

State of Colorado
Energy & Carbon Management Commission

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404445872
Receive Date:
11/24/2025

Report taken by:
Candice (Nikki) Graber

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>PDC ENERGY INC</u>	Operator No: <u>69175</u>	Phone Numbers Phone: <u>(970) 304-5000</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>Lauren Hoff</u>	Email: <u>RBUEUF27@chevron.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 32693 Initial Form 27 Document #: 403547130

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

Yes Multiple Facilities

Facility Type: <u>LOCATION</u>	Facility ID: <u>422948</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>VEGA USX A03-05 TANK</u>	Latitude: <u>40.522080</u>	Longitude: <u>-104.541060</u>	
	** correct Lat/Long if needed: Latitude: <u>40.522185</u>	Longitude: <u>-104.540780</u>	
QtrQtr: <u>NWNW</u>	Sec: <u>3</u>	Twp: <u>6N</u>	Range: <u>64W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>488379</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Vega USX A03-05</u>	Latitude: <u>40.522227</u>	Longitude: <u>-104.540746</u>	
	** correct Lat/Long if needed: Latitude: _____	Longitude: _____	
QtrQtr: <u>NWNW</u>	Sec: <u>3</u>	Twp: <u>6N</u>	Range: <u>64W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SW _____

Most Sensitive Adjacent Land Use Agricultural _____

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

Nearest Well: Domestic - 822' NE; Surface Water: Freshwater Pond - 1,202' N; Occupied Building: 900' ENE; Livestock: 65' E; FWS Wetlands: 316' SE
Freshwater Emergent Wetland (PEM1C); HPH Sensitive Wildlife Habitat: Rule 1202.d: 61' N Pronghorn Winter Concentration; Rule 1202.d: Tank Battery Within
Mule Deer Severe Winter Range.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> E&P Waste | <input type="checkbox"/> Other E&P Waste | <input type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | _____ |
| <input checked="" type="checkbox"/> Oil | <input type="checkbox"/> Tank Bottoms | |
| <input checked="" type="checkbox"/> Condensate | <input type="checkbox"/> Pigging Waste | |
| <input type="checkbox"/> Drilling Fluids | <input type="checkbox"/> Rig Wash | |
| <input type="checkbox"/> Drill Cuttings | <input type="checkbox"/> Spent Filters | |
| | <input type="checkbox"/> Pit Bottoms | |
| | <input type="checkbox"/> Other (as described by EPA) | _____ |

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	GROUNDWATER	NA	Lab Analysis or Field Screening, if encountered
Yes	SOILS	Refer to Tables and Figures	Lab Analysis and Field Screening

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 was conducted at the Vega USX A03-05 Tank Battery on 10/10/24. Laboratory soil samples were collected from the produced water vessel (PWV) excavation base (PWV01-B@6') and sidewall (PWV01-N@3'), beneath the aboveground storage tank (AST01@0-6"), and at the dump line of the separator (SEP01-DL@4'). On-site dump lines located between the separator and tank battery were removed by pulling from either end. Field screening samples were collected from the remaining PWV excavation sidewalls (PWV01-E@3', PWV01-S@3', PWV01-W@3'), the water dump line (WDL01@0-6"), meter houses (GS01@0-6", GS02@0-6"), compressor (GS03@0-6"), and emission control device (GS04@0-6").

Lab soil samples were collected beneath the flowline risers under the Ruff 22-3 Flowline, Remediation # 32423, approved Form 27 # 404045695 (FL01R-S@3') and the Ruff 21-3 Flowline, Remediation # 32425, Form 27 # 404359711 (FL01R-S@3'), which is pending approval as of the submission of this report.

Laboratory analytical results indicated a 1-methylnaphthalene (M) exceedance at soil sample location PWV01-B@6'. This was reported as a historic release under Form 19 # 403965006 (Spill ID # 488379). Groundwater was not encountered during the tank battery decommissioning.

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):

Soil samples were collected as described in the Initial Action Summary of this Form 27. Sampling deviated from the approved sampling plan in Initial Form 27 # 403547130 because the flowline riser samples were collected under the Ruff 22-3 Flowline (Rem # 32423) and Ruff 21-3 Flowline (Rem # 32425). Soil samples were 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, EC, SAR, pH, metals, and boron.

Proposed Groundwater Sampling

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

If groundwater is encountered during a future site investigation, a groundwater sample will be collected and analyzed for all organic and inorganic compounds per ECMC Table 915-1; this sample analysis includes, but is not limited to BTEX, naphthalene, 1,2,4-trimethylbenzene (TMB), and 1,3,5-TMB by EPA Method 8260, chloride and sulfate anions by EPA Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

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 occurred during decommissioning activities. Field personnel screened disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required. A detailed summary of decommissioning activities, including field notes, site photos, figures, and laboratory analytical results, was attached to previous Form 27 # 403965948.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 4

Number of soil samples exceeding 915-1 4

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

Approximate areal extent (square feet) 400

NA / ND

ND Highest concentration of TPH (mg/kg) _____

-- Highest concentration of SAR 0.901

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 6

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?

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?

Concurrently with the proposed remedial excavation outlined in the Remedial Action Plan section of this Form 27, a site investigation will be conducted to collect background samples to determine if elevated pH and arsenic concentrations can be attributed to native soil conditions at the site. Background soil samples will be collected and analyzed for ECMC Table 915-1 metals, pH, EC, SAR, and boron.

This proposed supplemental site investigation (SSI) was previously approved in Form 27 # 403965948 and the proposed site investigation map attached to Form 27 # 404156801. Following a review of site data, the proposed SSI was updated to relocate proposed background sample locations further away from the former tank battery footprint. The updated proposed site investigation map is attached to this Form 27. The investigation will be completed per the proposed implementation schedule, and the results of the site investigation will be summarized in a subsequent Form 27.

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.

The 1-methylnaphthalene exceedance observed at sample location PWV01-B@6' will be removed through remedial excavation. Excavation confirmation samples will be submitted for the full Table 915-1 analytical suite. The results of the remedial excavation will be submitted on a subsequent Form 27.

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.

In addition to remedial excavation activities, a site investigation will be conducted to collect background samples to determine if elevated pH and arsenic concentrations can be attributed to native soil conditions at the site. Background soil samples will be collected and analyzed for ECMC Table 915-1 metals, pH, EC, SAR, and boron. This proposed supplemental site investigation (SSI) was previously approved in Form 27 # 403965948 and the proposed site investigation map attached to Form 27 # 404156801. Following a review of site data, the proposed SSI was updated to relocate proposed background sample locations further away from the former tank battery footprint. The updated proposed site investigation map is attached to this Form 27. The site investigation will be completed per the proposed implementation schedule, and the results of the site investigation will be summarized in a subsequent Form 27.

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.

Groundwater was not encountered during the initial decommissioning activities.

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 Updated Supplemental Site Investigation Proposal

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.

Operator does not have site-specific financial assurance for this project; however, Operator has inactive well, blanket, and surface bonding including Surety IDs 106077122, 106473808, and 106473820, as well as commercial general liability and/or umbrella/excess insurance meeting the requirements of Rule 705.b. Operator does not anticipate making an insurance claim for this project.

- Further soil investigation/delineation is required
- Source removal activities are required

Costs included herein are estimates only and may change over time based on numerous factors. Accordingly, Operator makes no guarantees as to the accuracy of such cost estimates, thus providing an estimate for the next year below.

Operator anticipates the remaining cost for this project to be: \$ 50000

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? No

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.

Reclamation will be conducted in accordance with ECMC 1000 Series Rules.

Is the described reclamation complete? Yes _____

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. 10/10/2024

Proposed date of completion of Reclamation. 03/13/2027

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. 09/11/2023

Actual Spill or Release date, or date of discovery. 10/21/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 10/10/2024

Proposed site investigation commencement. 03/13/2026

Proposed completion of site investigation. 03/13/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 03/13/2026

Proposed date of completion of Remediation. 09/13/2026

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:

The implementation schedule was updated for the proposed site investigation and remedial excavation at the Vega USX A03-05 Tank Battery to reflect a change in start work dates due to land access constraints. The proposed background site investigation is tentatively scheduled for 03/13/26. The remedial excavation proposed in the Remedial Action Plan does not have a tentative start date, and will be completed per contractor availability as soon as possible. The ECMC will be notified of any updates to the implementation schedule in a subsequent Form 27.

OPERATOR COMMENT

This Form 27 is being submitted as a 4Q25 update to the proposed site investigation and remedial excavation at the Vega USX A03-05 Tank Battery (REM # 32693).

This proposed supplemental site investigation (SSI) was previously approved in Form 27 # 403965948 and the proposed site investigation map attached to Form 27 # 404156801. Following a review of site data, the proposed SSI was updated to relocate proposed background sample locations further away from the former tank battery footprint. The updated proposed site investigation maps attached to this Form 27.

In response to the comments issued on previously submitted Form 27 Doc #404296564 and #404372902, Operator has demonstrated progress of remediation at this site by previously scheduling the proposed site investigation for 07/22/25 and submitting a Colorado 811 Ticket on 07/14/25 in order to maintain the approved implementation schedule. However, land access was denied by the land owner due to crops in the field. The Colorado 811 confirmation ticket supporting this is attached to this Form 27. Redactions included in the form attachments are solely applied to inapplicable and/or personal information. The ECMC will be notified of any updates to the implementation schedule in a subsequent Form 27.

The implementation schedule was updated for the proposed site investigation and remedial excavation at the Vega USX A03-05 Tank Battery to reflect a change in start work dates due to land access constraints. The proposed background site investigation is tentatively scheduled for 03/13/26. The remedial excavation proposed in the Remedial Action Plan does not have a tentative start date, and will be completed per contractor availability as soon as possible.

The results of the proposed site investigation and remedial excavation will be submitted on a subsequent Form 27. Per ECMC Rule 913.e., quarterly reporting will be conducted until closure criteria are achieved for the remediation project.

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

Signed: Lo Blanchard

Title: Reg. Reporting Analyst

Submit Date: 11/24/2025

Email: tas-chevron-5@tasman-geo.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: Candice (Nikki) Graber

Date: 11/26/2025

Remediation Project Number: 32693

COA Type

Description

	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.
	Pursuant to Rule 913.d, Operator will adhere to the proposed schedule. Any deviation from the schedule must be approved by the Director in writing on a Form 27 Supplemental Report.
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
404445872	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
404446714	CORRESPONDENCE
404449180	SITE INVESTIGATION PLAN
404453321	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date
Agency	Operator submitted this form 11/24/2025; outside crop season but has not provided an updated call ticket or schedule. Note: 811 locates expire after 30 days.	11/26/2025

Total: 1 comment(s)