

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

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received 10/27/2014
Project 8740
DOC 200416223
Pit Facility 286531
E&P waste Facility 292833

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remedial 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.

☐ 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): Pit (pond) Closure

OGCC Operator Number: 10044	Contact Name and Telephone: Jack Sosebee
Name of Operator: Red River Ranch Holdings LLC	No: 303-921-9176
Address: 15850 County Road 13	Fax: e-mail: jack.sosebee@comcast.net
City: Weston State: CO Zip: 81091	
API Number: _____	County: Las Animas
Facility Name: RRR CW-D / D	Facility Number: 286531
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): SENE, Sec. 13, T35S, R68W, 6th Latitude: 36.999733 Longitude: -104.941092	

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.): Other - burnt timber

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Bandarito clay loam, 3 to 9 percent slopes

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

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	pond bottom in contact with overlying water	site conditions and hydrology
<input type="checkbox"/> Vegetation	_____	_____
<input type="checkbox"/> Groundwater	_____	_____
<input type="checkbox"/> Surface Water	_____	_____

REMEDATION WORKPLAN

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

All wells contributing produced water to Pond D have been plugged and abandoned (Form 6 Subsequent Reports are under review at COGCC).

Describe how source is to be removed:

Because the wells contributing produced water to Pond D have been plugged and abandoned, the source has been eliminated.

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.:

The pond liner will be excavated and disposed in a permitted solid waste landfill as non-hazardous/non-E&P solid waste. There are no other impacts that require remediation. Analyses of the pond bottom soil indicate that the applicable 910-1 contaminants of concern are present in concentrations below the Table 910-1 limits or are below background concentrations established through analysis of nearby soils. See attached Pond D Soil Analyses for additional details.



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.):

There is no reason to suspect that groundwater has been 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.

The fence around the pond has already been removed. After the pond liner has been excavated and removed, the pond will be graded to its approximate currently-existing contours. Outlet structures will be left in place. Wetland and aquatic plants will be allowed to naturally re-establish.

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:

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

No E&P waste remains at the site.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 8/25/14 Date Site Investigation Completed: 10/22/14 Date Remediation Plan Submitted: NA
Remediation Start Date: NA Anticipated Completion Date: NA Actual Completion Date: NA

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Jack Sosebee Signed: Jack Sosebee
Title: Designated Representative and Environmental Consultant Date: 10/27/14

OGCC Approved: _____ Title: _____ Date: _____

Notify COGCC when pit liner is removed and provide documentation of disposal at permitted disposal site. Notify COGCC environmental staff if variance request regarding final land contours is granted by the Director and if variance not granted then report when closure process is completed as required by rules regarding final redamation.

METALS

Analytical results demonstrate that background concentrations of arsenic (As) exceed Table 910-1 concentration levels. Analytical results demonstrate that concentrations of As in soils in the pit also exceed Table 910-1 concentration levels and the pit concentrations are less than or within analytical uncertainty of being equal to the background concentrations. The analytical results are summarized below:

METAL	BACKGROUND CONCENTRATION (MG/KG)	PIT CONTENTS, SOIL/BEDROCK BELOW PIT OR IMPACTED MEDIA (MG/KG)	TABLE 901-1 CONCENTRATION LEVELS (MG/KG)
Arsenic	2.3-3.1	3.1	0.39

COGCC and CDPHE have consulted and agree that operators do not need to request variances from CDPHE for instances where the concentrations of metals in impacted soils are equal to or less than background concentrations, but do not meet Table 910-1 concentration values. Operators must ensure that remaining pit contents are covered with a minimum of 3 feet of backfill and soil. The soil horizons must be replaced in their original relative position, and redaimed in accordance with 1000 Series Rules.