

State of Colorado
Oil and Gas Conservation Commission

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

received 09/24/2015
Project 9264
Document 200437395
Spill 442346

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.

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No:

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

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

GENERAL INFORMATION

OGCC Operator Number: 47120		Contact Name and Telephone	
Name of Operator: Kerr-McGee Oil and Gas Onshore, LP		Name: Phillip Hamlin	
Address: 1099 18th Street, Suite 1800		No: 970-336-3500	
City: Denver State: CO Zip: 80202		Fax: 970-336-3656	
API/Facility No: 318916		County: Weld	
Facility Name: Platteville		Facility Number: 63N66W19SWSW	
Well Name: Platteville		Well Number: 1-19	
Location (Qtr, Sec, Twp, Rng, Meridian): SWSW S19 T3N R66W		Latitude: 40.205456 Longitude: -104.826127	

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.):		Condensate and Produced Water	
Site Conditions: Is location within a sensitive area (according to Rule 901e)?		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N If yes, attach evaluation.	
Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.):		Non-Crop Land	
Soil type, if not previously identified on Form 2A or Federal Surface Use Plan:		Sand	
Potential receptors (water wells within 1/4 mi, surface waters, etc.):		The nearest surface water is located approximately 350' northwest of the site.	
		The nearest water well is located approximately 235' northwest of the release area.	
Description of Impact (if previously provided, refer to that form or document):			
Impacted Media (check):		Extent of Impact:	
<input checked="" type="checkbox"/> Soils		50' (E-W) x 19' (N-S) x 6' bgs	
<input type="checkbox"/> Vegetation			
<input checked="" type="checkbox"/> Groundwater		See attached data	
<input type="checkbox"/> Surface water			
		How Determined:	
		Excavation, soil sampling, and laboratory analysis	
		Groundwater sampling and laboratory analysis	

REMEDIATION WORKPLAN

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

On July 1, 2015, historical hydrocarbon impacts were discovered during replacement of the produced water sump at the Platteville 63N66W19SWSW production facility. The well was shut in, associated underground infrastructure removed, and excavation activities commenced. Groundwater was encountered in the excavation at approximately 6 feet below ground surface (bgs). An Initial/Supplemental Form 19 was submitted to the COGCC on July 2, 2015. The COGCC has issued Spill Tracking number 442346 for this release.

Describe how source is to be removed:

On July 1, 2015, excavation activities commenced and approximately 230 cubic yards of impacted material were excavated and transported to the Kerr-McGee Land Treatment Facility in Weld County, Colorado for disposal. Excavation activities were guided in the field using a photoionization detector (PID) to measure volatile organic compound (VOC) concentrations in soil. Soil samples were collected from the sidewalls of the final extent of the excavation area at approximately 5 feet bgs. Soil samples were submitted to Origins Laboratory in Denver, Colorado for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), total petroleum hydrocarbons (TPH) - gasoline range organics (GRO) by USEPA Method 8260, TPH - diesel range organics and oil range organics (DRO and ORO) by USEPA Method 8015, electrical conductivity (EC), and pH. Laboratory results indicated that constituent concentrations in the soil samples collected from the final lateral extent of the excavation area were below the applicable COGCC Table 910-1 standards. Soils were excavated into the phreatic zone to address potential hydrocarbon impacts that may have been present below the current groundwater table due to seasonal fluctuations. Groundwater was encountered in the excavation at approximately 6 feet bgs. Approximately 80 barrels of impacted groundwater were removed via vacuum truck and transported to a licensed injection facility for disposal. A groundwater sample (GW01) was subsequently collected and submitted for laboratory analysis of BTEX. Analytical results received on July 2, 2015, indicated that the benzene and toluene concentrations in sample GW01 were above the applicable COGCC Table 910-1 groundwater standards. Soil analytical results are summarized in Table 1 and groundwater analytical results are summarized in Table 2. Soil and excavation groundwater sample locations are illustrated on Figure 1 and laboratory analytical reports are included as Attachment A.

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.:

Impacted soil was excavated and transported to the Kerr-McGee Land Treatment Facility in Weld County, Colorado. Impacted groundwater was removed via a vacuum truck and transported to a licensed injection facility for disposal. Additional proposed groundwater remediation measures are described on the following page. The produced water sump was removed during assessment and remediation activities.

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Facility Name & No.: _____

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REMEDIATION WORKPLAN (CONT.)

OGCC Employee: _____

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

Temporary monitoring and/or remediation wells will be installed at the site to further assess the extent of groundwater impacts. These wells will be sampled on a quarterly basis and submitted for laboratory analysis of BTEX until concentrations remain below COGCC groundwater standards for four consecutive quarters.

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.

The excavation has been backfilled with clean soil and graded to match the adjacent topography. Reclamation activities at the site will be compliant with COGCC regulations.

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:

Data indicate that impacted soil has been delineated and removed from the site. Temporary monitoring/remediation wells will be installed to further assess groundwater impacts. Soil and groundwater analytical results are summarized in Tables 1 and 2, respectively. The laboratory analytical reports are included as Attachment A.

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

Impacted soil was transported to the Kerr-McGee Land Treatment Facility in Weld County, Colorado for disposal. Impacted groundwater was transported to a licensed injection facility for disposal.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 7/1/2015	Date Site Investigation Completed: _____	Remediation Plan Submitted: _____
Remediation Start Date: 7/1/2015	Anticipated Completion Date: 3/1/2017	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: Phillip Hamlin

Signed: Title: Senior HSE Representative Date: 9/22/15

OGCC Approved: _____ Title: _____ Date: _____