

State of Colorado
Energy & Carbon Management Commission

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Report taken by:
Chris Sanchez

Site Investigation and Remediation Workplan (Supplemental Form)

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock.

This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by ECMC is based on the site conditions accurately described herein; any changes in site conditions identified during or subsequent to the performance of the approved workplan may necessitate additional investigation or remediation which shall be described on a supplemental Form 27. This Form 27 is intended to provide basic information regarding the proposed site investigation and remediation actions, but the workplan may be more fully described in attached documentation.

Closure request is not available for an Initial Site Investigation and Remediation Workplan.

OPERATOR INFORMATION

Name of Operator: <u>OXY USA INC</u>	Operator No: <u>66561</u>	Phone Numbers Phone: <u>(720) 929-4306</u> Mobile: <u>()</u>
Address: <u>PO BOX 173779</u>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80217-3779</u>
Contact Person: <u>Erik Mickelson</u>	Email: <u>DJRemediation_Forms@oxy.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 28200 Initial Form 27 Document #: 403342050

PURPOSE INFORMATION

- Rule 913.c.(1): Pit or Cuttings Trench closure.
- Rule 913.c.(2): Buried or partially buried vessel closure, which will be by removal.
- Rule 913.c.(3): Remediation of Spill and Releases pursuant to Rule 912.
- Rule 913.c.(4): Land treatment of Oily Waste pursuant to Rule 905.e.
- Rule 913.c.(5): Closure of Centralized E&P Waste Management Facilities pursuant to Rule 907.h.
- Rule 913.c.(6): Remediation of impacted Groundwater pursuant to Rule 915.e.(3).D, and the contaminant concentrations in Table 915-1.
- Rule 913.c.(7): Investigation and remediation of natural gas in soil or Groundwater.
- Rule 913.c.(8): When requested by the Director due to any potential risk to soil, Groundwater, or surface water.
- Rule 913.c.(9): Decommissioning of Oil and Gas Facilities.
- Rule 913.g: Changes of Operator.
- Rule 915.b: Request to leave elevated inorganics in situ.
- Other: Request director's approval of site-specific waste profile

SITE INFORMATION

Yes Multiple Facilities

Facility Type: <u>PIT</u>	Facility ID: <u>115232</u>	API #: _____	County Name: <u>HUERFANO</u>
Facility Name: <u>DRILL SITE 4 PIT</u>	Latitude: <u>37.669510</u>	Longitude: <u>-105.196210</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NENE</u>	Sec: <u>26</u>	Twp: <u>27S</u>	Range: <u>70W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>483915</u>	API #: _____	County Name: <u>HUERFANO</u>
Facility Name: <u>Sheep Mountain Unit Well #9-26</u>	Latitude: <u>37.669510</u>	Longitude: <u>-105.196210</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWSW</u>	Sec: <u>26</u>	Twp: <u>27S</u>	Range: <u>70W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SC _____

Most Sensitive Adjacent Land Use Range Land _____

Is domestic water well within 1/4 mile? No _____

Is surface water within 1/4 mile? Yes _____

Is groundwater less than 20 feet below ground surface? No _____

Other Potential Receptors within 1/4 mile

The site is located within a Bighorn Sheep Production Area, Bighorn Sheep Winter Range, Elk Production Area, and within a ¼ mile of the boundary of an Aquatic Sportfish Management Waters High Priority Habitat (HPH) areas.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- E&P Waste Other E&P Waste Non-E&P Waste
- Produced Water Workover Fluids
- Oil Tank Bottoms
- Condensate Pigging Waste
- Drilling Fluids Rig Wash
- Drill Cuttings Spent Filters
- Pit Bottoms
- Other (as described by EPA)

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	TBD	Soil Samples/Laboratory Analytical Results

INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

Pit closure activities at the former pit associated with the Sheep Mountain Unit #9-26 wellhead began on February 2, 2023. Groundwater was not encountered during pit closure activities. Visual inspection and field screening of soil at varying depths were conducted at the lowest point of the pit and from near the drain and soil samples (SS01 @1', SS01 @3', SS02 @1', and SS02 @3') were submitted for analysis of Table 915-1 constituents to determine if a release occurred. The vent lines associated with the former pit were removed between August 14, 2024 and June 12, 2025. Soil samples were collected from the locations where the vent lines were disconnected from the wellheads (FL03@3' and FL08@3'), from where the vent line ended at the former pit (FL09@3') and from where the vent line daylighted (FL04@2'). Laboratory analytical results indicated that benzo(a)pyrene and dibenz(a,h)anthracene impacts exceeding the ECOMC Table 915-1 Residential Soil Screening Levels (RSSLs), as approved in the Form 27 Initial Document No. 404026765, were present at the pit. As such, a Form 19 Initial/Supplemental Spill/Release Report (Document No. 403323443) was submitted on February 16, 2023 and the ECOMC issued Spill/Release Point ID 483915. Initial analytical results indicated pH exceeding the allowable level and background level was present at the FL03 and FL08 locations. Verification samples were collected concurrently with the initial samples but in separate laboratory provided bottles to confirm the initial results. Final results along the vent lines were within the Table 915-1 RSSLs or background levels. The pit and vent line soil samples are depicted on Figures 1 and 2. The PID readings and soil sample results are summarized in Tables 1 and 2, respectively.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

Will soil samples be collected as part of this investigation? (Number, type (grab/composite), analyses, and locations of samples):

On February 2, 2023, and August 14, 2024, excavation activities were conducted to address remaining soil impacts at the SS01 and SS02 locations. Confirmation soil samples were collected from the base and sidewalls of the excavations at approximately 15 ft below ground surface (bgs) and 12 ft bgs, respectively. The confirmation samples were submitted for laboratory analysis of the site-specific waste profile, including TPH, PAHs, and select Table 915-1 metals, using ECOMC-approved methods. Analytical results indicated that all samples at the final excavation extents were within the ECOMC Table 915-1 RSSLs or below background levels. The laboratory report is attached. A photo log is attached.

Proposed Groundwater Sampling

Will groundwater samples be collected as part of this investigation? (Number, analyses, and locations of samples):

Groundwater was not encountered during assessment activities.

Proposed Surface Water Sampling

Will surface water samples be collected as part of this investigation? (Number, analyses, and locations of samples):

Additional Investigative Actions

Additional alternative investigative actions described in attached Site Investigation Plan (summary):

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 22

Number of soil samples exceeding 915-1 18

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 297

NA / ND

-- Highest concentration of TPH (mg/kg) 446

-- Highest concentration of SAR 0.401

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 15

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? Yes

Depth to groundwater (below ground surface, in feet) _____

Number of groundwater monitoring wells installed _____

Number of groundwater samples exceeding 915-1 _____

_____ Highest concentration of Benzene (µg/l) _____

_____ Highest concentration of Toluene (µg/l) _____

_____ Highest concentration of Ethylbenzene (µg/l) _____

_____ Highest concentration of Xylene (µg/l) _____

_____ Highest concentration of Methane (mg/l) _____

Surface Water

0 Number of surface water samples collected

_____ Number of surface water samples exceeding 915-1

If surface water is impacted, other agency notification may be required.

OTHER INVESTIGATION INFORMATION

Were impacts to adjacent property or offsite impacts identified?

Were background samples collected as part of this site investigation?

Twelve background soil samples (NATIVE-BG01@3' through NATIVE-BG03@3', NATIVE-BG01@6' through NATIVE-BG03@6', NATIVE-BG01@10' through NATIVE-BG03@10', & NATIVE-BG01@15' through NATIVE-BG03@15') were collected from the native material outside of the pit excavations. Two background soil samples (BG-SS02 & BG-SS04) were collected from the pad material adjacent to the nearby Sheep Mountain temporary soil staging area (Rem# 20714) located approximately 680 ft northwest, from a similar depth as the initial pit samples (0.5' bgs), & NCRS soil type (Sandy Loam). The background soil samples were submitted for analysis of pH, EC, SAR, boron & Table 915-1 metals, using ECMC-approved methods. Analytical results indicate that arsenic is naturally high in the soil used to construct the pad & pH & arsenic are naturally high in the native soil. The background soil sample analytical results are summarized in Table 2. The background soil sample locations are illustrated on Figure 3.

Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) _____

Volume of liquid waste (barrels) _____

Is further site investigation required?

Assessment activities are ongoing and will be summarized in a subsequent Form 27 Supplemental report.

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? No

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Approximately 378 cubic yards of impacted soil were removed from the site and transported to the Southside Landfill in Pueblo, CO for disposal. Disposal records are kept on file and are available upon request. The excavation area has been backfilled and contoured to match pre-existing conditions.

REMEDIATION SUMMARY

Describe how remediation of existing impacts to soil and groundwater is to be accomplished (i.e. summarize remedial action plan). Provide a brief narrative description including: technical justification, schedule for implementation, estimated time to attain NFA status, plus plans and specifications for the selected remedial action technology.

Laboratory data indicate that benzo(a)pyrene and dibenz(a,h)anthracene impacts have been remediated and all soil at the final excavation extents is within the ECMC Table 915-1 RSSLs or within background levels. Groundwater was not encountered in the pit or vent line potholes. Assessment activities are ongoing and will be summarized in a subsequent Form 27 Supplemental report.

Soil Remediation Summary

In Situ

Ex Situ

- _____ Bioremediation (or enhanced bioremediation)
- _____ Chemical oxidation
- _____ Air sparge / Soil vapor extraction
- _____ Natural Attenuation
- _____ Other _____

- Yes _____ Excavate and offsite disposal
- _____ If Yes: Estimated Volume (Cubic Yards) _____ 378
- _____ Name of Licensed Disposal Facility or ECMC Facility ID # _____
- No _____ Excavate and onsite remediation
- _____ Land Treatment
- _____ Bioremediation (or enhanced bioremediation)
- _____ Chemical oxidation
- _____ Other _____

Groundwater Remediation Summary

- _____ Bioremediation (or enhanced bioremediation)
- _____ Chemical oxidation
- _____ Air sparge / Soil vapor extraction
- _____ Natural Attenuation
- _____ Other _____

GROUNDWATER MONITORING

If groundwater has been impacted, describe proposed monitoring plan, including # of wells or sample points, monitoring schedule, analytical methods, points of compliance. Attach a groundwater monitoring location diagram.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

Quarterly Semi-Annually Annually Other

Request Alternative Reporting Schedule:

Semi-Annually Annually Other

Rule 913.e:

After initial approval of a Form 27, the Operator will provide quarterly update reports in a Supplemental Form 27 to document progress of site investigation and remediation, unless an alternative reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule based on site-specific conditions.

Report Type: Groundwater Monitoring Land Treatment Progress Report O&M Report
 Other _____

Adequacy of Operator's General Liability Insurance and Financial Assurance

Describe the adequacy of the Operator's general liability insurance and Financial Assurance to fully address the anticipated costs of Remediation, including the estimated remaining cost for this project (below).

If this information has been provided on a Form 27 within the last 12 months, provide the Document Number of that form.

OXY USA Inc. has sufficient insurance and bonding to fully address the anticipated costs of Remediation, including the remaining estimated costs for this project. OXY USA Inc. currently has a \$100,000 blanket plugging bond on file with the Energy and Carbon Management Commission (bond # 022019502). The cost for remediation is a preliminary estimate only, costs may change upwards or downward based on site-specific information. Oxy makes no representation or guarantees as to the accuracy of the preliminary estimate.

Operator anticipates the remaining cost for this project to be: \$ 5000

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? Yes

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

NA

Volume of E&P Waste (solid) in cubic yards 378

E&P waste (solid) description Impacted Soil

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: Southside Landfill in Pueblo, CO

Volume of E&P Waste (liquid) in barrels 0

E&P waste (liquid) description _____

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: _____

REMEDIATION COMPLETION REPORT

REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? No

If YES:

- Compliant with Rule 913.h.(1).
- Compliant with Rule 913.h.(2).
- Compliant with Rule 913.h.(3).

Do all soils meet Table 915-1 standards? _____

Does the previous reply indicate consideration of background concentrations? _____

Does Groundwater meet Table 915-1 standards? _____

Is additional groundwater monitoring to be conducted? _____

Operator shall comply with the ECMC 1000-Series Reclamation Requirements for all impacted and disturbed areas.

RECLAMATION PLAN

RECLAMATION PLANNING

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.

The site will be reclaimed in accordance with ECMC 1000 Series Reclamation Rules.

Is the described reclamation complete? _____

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

Interim

Final

Did the Surface Owner provide the seed mix? _____

If YES, does the seed mix comply with local soil conservation district recommendations? _____

Did the local soil conservation district provide the seed mix? _____

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. _____

Proposed date of completion of Reclamation. _____

IMPLEMENTATION SCHEDULE

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

PRIOR DATES

Date of Surface Owner notification/consultation, if required. 02/14/2023

Actual Spill or Release date, or date of discovery. 02/14/2023

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 02/02/2023

Proposed site investigation commencement. 02/02/2023

Proposed completion of site investigation. 02/27/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 02/02/2023

Proposed date of completion of Remediation. 02/27/2026

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

OPERATOR COMMENT

Per Rule 915.e.(2).C, discrete grab samples [SS01@1', SS01@3', SS02@1', and SS02@3'] were collected from the most impacted material available in the source area on 2/2/2023. The results summary table is attached. Based on these results, KMOG requests approval to amend confirmation sampling and analysis to only include hydrocarbon and metal analytes detected above laboratory reporting limits and reclamation parameters exceeding Table 915-1 allowable levels, specifically: TPH, PAHs, arsenic, barium, cadmium, lead, and selenium.

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

Signed: Erik Mickelson

Title: Environmental Lead

Submit Date: 09/03/2025

Email: DJRemediation_Forms@oxy.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with ECMC Rules and applicable orders and is hereby approved.

ECMC Approved: Chris Sanchez

Date: 04/02/2026

Remediation Project Number: 28200

COA Type**Description**

	Form 27 Document # 404561226 supersedes this Form 27, Reference Form 27 Document # 404561226 for COAs
1 COA	

ATTACHMENT LIST

Upon approval, the approved Form 27 and all listed attachments will be indexed to the Remediation Project file. Only the approved Form 27 will also be indexed to the related Facilities.

Att Doc Num**Name**

404026765	FORM 27-SUPPLEMENTAL-SUBMITTED
404322185	PHOTO DOCUMENTATION
404322188	LABORATORY ANALYTICAL REPORT
404322195	SOIL SAMPLE LOCATION MAP
404322196	SOIL SAMPLE LOCATION MAP
404322199	SOIL SAMPLE LOCATION MAP
404333500	ANALYTICAL DATA SUMMARY TABLE(S)

Total Attach: 7 Files

General Comments**User Group****Comment****Comment Date**

Environmental	Form returned to DRAFT at Operators request Operators request, Oxy Operations has identified additional work to be completed under this F27.	07/22/2025
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Total: 1 comment(s)