

State of Colorado
Oil and Gas Conservation Commission

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



FOR OGCC USE ONLY

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 Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No:

OGCC Operator Number: 28600

Name of Operator: ExxonMobil Corporation

Address: P.O. Box 4358; CORP-MI-3011

City: Houston

State: TX Zip: 77210-4358

Contact Name and Telephone:

Adrienne N. Rosecrans

No: 281 654 2742

Fax: 281 654 1147

API Number: 05-103-11295

11290

Facility Name: Freedom Unit

County: Rio Blanco

Well Name: Freedom Unit

Facility Number: 336042

Well Number: 297-16A

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SWNW, 16, 2S, 97W, 6TH

Latitude: 39.877284 Longitude: 108.293832

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Drill Cuttings and Fluids

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: Torriothents-Rock outcrop complex

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):



Soils



Vegetation



Groundwater



Surface Water

Extent of Impact:

Arsenic

How Determined:

sediment/soil and laboratory analysis

REMEDIALATION WORKPLAN

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

Site is being prepared for pit closure. Samples were taken from the three open pits, along with the three additional cuttings trenches and were analyzed for TPH, EC, SAR, pH and Arsenic.

Background samples were also taken to establish arsenic background concentration levels.

Describe how source is to be removed:

Pit synthetic liners will be removed and sent to an offsite permitted disposal/recycling facility. Final pit content disposition is dependent on laboratory results. See section I of the attached application for the full Pit Closure Plan.

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.:

This application is submitted to request approval of site-specific background arsenic levels to be used in lieu of table 910-1 limits as applicable. Because native soil is being used as surface fill for the top three feet of pits, SAR, electrical conductivity, and pH background level requests are not submitted.



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

REMEDIALATION WORKPLAN (Cont.)

OGCC Employee:

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

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.

As specified in the Surface Use Plan and BLM Conditions of Approval.

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:

As applicable, a soil sample will be collected below each of the synthetic pit liners and sent for laboratory analysis of Table 910-1 constituents.

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

The synthetic liners will be removed from each pit and sent for offsite recycling/disposal. Pit contents will be processed onsite by a temporary thermal desorption unit to reduce TPH concentrations. Both thermal desorption and mix/blend methods will be utilized to reduced constituent concentrations below table 910-1 levels. Sediments below table 910-1 levels will be disposed onsite. Sediments containing higher constituent levels will be sent for offsite recycling/disposal.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 1/18/11	Date Site Investigation Completed:	Date Remediation Plan Submitted: 2/11/11
Remediation Start Date: February 2011	Anticipated Completion Date: May 2011	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: Adrienne N. Rosecrans

Signed: Rosecrans, Adrienne N. (anberry)

Title: Senior Environmental Engineer

Date: 2/10/11

OGCC Approved:

For Chris Camfield

Title: For Chris Camfield

Date: 02/25/2011