

State of Colorado
Oil and Gas Conservation Commission

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Document Number:
403055757
Receive Date:
05/23/2022

Report taken by:
Laurel Anderson

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.

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>(970) 237-1415</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>Levi Kirk</u>	Email: <u>Primarycontractor@marcomllc.net</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 23366 Initial Form 27 Document #: 403055757

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>LOCATION</u>	Facility ID: <u>479311</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>UPRR 42 PAN AM AE MANIFOLD 2</u>	Latitude: <u>40.094130</u>	Longitude: <u>-104.925760</u>	
** correct Lat/Long if needed: Latitude: <u>40.094020</u>		Longitude: <u>-104.925690</u>	
QtrQtr: <u>NESE</u>	Sec: <u>31</u>	Twp: <u>2N</u>	Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>481730</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Facility 4 AE 2</u>	Latitude: <u>40.094059</u>	Longitude: <u>-104.925604</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESE</u>	Sec: <u>31</u>	Twp: <u>2N</u>	Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use Developed

Is domestic water well within 1/4 mile? Yes

Is surface water within 1/4 mile? No

Is 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
Yes	SOILS	280 yards	Calculated based off of 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.

KPK was notified by another operator that impacts were located near the KPK flowline. KPK dispatched field crews to the site and began excavating to expose line. NO leaks or damage was found and it was labeled as a historical release. KPK crews began excavating and removing impacted soil.

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):

Soil samples were collected for the site on 4/28/2022, under COGCC witness. Analytical results indicate further excavation is required on the Bottom hole, additionally backgrounds should be collected based upon the analytical results of the metals. MarCom is proposing a site specific background plan where a total of four background locations are sampled on site. Each background location will have samples collected at 4 and 8', and they will be analyzed for table 915.1 Inorganics. The Proposed background locations are attached in a Map.

Proposed Groundwater Sampling

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

If groundwater is encountered at the site, then a groundwater monitoring well installation plan will be submitted.

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 background samples will be collected.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 9

Number of soil samples exceeding 915-1 9

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 945

NA / ND

-- Highest concentration of TPH (mg/kg) 154.5

-- Highest concentration of SAR 8.8

BTEX > 915-1 Yes

Vertical Extent > 915-1 (in feet) 8

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?

MarCom is proposing a site specific background plan where a total of four background locations are sampled on site. Each background location will have samples collected at 4 and 8', and they will be analyzed for table 915.1 Inorganics. The Proposed background locations are attached in a Map.

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?

Further excavation is required.

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Source will be removed using excavation, once source has been removed further excavation will continue on impacted soils.

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.

Following the removal of the source, impacted soil will be removed until clean confirmation samples are collected. Before sampling events COGCC will be notified 48 hours prior to sampling.

Soil Remediation Summary

In Situ

Ex Situ

Bioremediation (or enhanced bioremediation)
 Chemical oxidation
 Air sparge / Soil vapor extraction
 Natural Attenuation
 Other _____

Yes Excavate and offsite disposal
If Yes: Estimated Volume (Cubic Yards)
Name of Licensed Disposal Facility or COGCC Facility ID # _____
No 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.

If groundwater was encountered a groundwater monitoring plan will be constructed and submitted for approval.

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 Form 27 _____

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:

Hydrocarbon impacted soil.

Volume of E&P Waste (solid) in cubic yards _____ 280

E&P waste (solid) description Hydrocarbon impacted soils

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: Front Ranger 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: _____

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 hydrocarbon impacted soils, KPK will request backfill on a form 27, and once approval has been granted, KPK will work with the developer to reseed and reclaim the area.

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. 06/25/2022

Proposed date of completion of Reclamation. 07/15/2022

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. 03/09/2022

Actual Spill or Release date, or date of discovery. 03/09/2022

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/09/2022

Proposed site investigation commencement. 04/28/2022

Proposed completion of site investigation. 06/10/2022

REMEDIAL ACTION DATES

Proposed start date of Remediation. 03/09/2022

Proposed date of completion of Remediation. 06/10/2022

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 serves as the initial 27 for the site, and is to move forward with the proposed site specific at depth background plan. All other required attachments will be submitted with the supplemental form 27, which includes maps, coordinates, and manifests.

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: 05/23/2022

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: 06/02/2022

Remediation Project Number: 23366

Condition of Approval

COA Type

Description

	Operator shall provide a list of the associated wells associated with the Facility AE 2 flowline system on the next Supplemental Form 27.
	Operator shall select Rule 913.c.(6) in addition to Rule 913.c.(3) on the next Supplemental Form 27.

	<p>Due to the presence of impacted soil in contact with groundwater (See Complaint Document #697601811) Operator shall:</p> <p>Comply with Table 915-1 Protection of Groundwater Soil Screening Level Concentrations.</p> <p>On the next Form 27s, Operator shall propose a groundwater sampling plan to include the installation of 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.</p>
	<p>Laboratory analytical data (Operator and COGCC) indicates pH (8.32) in sample SW-3@7' exceed Table 915-1 soil suitability levels for reclamation.</p> <p>If the Operator proposes to leave material with elevated levels of pH in situ, the Operator shall provide a detailed Reclamation plan that includes, but is not limited to, soil analysis from adjacent undisturbed lands, revegetation techniques, site stabilization, and details of seeded species. Operator will submit such a Reclamation plan on a Form 27 Supplemental Report for Director review.</p>
	Operator shall provide all waste manifests as required by Rule 905.b.(3) for oily waste (soil and groundwater) hauled off site for disposal.
	All unaddressed COAs/CAs from previously approved forms/inspections still apply
6 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>
403055757	FORM 27-INITIAL-SUBMITTED
403057042	ANALYTICAL RESULTS
403057051	ANALYTICAL RESULTS
403057053	ANALYTICAL RESULTS
403057054	SOIL SAMPLE LOCATION MAP

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	COGCC approves of the proposed site specific background sampling plan.	05/24/2022
Environmental	Per CA on FIR Doc #697601808 Operator was required to: "investigate area of reported spill within 72 hours of this notification and follow spill reporting as outlined in rule 912 in particular with respect to Rule 912.b(1)F." by March 3, 2022. Note: Operator did not submit a Form 19i until March 9, 2022.	05/24/2022
Environmental	Analytical results for split grab soil samples collected from from the excavation (SW-3@7' and BH-1@8') and submitted by COGCC for laboratory analysis of organic compounds in soil, SAR, EC and pH indicate SAR (6.79) and pH (8.32) exceeded Table 915-1 Soil Suitability for Reclamation standards for sample SW-3@7'. Additionally, TPH (829 mg/kg), 1,2,4-trimethylbenzene (0.0477 mg/kg), and SAR (7.10) in BH-1@8' exceeded the respective Table 915-1 standards.	05/24/2022
Environmental	Added Facility 4AE 2 (Spill/Release ID 481730)	05/24/2022

Total: 4 comment(s)