

State of Colorado
Oil and Gas Conservation Commission



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#8450

FOR OGCC USE ONLY

RECEIVED
4/28/2014

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): _____

OGCC Operator Number: _____	Contact Name and Telephone: _____
Name of Operator: _____	_____
Address: _____	No: _____
City: _____ State: _____ Zip: _____	Fax: _____

API Number: _____	County: _____
Facility Name: _____	Facility Number: _____
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): _____	Latitude: _____ Longitude: _____

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): _____

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.): _____

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: _____

Potential receptors (water wells within 1/4 mi, surface waters, etc.): _____

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

Impacted Media (check):	Extent of Impact:	How Determined:
Soils	_____	_____
Vegetation	_____	_____
Groundwater	_____	_____
Surface Water	_____	_____

REMEDIALTION WORKPLAN

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

Describe how source is to be removed:

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.:



Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
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.):

Groundwater was encountered, so monitoring borings will be drilled (direct push) to a depth of 6 feet (about 1 foot into groundwater). Soil samples will be collected using a two-inch diameter, four-foot long, core barrel lined with acetate sleeves. Soils from all of the borings will be field screened for volatile organic compounds (VOCs) with a photo-ionization detector (PID) and staining. The borings will be backfilled with the soils collected during drilling and with bentonite chips (hydrated) and resurfaced to match the surrounding area. The borings will be used to determine the nature and extent (horizontal & vertical) of the contamination. Soil samples will be collected from borings that exhibit contamination (near tank) and from boring that do not exhibit contamination. The soil samples will be used to define the nature and extent of the contamination and will be used to assist with additional soil excavation and disposal (if needed).

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.

Soil samples will be collected using a two-inch diameter, four-foot long, core barrel lined with acetate sleeves. Soils from all of the borings will be field screened for volatile organic compounds (VOCs) with a photo-ionization detector (PID) and staining. The borings will be backfilled with the soils collected during drilling and with bentonite chips (hydrated) and resurfaced to match the surrounding area. The borings will be used to determine the nature and extent (horizontal & vertical) of the contamination. Soil samples will be collected from borings that exhibit contamination (near tank) and from boring that do not exhibit contamination. The soil samples will be used to define the nature and extent of the contamination and will be used to assist with additional soil excavation and disposal (if needed).

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:

Once borings are drilled, soil and water samples will be taken and analyzed. Lab analysis will be submitted to the COGCC when results become available.

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

Waste Management

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 10-09-2013 Date Site Investigation Completed: _____ Date Remediation Plan Submitted: 04-08-2014
Remediation Start Date: 03-01-2014 Anticipated Completion Date: 12-31-2014 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: VP Engineering Date: 04-28-2014

OGCC Approved: _____ Title: _____ Date: _____