

State of Colorado
Oil and Gas Conservation Commission

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Document Number:
402531378

Receive Date:

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.

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> | Phone Numbers |
| Address: <u>1675 BROADWAY, STE 2800</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> | Phone: <u>(303) 825-4822</u> |
| | | Mobile: <u>(720) 317-8161</u> |

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 11876 Initial Form 27 Document #: 401776946

PURPOSE INFORMATION

901.e. Sensitive Area Determination 909.c.(5), Rule 910.b.(4): Remediation of impacted ground water

909.c.(1), Rule 905: Pit or PW vessel closure Rule 909.e.(2)A.: Notice completion of remediation in accordance with Rule 909.b.

909.c.(2), Rule 906: Spill/Release Remediation Rule 909.e.(2)B.: Closure of remediation project

909.c.(3), Rule 907.e.: Land treatment of oily waste Rule 906.c.: Director request

909.c.(4), Rule 908.g.: Centralized E&P Waste Management Facility closure Other _____

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

| | | | |
|------------------------------------------------|----------------------------|-------------------------------|-----------------------------|
| Facility Type: <u>SPILL OR RELEASE</u> | Facility ID: <u>441100</u> | API #: _____ | County Name: <u>JACKSON</u> |
| Facility Name: <u>SPILL/RELEASE POINT</u> | Latitude: <u>40.781138</u> | Longitude: <u>-106.240976</u> | |
| ** correct Lat/Long if needed: Latitude: _____ | | Longitude: _____ | |
| QtrQtr: <u>SWNW</u> | Sec: <u>2</u> | Twp: <u>9N</u> | Range: <u>79W</u> |
| | Meridian: <u>6</u> | Sensitive Area? <u>Yes</u> | |

SITE CONDITIONS

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

Is domestic water well within 1/4 mile? No Is surface water within 1/4 mile? No

Is groundwater less than 20 feet below ground surface? No

Other Potential Receptors within 1/4 mile

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 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 | 200' x 10' | Visual and soil analysis |

INITIAL ACTION SUMMARY

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

During the previous operator, Bonanza Creek, and while conducting routine inspections, a release was observed along a flowline right of way. Approximately 7.4 bbl of oil and produced water were discharged to the ground surface. The well was shut-in immediately to stop the release. Incident response personnel were contacted to cleanup the discharged oil/water. The ground was frozen and the fluid was pooled on the ground surface.

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):

KPK field screened the release location area October 2019. Field screening results from ambient temperature head space measurements within the release area showed elevated readings at 7 of the 11 screening locations. Summary of field screening results have been provided in the attached site map. Soil sampling was not conducted in October 2019 due to the elevated field screening results. Based results of the PID field screening, excavation is necessary to remove impacted soil associated the release. Final vertical and horizontal extent of excavation area will be based on results from collected grab soil samples. All soil samples will be analyzed for TPH - DRO, GRO & ORO, BTEX, pH, EC, and SAR and verified compliant with COGCC Table 910 -1.

Proposed Groundwater Sampling

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

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):

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 4
Number of soil samples exceeding 910-1 1
Was the areal and vertical extent of soil contamination delineated? Yes
Approximate areal extent (square feet) 2000

NA / ND

-- Highest concentration of TPH (mg/kg) 1000
NA Highest concentration of SAR
BTEX > 910-1 No
Vertical Extent > 910-1 (in feet) 0

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 910-1

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 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

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.

Impacted soil with analytical results exceeding Table 910-1 thresholds will be excavated and disposed of at the Walden Land Treatment Facility.

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.

Area showing elevated readings from PID field screening will be excavated until total horizontal and vertical extent of the historical contamination is defined. Final vertical and horizontal extent of excavation area will be based on results from collected discrete soil samples. Discrete soil samples will be collected from the base and walls of the final area of excavation. Discrete soil samples will be collected from investigation area showing no elevated PID readings. All soil samples will be analyzed for TPH - DRO, GRO & ORO, BTEX, pH, EC, and SAR and verified compliant with COGCC Table 910-1.

Excavation activities are scheduled to begin July 2021 and will continue until confirmation samples can be collected.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

Yes _____ Excavate and offsite disposal

_____ Chemical oxidation

_____ If Yes: Estimated Volume (Cubic Yards) _____ 50

_____ Air sparge / Soil vapor extraction

_____ Name of Licensed Disposal Facility or COGCC Facility ID # _____ 427373

_____ Natural Attenuation

_____ 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.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Frequency: Quarterly Semi-Annually Annually Other KPK to provide update once soil analysis is received

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? No

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: _____

REMEDIATION COMPLETION REPORT

REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? No

Do all soils meet Table 910-1 standards? _____

Does the previous reply indicate consideration of background concentrations? _____

Are the only residual soil impacts pH, SAR, or EC at depths greater than 3 feet below ground surface? _____

Does Groundwater meet Table 910-1 standards? _____

Is additional groundwater monitoring to be conducted? _____

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.

Line was repaired and tested. Soil has been tilled periodically.

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? Yes

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. 03/12/2015

Actual Spill or Release date, if known. 03/12/2015

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/12/2015

Date of commencement of Site Investigation. 03/12/2015

Date of completion of Site Investigation. 10/24/2019

REMEDIAL ACTION DATES

Date of commencement of Remediation. 03/12/2015

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: _____

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: _____

Date: _____

Remediation Project Number: 11876

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

| | |
|-----------|----------|
| 402531464 | SITE MAP |
|-----------|----------|

Total Attach: 1 Files

General Comments

User Group

Comment

Comment Date

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

Total: 0 comment(s)