

State of Colorado
Oil and Gas Conservation Commission



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

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

FOR OGCC USE ONLY
Received 11/20/2018
Rem #9362

Robert Young

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No: 2086962

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☒ Other (describe): Salt Kill Investigation

OGCC Operator Number: 46290

Name of Operator: K.P. Kauffman Company, Inc.

Address: 1675 Broadway Suite 2800

City: Denver State: CO Zip: 80202

Contact Name and Telephone:

Susana Lara-Mesa

No: 303-825-4822

Fax: 303-825-4825

API Number: County: Morgan

Facility Name: Boxer Battery Facility Number: 439100

Well Name: Well Number:

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SWSE S29 T2N R58W Latitude: 40.10274 Longitude: -103.89159

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Produced Water

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☐ Y ☒ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Non-irrigated dryland grass (cattle)

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Truckton Soils, 3 to 9 percent slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): None

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):

- ☒ Soils
☐ Vegetation
☐ Groundwater
☐ Surface Water

Extent of Impact:

Unknown

How Determined:

REMEDIALTION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

As a result of a potential historical related release from produced water storage pit located at the Boxer Battery, KPK will investigate the stormwater runoff areas directly south of the produced water pit. At the direction of the COGCC, KPK will sample the areas highlighted in the attached location drawing and analyze the soil for Conductivity, SAR, and pH as required under COGCC Rule 910.(3).B. Samples will be collected at various depths ranging from 6" to 3' to accurately investigate the potentially contaminated area. Field screening with a PID reader will be performed and logged for each sample.

Describe how source is to be removed:

If results from the collected soil samples are found to exceed the reporting threshold limits established in COGCC Table 910-1, KPK will begin excavation activities within the stormwater runoff areas where applicable. Excavated soil will be disposed of at a certified disposal facility.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

If remediation is required following the analysis of the collected soil samples, KPK will excavate contaminated areas and dispose of excavated soil at a certified disposal facility. New soil samples will be collected from excavation areas and analyzed for pH, EC, and SAR. If results from the collected soil samples are found below the reporting threshold limits established in COGCC Table 910-1, KPK will backfill excavation areas with clean soil and graded to match the existing landscape of the area. Native seed will be applied to revegetate and promote natural erosion control.

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Tracking Number: 2086962

Name of Operator: KP Kauffman Company

OGCC Operator No:46290

Received Date: 11-18-2015

Well Name & No: Boxer Tank Battery

Facility Name & No: 439100

OGCC Employee: Robert Young

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REMEDIATION WORKPLAN (Cont.) Rem #9362

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

If groundwater is encountered during potential excavation, water sampled will be collected and analyzed for BTEX to determine if groundwater is contaminated based on reporting limits established in COGCC Table 910-1.

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. Use additional sheet for description if required.

If remediation is required following the analysis of the collected soil samples, KPK will excavate contaminated areas and dispose of excavated soil at a certified disposal facility. New soil samples will be collected from excavation areas and analyzed for pH, EC, and SAR. If results from the collected soil samples are found below the reporting threshold limits established in COGCC Table 910-1, KPK will backfill excavation areas with clean soil and graded to match the existing landscape of the area. Native seed will be applied to revegetate and promote natural erosion control and graded to match existing landscape.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☒ Y ☐ N If yes, describe:

At the direction of the COGCC, KPK will sample the areas highlighted in the attached location drawing and analyze the soil for pH, electric conductivity (EC), and sodium adsorption ratio (SAR) as required under COGCC Rule 910.(3).B. Samples will be collected at various depths ranging from 6" to 3' to accurately investigate the potentially contaminated area. Additional investigation activities are pending the approval of the soil sample locations by the COGCC and the analytical results of the soil samples.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

If soil is found to be contaminated it will be disposed of at a certified disposal facility.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 11-06-2015

Date Site Investigation Completed: TBD

Date Remediation Plan Submitted: _____

Remediation Start Date: 11-16-2015

Anticipated Completion Date: 12-31-2015

Actual Completion Date: TBD

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

Print Name: Susana Lara-Mesa

Signed:

Title: Vice President of Engineering

Date: 11-18-2015

OGCC Approved: _____ Title: **NE EPS** Date: **11/20/2015**