

State of Colorado
Energy & Carbon Management Commission1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number:

403884763

Receive Date:

09/03/2024

Report taken by:

Krystal Heibel

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: SMITH ENERGY CORP	Operator No: 70385	Phone Numbers
Address: 12706 SHILOH RD		Phone: (303) 894-2100
City: GREELEY	State: CO	Zip: 80631
Contact Person: James Hix - East OWP EPS	Email: james.hix@state.co.us	Mobile: (303) 905-5341

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 27605 Initial Form 27 Document #: 403276062

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: _____

SITE INFORMATION

No Multiple Facilities

Facility Type: LOCATION	Facility ID: 317747	API #: _____	County Name: WELD
Facility Name: WELD-WEITZEL-67N60W 33NESW	Latitude: 40.529760	Longitude: -104.101740	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NESW	Sec: 33	Twp: 7N	Range: 60W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SC Most Sensitive Adjacent Land Use Rangeland

Is domestic water well within 1/4 mile? Yes 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

Intermittent drainages to Coal Bank Draw ~ 1/4 mile southwest, United Surface & Minerals LLC ponds - adjacent east of the location. Select Energy Services c/o Quantum Water DWR Permit #76687-F Static Water Level = 593.2 ft bgs, Top of Perf Casing = 1002 ft, TD = 1580 ft bgs located ~1260 ft SSE. DWR Permit 50576-MH (Expired) NOI to construct monitoring hole(s) Expected Depth = 1600 ft, Aquifer: Laramie/Fox Hills (Klf)

SITE INVESTIGATION PLAN

TYPE OF WASTE:

☒ E&P Waste ☒ Other E&P Waste ☒ Non-E&P Waste

☒ Produced Water

☐ Workover Fluids

Motor Oil

☒ 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	Unknown	Visually

INITIAL ACTION SUMMARY

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

The Smith Energy Corp. Weld-Weitzel-67N60W 30 NESW location (Location ID #317747) production facility, and the Weld-Weitzel #5-33 and Weld Weitzel #11-33 wells, are in the Colorado ECMC Orphaned Well Program. Stained soils were observed around the wellhead, pump jack engine, the heater treater/separator, and tanks during recent inspections. The Weld-Weitzel-67N60W 30 NESW production facility and off-location flowlines will be decommissioned and removed. Civitas will plug and abandon the wells as part of a public project.

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):

Grab soil samples will be collected by a third-party consultant in areas exhibiting impact or areas most likely to exhibit E&P waste impacts including beneath aboveground storage tanks, buried produced water tank, loadouts, heater treater, and flowlines when the production facilities are decommissioned and removed. Soil samples will be submitted for laboratory analysis of full Table 915-1 parameters. Grab soil samples will be collected from areas most likely to exhibit E&P Waste impacts. Soil samples will be submitted for analysis of Table 915-1 parameters including organic compounds (TPH ranges C6-C36; BTEX; 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Naphthalene, PAH) and inorganic compounds (metals, soil suitability for reclamation).

Proposed Groundwater Sampling

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

Groundwater samples are not expected to be collected as part of this initial site investigation.

Proposed Surface Water Sampling

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

Surface water samples are not expected to be collected as part of this investigation.

Additional Investigative Actions

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

No additional alternative investigative actions are expected to be performed as part of this initial site investigation.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 15
Number of soil samples exceeding 915-1 6
Was the areal and vertical extent of soil contamination delineated? No
Approximate areal extent (square feet) 2860

NA / ND

-- Highest concentration of TPH (mg/kg) 42616
-- Highest concentration of SAR 2.63
BTEX > 915-1 Yes
Vertical Extent > 915-1 (in feet) 10

Groundwater

Number of groundwater samples collected 0
Was extent of groundwater contaminated delineated? No
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?

Yes, a background soil sample, 317747_BK01 @3', was collected from an undisturbed area north of the location. The background soil sample was submitted to an accredited environmental laboratory for analysis of Table 915-1 metals (As, Ba, Cd, Cr6+, Cu, Pb, Ni, Se, Ag, Zn) and soil suitability for reclamation parameters (pH, EC, SAR, and hot water soluble boron).

☐ 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?

Further site investigation is required to delineate the lateral and vertical extent of impacted soils encountered at the Weld-Weitzel #5-33/ Weld-Weitzel #11-33 shared tank battery beneath the former produced water vault (PWV) reported TPH = 42616 mg/kg, benzene = 5 mg/kg, and pH = 8.66 at 10 ft bgs, Separator with TPH = 938 mg/kg; wellhead flowline soil sample 317747_FL01_01 @10', with pH = 9.00 and As = 6.62 mg/kg; at the Weld-Weitzel #11-33 (OWP) well head floor sample, WH-B01 @7', Benzene, Naphthalene, 1,2,4-TMB, 1,3,5-TMB, Fluorene, 1-Methylnaphthalene, 2-Methylnaphthalene, As, Ba, and Cr6+; and east sidewall sample, BTEX > Protection of Groundwater SSL, 1,2,4-TMB, 1,3,5-TMB, PAH compounds > Protection of Groundwater SSL.

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.

If E&P Waste impacts are encountered during decommissioning of Oil and Gas Facilities, approximately 10 cubic yards of the impacted soils will be excavated, temporarily stockpiled on location, and hauled to a commercial disposal facility.

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.

A third-party consultant will perform environmental oversight and collect soil samples from locations most likely to exhibit E&P waste impacts during the production facility decommissioning and flowline removal. If E&P waste impacts are encountered, a remediation workplan will be developed to define the horizontal and vertical extent of the impacts and strategies to remediate the site to meet applicable Table 915-1 concentrations or levels.

Soil Remediation Summary

☐ In Situ

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

☐ Ex Situ

_____ Excavate and offsite disposal
_____ If Yes: Estimated Volume (Cubic Yards) _____
_____ Name of Licensed Disposal Facility or ECMC Facility ID # _____
_____ 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

A supplemental Form 27 will be submitted with the facility closure report.

☐ 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.

The SMITH ENERGY CORP. - 70385 WELD-WEITZEL-67N60W 33NESW (Location ID #317747) is in the ECMC Orphaned Well Program. The site investigation, remediation, and reclamation of the oil and gas location will be performed using the Operator's bond and/or other funding sources.

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

WASTE DISPOSAL INFORMATION

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

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

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

E&P waste (solid) description _____

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: _____

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

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 Colorado ECMC OWP will reclaim this oil and gas location in accordance with 1000 Series Rules including grading/recontouring of disturbed areas. Reclamation will be performed under a separate scope of work. Final reclamation will be conducted per ECMC 1000 Series Rules and prioritized based on OWP ranking, project funding, and staff availability. The reclamation scope will include a plan to address and avoid any effect on reclamation from Table 915-1 inorganic and soil suitability for reclamation parameters.

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. 10/27/2023

Actual Spill or Release date, or date of discovery. 02/27/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/16/2023

Proposed site investigation commencement. 10/17/2023

Proposed completion of site investigation. 06/26/2024

REMEDIAL ACTION DATES

Proposed start date of Remediation. _____

Proposed date of completion of Remediation. _____

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

The SMITH ENERGY CORP - 70385 WELD WEITZEL 11-33 (OWP) oil and gas well (API #05-123-07696) WELD-WEITZEL-67N60W 33NESW (Location ID #317747) is in the ECMC Orphaned Well Program ("OWP"). Civitas Resources/Extraction Oil & Gas Inc. plugged and abandoned (PA) the Weld Weitzel #11-33 (OWP) well as part of a public project. Civitas Resources also PA the Weld-Weitzel #5-33 (OWP) under a separate remediation project. This supplemental Form 27 presents the results from the shared tank battery and Weld-Weitzel #11-33 wellhead decommissioning. The OWP oversaw the decommissioning of the Weld Weitzel #5-33 (OWP) / Weld Weitzel #11-33 (OWP) shared, remote tank battery in October 2023. Multiple historic releases occurred at the site beneath the produced water vault (PWV), (sample ID #317747_PWV01_B01 @10' bgs) with total petroleum hydrocarbons (TPH) = 42616 mg/kg, Benzene = 5 mg/kg, and Naphthalene = 3.56 mg/kg. Separator, (Sample ID #317747_SEP01_B01 @3' bgs) with a TPH = 938 mg/kg, and Weld-Weitzel #11-33 (OWP) flowline (Sample ID #317747_FL01_01 @10' bgs), with Arsenic = 6.62 mg/kg and pH = 9.00 s.u. The Weld-Weitzel #11-33 (OWP) wellhead soil sample, WH-B01 @7', collected on 06/26/2024 from the excavation floor reportedly had Benzene, Naphthalene, 1,2,4-TMB, 1,3,5-TMB, Fluorene, 1-Methylnaphthalene, 2-Methylnaphthalene, Arsenic, Barium, and Hexavalent Chromium above Table 915-1 SSL. The Weld-Weitzel #11-33 (OWP) wellhead east sidewall excavation soil sample, WH-E01 @6', reportedly had BTEX, 1,2,4-TMB, 1,3,5-TMB, PAH compounds, Arsenic, Barium, Lead, and Selenium above Table 915-1 SSL. Further Site Investigation is required to delineate the lateral and vertical extent of impacts. Site Investigation and remediation activities will proceed under Remediation Project #27605.

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

Signed: James Hix

Title: East OWP EPS

Submit Date: 09/03/2024

Email: james.hix@state.co.us

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: Krystal Heibel

Date: 10/31/2024

Remediation Project Number: 27605

COA Type

Description

0 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

403884763	FORM 27-SUPPLEMENTAL-SUBMITTED
403908097	SITE INVESTIGATION REPORT
403908221	SITE INVESTIGATION REPORT

Total Attach: 3 Files

General Comments

User Group

Comment

Comment Date

Environmental	"Laboratory analytical results exceeded the ECMC Table 915-1 allowable concentrations for TPH, benzene, naphthalene, pH, and arsenic."	10/31/2024
Environmental	ECMC approves OWP's request for use of Residential SSLs based on the depth to groundwater and the local lithology suggesting a pathway to groundwater at this location is not likely.	10/31/2024

Total: 2 comment(s)