

State of Colorado
Oil and Gas Conservation Commission



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received 10/27/2014
REM 8735
DOC 200416196
FACILITY 286150
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 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): Pit (pond) Closure

OGCC Operator Number: 10044
Name of Operator: Red River Ranch Holdings LLC
Address: 15850 County Road 13
City: Weston State: CO Zip: 81091
Contact Name and Telephone: Jack Sosebee
No: 303-921-9176
Fax: e-mail: jack.osebee@comcast.net

API Number: _____ County: Las Animas
Facility Name: RRR PP CW-A / A Facility Number: 286150
Well Name: _____ Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): SWNW, Sec. 16, T35S, R68W, 6th Latitude: 36.998147 Longitude: -105.009883

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.): timber
Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Tercio-Graneros Complex
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 A 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 A 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.:

There are no impacts that require remediation. Analyses of the pond bottom soil indicate that the applicable Table 910-1 contaminants of concern are present in concentrations below the Table 910-1 limits, are below background concentrations established through analysis of nearby soils, or are at normal levels based on the local soil survey. See attached Pond A 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.

Red River Ranch Holdings, LLC is the landowner, as well as the operator, and plans to leave Pond A as it currently exists for the benefit of wildlife and native vegetation. There is no liner to remove. The pond periodically retains a small amount of water that is of benefit to small mammals and birds. The fence around the pond can serve as an elk enclosure, allowing regeneration of aspen, shrubs, and forbs.

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 if variance request regarding final land contours is granted by the Director and if variance not granted the report when closure process is completed.

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 fill at the top of the pit also exceed Table 910-1 concentration levels and the pit concentrations are greater than but within the 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	3.1-3.7	4	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. If no variance is granted then 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 reclaimed in accordance with 1000 Series Rules.