

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.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

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

FOR OGCC USE ONLY

Rec 4/11/16
Doc #200439354
Rem # 9609

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No:

OGCC Operator Number: 61250

Name of Operator: MULL DRILLING COMPANY INC.

Address: 1700 WATERFRONT PARKWAY BLDG #1200

City: WICHITA

State: KS

Zip: 67206-6637

Contact Name and Telephone:

CARL D. SMALLEY

No: 719-342-1812

Fax: 719-767-8994

API Number: NONE EXISTING

County: CHEYENNE

Facility Name: MUSF #5 FLOWLINE

Facility Number: ~~NONE EXISTING~~ 444662

Well Name: MUSF #5

Well Number: #5

Location: (QtrQtr, Sec, Twp, Rng, Meridian): NWSE SEC 32- TWP 13S- RNG 49W -- 6TH M. Latitude: 38.870083 Longitude: -102.909683

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): CRUDE OIL

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.): RANGELAND

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: STONEHAM LOAM 0-3% SLOPES

Potential receptors (water wells within 1/4 mi, surface waters, etc.): NO SURFACE WATERS WITHIN 1/4 MILE

EPHEMERAL STREAM ~ 1300 FEET EAST OF SPILL SITE

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

Impacted Media (check):



Soils

Extent of Impact:

20 FEET X 20 FEET

How Determined:

VISUAL



Vegetation

12 FEET X 12 FEET

VISUAL



Groundwater



Surface Water

REMEDIALTION WORKPLAN

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

FORM 19

Describe how source is to be removed:

FORM 19

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.:

INSITU. BIOREMEDIATION - ADMINISTERED SOIL RECLAIMANT (RECLAIM-O). APPLICATION:
(1) TILLED THE SOIL BEFORE ADMINISTERING RECLAIMANT. (2) SPRAYED 15 GAL.
RECLAIM-O MIXED WITH 15 BBL. FRESH WATER ONTO CONTAMINATED SOILS. (3)
ALLOWED THE EMULSION TO SOAK INTO THE SOILS.

Submit Page 2 with Page 1



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

Page 2
REMEDIATION WORKPLAN (Cont.)

OGCC Employee: _____

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):
GROUND WATER WAS NOT IMPACTED.

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.
EXCAVATED AREA WAS PUT BACK TO GRADE (VISUAL INSPECTED DAILY). SPILL SITE HAS BEEN FERTILIIZED AND SEEDED (NATIVE GRASS) - 3/11/2016.

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:
ANALYTICAL RESULT ATTACHED TO FORM 19 -- DRO VALUE ABOVE 910-1 VALUE.
FURTHER SOIL ANALYSIS WILL BE FORTHCOMING TO CHECK DRO VALUES.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):
ALL SOILS WILL BE RECLAIMED AT SPILL SITE.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: <u>01/28/2016</u>	Date Site Investigation Completed: _____	Date Remediation Plan Submitted: <u>4/11/2016</u>
Remediation Start Date: <u>2/17/2016</u>	Anticipated Completion Date: <u>2/17/2017</u>	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: CARL D. SMALLEY Signed: _____
Title: MDC ENVIRONMENTAL MANAGER Date: 4/11/2016

OGCC Approved: _____ Title: _____ Date: _____

Conditions of Approval

1. Land Treatment of oily waste shall be performed in strict accordance with the requirements of COGCC Rule 907.e.(2).
2. At a minimum, collect soil samples from the treatment areas twice per year to establish rate of biodegradation. Samples shall be collected consistently from the same approximate locations during each sampling event.
 - a. One sample shall be collected to represent each 100 cubic yards of soil being treated.
 - b. Samples shall be analyzed for diesel range organics (DRO).
3. Submit semi-annual progress reports with analytical data to area Environmental Protection Specialist no later than April 30th and October 31st each year of treatment. Include the following information in each progress report:
 - a. Dates and description of work performed such as aeration by tilling or addition of nutrients, microbes, water or other amendments.
 - b. Include types and volumes of nutrients, microbes or other amendments.
 - c. Provide sample results with sample location diagram, summary table of results compared to Table 910-1 standards and laboratory reports.
 - d. Failure to submit the semi-annual progress reports by the due dates will result in the requirement to immediately dispose all oily waste off site at an appropriate disposal facility.
4. Implement stormwater controls to prevent contamination of stormwater runoff.
5. Control weeds in the disturbed areas associated with the land treatment.
6. Operator shall complete remediation within three years of the date of this conditional approval - by April 12, 2019. In the event any treated waste fails to meet Table 910-1 standards within three (3) years, it must be removed and disposed of at a commercial facility within 30 days. Disposal documentation must be received by COGCC within 15 days following disposal.
7. If waste fails to meet Table 910-1 standards and is removed from the location for disposal, the underlying soil must be sampled to verify compliance with Table 910-1 standards.
8. The treatment location must be reclaimed in accordance with Rule 1004.c.
 - a. Final reclamation shall include incorporation of treated waste or other proposed reuse, final contouring, seeding and weed control until vegetation complies with the threshold for release.

9. To meet closure criteria for the remediation, submit a final report with a closure request and request for inspection once all confirmation samples comply with Table 910-1 standards. Final closure request shall be made no later than April 12, 2019.