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.

Excavation will be performed to remove all impacted soil from all associated facilities. Impacted soil will be brought to a certified disposal facility. If groundwater is found to be impacted, a groundwater monitoring plan will be submitted for review and approval to address known impacts to groundwater.
Excavation and disposal of impacted soil will proceed until field screening results indicate soil impacts have been removed. Confirmation samples will be collected following notification to COGCC if field screening results indicate impacts have been removed.
Further excavation is required but prior to excavation the extent of the impacts will be delineated with a Geoprobe.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

Yes _____ Excavate and offsite disposal

_____ Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) _____ 2320

_____ Air sparge / Soil vapor extraction

Name of Licensed Disposal Facility or COGCC Facility ID # _____

_____ Natural Attenuation
_____ Other _____

_____ 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.

A temporary monitoring well has been installed by Apex, and has been monitored since installation, but it has been dry.

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 holds adequate operator general liability and financial assurance in accordance to the agreed upon amount in the KPK CPA and Grip plan.

Operator anticipates the remaining cost for this project to be: \$ 1 _____

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 _____ 2320

E&P waste (solid) description Hydrocarbon impacted soil

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: Front Range Landfil

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.

Following the removal of all impacts, KPK will request backfill. Once backfill is granted, KPK will consult with landowner on seeding and reclamation of the site.

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. 10/10/2022

Proposed date of completion of Reclamation. 10/31/2022

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. 01/17/2021

Actual Spill or Release date, or date of discovery. 01/17/2021

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/18/2021

Proposed site investigation commencement. 07/19/2021

Proposed completion of site investigation. 06/30/2022

REMEDIAL ACTION DATES

Proposed start date of Remediation. 07/19/2021

Proposed date of completion of Remediation. 09/25/2022

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

This form 27 is being submitted in efforts to move forward with proposed delineation borings. At this time no analytical is available as no samples have been collected for soil nor Groundwater, as the monitoring well that was installed has been dry since installation. The attached GW monitoring report includes the wells location and the field logs from the boring. Additionally cost for the project can not fully be determined until delineation of the site is completed.

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

Signed: Levi Kirk

Title: Project Manager

Submit Date: 06/14/2022

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: Laurel Anderson

Date: 06/16/2022

Remediation Project Number: 18594

Condition of Approval

COA Type

Description

	Operator shall complete the Adequacy of Operator's General Liability Insurance and Financial Assurance section on the next Form 27 Subsequent to provide information about their general liability insurance coverage and an estimate of remaining project costs based on current available data as required per Rule 905.f.
	Operator shall submit Quarterly Updates for REM 18594 every 90 days as required by Rule 913.e. This quarterly update was submitted 185 days late.
	Per COA on Doc #402798041: Operator will submit a Form 19 Supplemental Report for the purpose of requesting closure of Spill/Release ID 480128 as will proceed under REM 18594. Note: A form requesting closure of this spill was due by August 31, 2021, and as of June 13, 2022, is 286 days past due.
	Attached Groundwater Monitoring Report indicates additional groundwater monitoring is no warranted. This is not in compliance with Rule 915.e.(3)A. Due to the presence of impacted soil in contact with groundwater (groundwater observed within the excavation) Operator shall: Comply with Table 915-1 Protection of Groundwater Soil Screening Level Concentrations. Operator shall install monitoring wells (within the spill/release area, cross-gradient, down-gradient, and up-gradient) to properly characterize groundwater pursuant to Rule 915 and determine hydraulic gradient, as required by Rule 915.e.(3)A.ii. All monitoring wells shall be constructed as permanent monitoring wells in accordance with the State Engineer's Water Well Construction and Permitting Rules. Operator shall update the proposed groundwater sampling section and provide an updated map with the proposed monitoring well locations for COGCC approval.
	Operator has previously provided soil analytical data; However, no data has been provided in the soil sample summary section, nor has an Analytical Summary Table been provided. Operator shall populate the applicable information and provide an ongoing Analytical Summary Table along with GPS coordinates for each sample location on all future Supplemental Form 27's.
	Operator has previously provided a Disposal Water Ticket; However, no data has been provided in Waste Disposal Information section. Operator shall populate the applicable information on the next Supplemental Form 27.
	All unaddressed COAs/CAs from previously approved forms/inspections still apply. Additionally, all COAs applied to the GRIP apply to this remediation project.

7 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.

<u>Att Doc Num</u>	<u>Name</u>
403061877	FORM 27-SUPPLEMENTAL-SUBMITTED
403066106	MONITORING REPORT
403078624	MAP
403078640	CORRESPONDENCE

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	COGCC approves of the proposed soil boring locations.	06/13/2022
Environmental	COGCC has added Spill ID 480864 to this Form. Operator shall reference all open Spills under Remediation 18594 on subsequent Supplemental Form 27's.	06/13/2022
Environmental	The Primary Contractor indicated they've been in contact with CPW during a telephone conversation with COGCC personnel. CPW has informed the primary contractor the Bald Eagles are currently not nesting at the location; As such the primary contractor has been granted approval to move forward with work through September 2022. Operator shall provide all correspondence with CPW on the next Supplemental Form 27.	06/13/2022

Total: 3 comment(s)