

FORM
27
Rev 6/99State 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.

FOR OGCC USE ONLY

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COGCC/Rifle Office
OGCC Employee
☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No: Remediation #5132

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

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

OGCC Operator Number: 66561

Name of Operator: OXY USA Inc.

Address: 760 Horizon Drive, #101

City: Grand Junction

State: CO Zip: 81506

Contact Name and Telephone:

Sean T. Norris

No: 970-263-3628

Fax: Sean T. Norris

API Number: Regulatory Lead

County: _____

Facility Name: Colorado Land #1

Facility Number: 311745

Well Name: Colorado Land

Well Number: #1

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SWNW 17 10S 94W 6 PM

Latitude: 39.19219 Longitude: 107.91111

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Suspected Produced water/condensate from 1992 spill

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.): Irrigated and Rangeland

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Cumulic Haploborolis, 1-3% slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Surface waters ~139' west to Grove Creek

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

Remediation No. 5132

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):

This document is intended to serve as an addendum to the previously submitted Form 27 associated with Remediation #5132. Integrity testing was performed on the gathering lines from the 17-5 wells to the separator units. The test was performed on the flow lines from the following wells: 17-3, 17-3A, 17-3C, 17-4, 17-4A, 17-4B, 17-6, 17-6A and 17-6B. Integrity testing was also performed the dump lines leading from the separator units to condensate and produced water tanks. No issues were with line integrity were found during this testing. Documentation regarding integrity testing is available upon request. MIT testing was conducted on the Colorado Land #1 Well. Results indicate the well is not leaking gas or fluids.

Describe how source is to be removed:

Due to the unanticipated issues associated with acquisition of the underground injection permit, previous plans to pump water from down gradient wells and re-inject at up gradient locations along with ORC have been delayed. In an effort to continue a proactive remediation Oxy is intending to conduct a pilot evaluation of an Oxy will install an in-situ Submerged Oxygen Curtin (ISOC) remediation system. The ISOC system is designed to introduce oxygen into the groundwater in order to enhance natural biodegradation without developing a sparged condition. Three (3) individual systems will be installed at three (3) primary locations No. 4, No. 10 and No. 15. The system will be periodically transitioned to alternate locations bell holes 1A - 5 and 9 will also be periodically utilized for system placement. Groundwater monitoring will continue as per the previously proposed schedule of quarterly testing. Quarterly source material monitoring ideal in respect to the ISOC system.

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.)

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.

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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.):

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 780 Horizon Drive, #101 Date Site Investigation Completed: Grand Junction Date Remediation Plan Submitted: CO
Remediation Start Date: 81506 Anticipated Completion Date: Sean T. Norris Actual Completion Date: 970-263-3628

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

Print Name: Sean T. Norris

Signed: *Sean T. Norris*

Title: Regulatory Lead

Date: 10/1/2010

OGCC Approved: *Linda Spry O'Rourke*

Title: EPS, NW Region

Date: 11/21/11



OXY USA Inc.
A subsidiary of Occidental Petroleum Corporation

760 Horizon Drive, Suite 101
Grand Junction, CO 81506

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OCT 05 2010

COGCC/Rifle Office

October 1, 2010

Linda Spry O'Rourke
COGCC
707 Wapiti Court
Suite 204
Rifle, CO 81650

RE: OXY USA Inc. Remediation No. 5132 Form 27

Dear Ms. Spry O'Rourke:

As per your request OXY USA Inc (Oxy) is providing your office with a Colorado Oil and Gas Conservation Commission (COGCC) Form 27 detailing Oxy's remediation status of the Colorado Land No. 1 location.

This form is intended to act as an addendum to the previously submitted Form 27. If you have any questions, please contact me at (970) 263-3628.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean T. Norris", written over a horizontal line.

Sean T. Norris
Regulatory Lead