FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

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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 INFORMATON

Name of Operator: SMITH ENERGY CORP Operator No: 70385
Address: 12706 SHILOH RD
City: GREELEY State: CO Zip: 80631
Contact Person: James Hix - East OWP EPS Email: james.hix@state.co.us

Phone Numbers
Phone: (303) 894-2100
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PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 27607 Initial Form 27 Document #: 403281330

PURPOSE INFORMATION

- [X] 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.
- [X] 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.
- [X] Other: Wellhead cut and cap sampling

SITE INFORMATION

Yes Multiple Facilities

Facility Type: PIT Facility ID: 111645 API #: County Name: WELD
Facility Name: FARNIK 2-X Latitude: 40.535944 Longitude: -103.944251
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: NWNE Sec: 35 Twp: 7N Range: 59W Meridian: 6 Sensitive Area? Yes

Facility Type: WELL Facility ID: API #: 123-10708 County Name: WELD
Facility Name: FARNIK-WELD COUNTY 2X (OWP) Latitude: 40.536582 Longitude: -103.939019
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: NENE Sec: 35 Twp: 7N Range: 59W Meridian: 6 Sensitive Area? Yes

Facility Type: LOCATION Facility ID: 319114 API #: County Name: WELD

Facility Name: FARNIK-WELD COUNTY-67N59W 35NENE (OWP) Latitude: 40.536507 Longitude: -103.939107

** correct Lat/Long if needed: Latitude: Longitude:

QtrQtr: NENE Sec: 35 Twp: 7N Range: 59W 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? 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

There are no DWR Permitted wells plotted within 1/4 mile. DWR Permit #280553-A Residential (2009) [DTW 110-126 ft, SWL = 37 ft, Top of Perf Casing = 100 ft, TD = 140 ft, ~3370 ft S at lower elevation] Surface Water: Drainage to Wildcat Creek ~330 ft southwest; NWI Mapped Wetlands: Riverine along intermittent drainage; CPW Mapped HPH: Location is within Mule Deer Severe Winter Concentration Area; Pronghorn Winter Concentration Area w/in 1/4-mile NE. There are no residential building units (RBU) located w/in 1/4 mile of the location.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

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

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	SOILS	UNKNOWN	Visually, Field Screening, Analytical

INITIAL ACTION SUMMARY

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

This oil and gas Location is in the Colorado ECMC Orphaned Well Program (OWP). This initial Form 27 is submitted for site investigation activities performed during decommissioning of Oil and Gas Facilities. Civitas Resources/Extraction Oil & Gas Inc. will plug and abandon (PA) the former Smith Energy Corp. - Farnik-Weld County 2X oil and gas well as part of a public project.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

[X] 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 from areas most likely to exhibit E&P Waste impacts. 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 (As, Ba, Cd, Cu, Cr6+, Pb, Ni, Ag, Zn) and soil suitability for reclamation parameters (pH, EC, SAR, hot water soluble boron)].

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 investigation. If encountered in sufficient quantity to enable sample collection, a grab groundwater sample or samples will be collected and submitted for analysis of organic compounds (BTEX; Naphthalene; 1,2,4-Trimethylbenzene; 1,3,5-Trimethylbenzene) and inorganic parameters (total dissolved solids (TDS), chloride ion, sulfate ion).

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 conducted as part of this site investigation.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil | **NA / ND**

Number of soil samples collected: 1 | -- | Highest concentration of TPH (mg/kg): 371

Number of soil samples exceeeding 915-1: 1 | -- | Highest concentration of SAR: 1.72

Was the areal and vertical extent of soil contamination delineated? No | BTEX > 915-1: No

Approximate areal extent (square feet) 400

Vertical Extent > 915-1 (in feet) 600

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?

Site-specific background samples were not collected as part of this investigation. A site-specific background soil sample, 319114_BK01 @3', was collected on 11/8/2023 from an undisturbed area north of the Farnik-Weld County 2X tank battery. Results for this background soil sample indicate that pH was reported at 8.64 standard units (s.u.). Arsenic was reported at 2.27 mg/kg in the background soil sample.

☐ 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 impacts at the Farnik-Weld County 2X wellhead. Further site investigation and remediation are also required at the associated Farnik-Weld County 2X tank battery, specifically near the produced water vault (PWV), Pit #111645, Separator and west aboveground storage tank (AST).

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, 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.

If E&P Waste impacted soils are encountered the soils will be excavated and removed. If the horizontal and vertical extent of the E&P Waste impacts cannot be defined or removed during this initial action, then additional site investigation and remediation will be performed at a later date under an approved supplemental Form 27. Site data will be evaluated and remediation technologies implemented to meet Table 915-1 soil residential screening levels, protection of groundwater screening levels, or Table 915-1 groundwater and WQCC Regulation 41 numeric and narrative levels as applicable to site conditions.

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 Supplemental Form 27 - Oil and Gas Facilities Decommissioning

☐ **Request Alternative Reporting Schedule:**

☐ Semi-Annually ☒ Annually ☐ Other The OWP requests annual reporting.

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 - FARNIK-WELD COUNTY 2X (OWP) well is in the ECMC Orphaned Well Program (OWP). The Operator's bond and other funding will be used to plug and abandon (PA) the well, investigate, remediate, and reclaim the oil and gas location.

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.

This oil and gas location will be reclaimed in accordance with 1000 Series Rules. This will be performed under a separate scope of work

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.

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 02/06/2023

Proposed site investigation commencement. 11/08/2023

Proposed completion of site investigation. 09/06/2024

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 former SMITH ENERGY CORP - 70385 FARNIK-WELD COUNTY #2X (OWP) oil and gas well (API #05-123-10708), FARNIK-WELD COUNTY-67N59W 35NENE (Location ID #319114), and Pit #111645 (active), are in the ECMC Orphaned Well Program (OWP). Civitas Resources/Extraction Oil & Gas Inc. plugged and abandoned (PA) the Farnik-Weld County #2X (OWP) as part of a public project. This Form 27 supplemental presents the results of the wellhead cut and cap soil sampling following well PA. Soil samples collected from the four wellhead excavation sidewalls did not exhibit evidence of E&P Waste impacts; however, the soil sample collected from the excavation base, B01 @8' (09/06/2024), had an odor and slightly elevated photoionization detector (PID) reading (6.9 ppm). Analytical results indicate estimated concentrations of naphthalene (0.0139 mg/kg "J"), 1-methylnaphthalene (0.0176 mg/kg "J") which are above the Table 915-1 Protection of Groundwater soil screening levels (SSL). There are no DWR Permitted water wells within 1/4-mile of the Location. A DWR permitted water well located approximately 3370 ft south and at lower elevation indicated a depth to water of 110 to 126 ft, static water level of 37 ft, and a total depth of 140 ft. The OWP requests to use the Table 915-1 Residential SSL. Arsenic was reported at 4.5 mg/kg and barium was reported at 101 mg/kg in the wellhead soil sample, B01 @8'. No site-specific background soil samples were collected during the wellhead cut and cap sampling. A site-specific background soil sample collected from an undisturbed area north of the tank battery on 11/8/2023. The background soil pH was reported at 8.64 s.u. and arsenic was reported at 2.27 mg/kg. Further site investigation and remediation are required at the wellhead and at the remote tank battery and pit to the west. Remediation will proceed under Remediation Project #27607.

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: 10/24/2024 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: 02/24/2025

Remediation Project Number: 27607

COA Type	Description
	OWP shall provide the remediation plans for investigating and potentially delineating contaminants of concern from the Farnik-Weld County 2X tank battery, produced water vault (PWV), Pit #111645, Separator and west aboveground storage tank (AST). "Further site investigation and remediation are required at the wellhead and at the remote tank battery and pit to the west. Remediation will proceed under Remediation Project #27607."
	OWP shall submit secured and standalone lab reports for analytical results collected for this remediation project, within the next submittal.
2 COAs	

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
403954828	FORM 27-SUPPLEMENTAL-SUBMITTED
403969716	SITE INVESTIGATION REPORT

Total Attach: 2 Files

General Comments

User Group	Comment	Comment Date
Environmental	ECMC added Location (Facility ID: 319114) and Pit (Facility ID: 111645) under the "Site Information" section to keep the chain of records in the database accurate.	02/24/2025
Environmental	Per Doc# 403906084, 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.	02/24/2025

Total: 2 comment(s)