

State of Colorado  
Energy & Carbon Management Commission

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Document Number:  
404307425  
Receive Date:  
08/11/2025

Report taken by:  
Nick Cholas

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 ECOM 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>PDC ENERGY INC</u>	Operator No: <u>69175</u>	Phone Numbers Phone: <u>(970) 278-6934</u> Mobile: <u>( )</u>
Address: <u>1099 18TH STREET SUITE 1500</u>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Erica Zuniga</u>	Email: <u>EricaZuniga@chevron.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 39981 Initial Form 27 Document #: 404095902

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: <u>LOCATION</u>	Facility ID: <u>305979</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>SEGAL 8-2-24</u>	Latitude: <u>40.299610</u>	Longitude: <u>-104.717580</u>	
** correct Lat/Long if needed: Latitude: <u>40.301991</u>		Longitude: <u>-104.717404</u>	
QtrQtr: <u>SENE</u>	Sec: <u>24</u>	Twp: <u>4N</u>	Range: <u>66W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SW Most Sensitive Adjacent Land Use Cropland  
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**

Riverine 0.23mi NW  
Freshwater Pond 0.22mi SE, 0.22mi NW  
Residential 0.05mi E, 0.17mi SE, 0.24mi N  
Farm Structure 0.01/0.02mi E, 0.18mi SE, 0.03/0.04mi S, 0.24/0.25mi N

**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
UNDETERMINED	GROUNDWATER	NA	Lab analysis if encountered
UNDETERMINED	SOILS	NA	Lab analysis

**INITIAL ACTION SUMMARY**

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

A site investigation will be conducted pursuant to ECMC Rule 911 at the Segal 1, 31, 41, 42, 8-2-24 Facility and Tank Battery location.

**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 confirmation soil samples will be collected from the produced water vessel(s) excavation, beneath the ground oil tank(s), at the risers for the flowline (s) and dumpline(s) of any separator(s). In addition, the on-site dump lines located between the separator and tank battery will be removed by pulling from either end. Soil samples will be analyzed by a certified laboratory for the full extent of Table 915-1, including but not limited to: TPH (total volatile [C6 -C10] and extractable [C10-C36] hydrocarbons) organic compounds in soil per ECMC Table 915-1, and EC, SAR, pH, metals, and boron. All samples collected will be analyzed by a certified laboratory using approved ECMC laboratory analysis methods.

**Proposed Groundwater Sampling**

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

If groundwater is encountered during the site investigation a grab groundwater sample will be collected and analyzed for all organic compounds and inorganic parameters per ECMC Table 915-1.

**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 ):

Visual inspection at the tank battery area will occur during abandonment activities. Field personnel will field screen all disturbed areas using visual and olfactory senses. Additionally, discrete soil samples will be collected from the base of the excavation and excavation sidewall in areas most likely to be impacted and exhibiting the highest field screened VOC concentration. The ECMC Tank Battery and Produced Water Vessel Closure Checklists will be utilized and filled out during the abandonment process. A photolog will be submitted on the Subsequent Form 27.

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

Number of soil samples collected 0  
Number of soil samples exceeding 915-1 \_\_\_\_\_  
Was the areal and vertical extent of soil contamination delineated? \_\_\_\_\_  
Approximate areal extent (square feet) \_\_\_\_\_

### NA / ND

\_\_\_\_\_ Highest concentration of TPH (mg/kg) \_\_\_\_\_  
\_\_\_\_\_ Highest concentration of SAR \_\_\_\_\_  
\_\_\_\_\_ BTEX > 915-1 \_\_\_\_\_  
\_\_\_\_\_ Vertical Extent > 915-1 (in feet) \_\_\_\_\_

### 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?

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?

## 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.

No source has been generated at this time

### 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.

NA

### Soil Remediation Summary

In Situ

Ex Situ

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

\_\_\_\_\_ 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.



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.

Reclamation will be in accordance with ECMC 1000 Series Rules.

Is the described reclamation complete? No

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. 10/13/2026

Proposed date of completion of Reclamation. 02/16/2027

## 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. 01/08/2025

Actual Spill or Release date, or date of discovery. \_\_\_\_\_

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 08/20/2026

Proposed site investigation commencement. 10/13/2026

Proposed completion of site investigation. 02/16/2027

### 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 is requesting additional time to commence site investigation activities. Site investigation activities will commence on or before the date specified in the "Proposed site investigation commencement." section.

**OPERATOR COMMENT**

This Supplemental Form 27 is being submitted as an Annual Timeline Update for the Segal 1, 31, 41, 42, 8-2-24 tank battery. PDC is proposing an annual timeline reporting frequency until decommissioning activities occur. The Q2 2025 Timeline Update, with the original request for annual reporting frequency, submitted on 05/18/2025 under Form 27 Document Number 404195614, is still pending review. Supplemental Form 27s will be prepared on an annual basis until decommissioning of the site infrastructure is complete. Following decommissioning activities, a Supplemental Form 27 will be prepared within 90 days of field activities unless a reportable release is discovered.

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

Signed: Kayla White, P.E.

Title: Environmental Consultant

Submit Date: 08/11/2025

Email: kwhite@cdhconsult.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: Nick Cholas

Date: 10/30/2025

Remediation Project Number: 39981

**COA Type****Description**

	ECMC approves schedule change. Operator shall submit Supplemental Form 27 with all available site assessment data no later than 90 days after work is completed. Should schedule change again, Operator shall submit a Supplemental Form 27 with an updated Implementation Schedule at least 14 days in advance per Rule 913.d.(2)
	ECMC has processed this form as an update; no analytical was attached thus approval of this form does not imply any agreement with comments on completion of site investigation. All ongoing/unaddressed comments/COAs from previous Forms remain applicable.
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**

404307425	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
404416524	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 2 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)