

State of Colorado  
**Oil and Gas Conservation Commission**



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FOR OGCC USE ONLY  
Received 11/19/2015  
Rem #9363  
  
Robert Young  
OGCC Employee:  
 Spill  Complaint  
 Inspection  NOAV  
Tracking No: 2086966

**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.

**CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED**

Spill or Release  Plug & Abandon  Central Facility Closure  Site/Facility Closure  Other (describe): Pit Closure

OGCC Operator Number: <u>46290</u>	Contact Name and Telephone: <u>Susana Lara-Mesa</u>
Name of Operator: <u>K.P. Kauffman Company, Inc.</u>	No: <u>303-825-4822</u>
Address: <u>1675 Broadway Suite 2800</u>	Fax: <u>303-825-4825</u>
City: <u>Denver</u> State: <u>CO</u> Zip: <u>80202</u>	

API Number: _____	County: <u>Morgan</u>
Facility Name: <u>Boxer Battery</u>	Facility Number: <u>102705</u>
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>SESE S29 T2N R58W</u> Latitude: <u>40.10257</u> Longitude: <u>-103.89023</u>	

**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: Valent Sand, 5 to 25 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):	Extent of Impact:	How Determined:
<input checked="" type="checkbox"/> Soils	<u>Unknown</u>	_____
<input type="checkbox"/> Vegetation	_____	_____
<input type="checkbox"/> Groundwater	_____	_____
<input type="checkbox"/> Surface Water	_____	_____

**REMEDIATION WORKPLAN**

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

The unlined earthen pit (Pit Permit Number: 102705) located 300' east of the Boxer Battery was closed in 2012 by KPK. KPK will investigate the historical remediation and closure of the pit by sampling the locations highlighted in the attached location drawing and analyze the soil samples for EC, 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 closed pit. 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 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 grade to match the existing landscape of the area. Native seed will be applied to revegetate and promote natural erosion control.



Tracking Number: 2086966 Name of Operator: KP Kauffman Company OGCC Operator No: 46290 Received Date: 11-19-2015 Well Name & No: Boxer Tank Battery Facility Name & No: 102705

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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 samples 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 grade to match the existing landscape of the area. Native seed will be applied to revegetate and promote natural erosion control. nd 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? [X] 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 collected at various depths ranging from 6" to 3' to accurately investigate the potentially contaminated area. Additional investigation activities are pending the 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: Date Remediation Plan Submitted: Remediation Start Date: 11-16-2015 Anticipated Completion Date: 13-31-2015 Actual Completion Date:

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: [Signature] Title: Vice President of Engineering Date: 11-19-2015

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

\*See conditions of approval correspondence.