

State of Colorado
Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:
404460044
Receive Date:
12/16/2025

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 #: 32723 Initial Form 27 Document #: 403582818

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>331245</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>NATIONAL HOG FARM-65N63W 21SWNE</u>		Latitude: <u>40.386750</u>	Longitude: <u>-104.438030</u>
		** correct Lat/Long if needed: Latitude: <u>40.386965</u>	Longitude: <u>-104.438453</u>
QtrQtr: <u>SWNE</u>	Sec: <u>21</u>	Twp: <u>5N</u>	Range: <u>63W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>491673</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>National Hog Farm-65N63W 21SWNE</u>		Latitude: <u>40.387027</u>	Longitude: <u>-104.438312</u>
		** correct Lat/Long if needed: Latitude: _____	Longitude: _____
QtrQtr: <u>SWNE</u>	Sec: <u>21</u>	Twp: <u>5N</u>	Range: <u>63W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>491674</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>National Hog Farm-65N63W 21SWSNE</u>	Latitude: <u>40.387024</u>	Longitude: <u>-104.438392</u>	
** correct Lat/Long if needed: Latitude: _____ Longitude: _____			
QtrQtr: <u>SWNE</u>	Sec: <u>21</u>	Twp: <u>5N</u>	Range: <u>63W</u>
		Meridian: <u>6</u>	Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SW Most Sensitive Adjacent Land Use Ranch 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? Yes

Other Potential Receptors within 1/4 mile

Nearest Well: Domestic - 3,345' SE; Surface Water: Freshwater Pond - 570' W; Livestock: 0' (Within Ranch Land); FWS Wetlands: 256' WSW Freshwater Emergent Wetland (PEM1A).

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 and 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.

Pursuant to ECOM Rule 911, a site investigation was conducted during decommissioning at the National Hog Farm-65N63W 21SWNE (AKA National Hog Farm 31, 33, 42-21) production facility on 6/17/25 through 6/19/25. Confirmation soil samples were collected from the flowline and dump line risers of the former separator (SEP01-FL, SEP01-DL), at a directional change observed along the length of the dump line (SEP01-DL01), beneath the above-ground storage tank (AST01), and from the base (PWV01-B) and side walls (PWV01-N, E, S, W) of the partially-buried produced water vessel excavation. Field screening samples were collected at the meter houses (MH01, 02, 03, 04, 05), water dump line (WDL01), and emission control devices (FLARE01, 02). The on-site dump lines located between the separator and tank battery were removed by pulling from either end.

Laboratory results indicated 1,2,4-Trimethylbenzene (TMB), 1,3,5-TMB, naphthalene, total petroleum hydrocarbons (TPH), benzo(a)anthracene, 1-Methylnaphthalene (M), and 2-M were detected in exceedance of ECOM Table 915-1 regulatory limits within samples AST01@0-6", PWV01-B@4', PWV01-B@4.5', and PWV01-N@2.5'. These exceedances were reported as historic releases under Form 19 Doc # 404245837 and 404246626, with corresponding Spill ID # 491674 and 491673.

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 ECOM Table 915-1, and EC, SAR, pH, metals, and boron.

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):

Sampling was conducted as described in the Initial Action Summary of this Form 27. Sampling deviated from the approved sampling plan in Initial Form 27 Doc # 403582818 because the infrastructure identified on the proposed sample location map as 3rd party meter houses (MH02 - MH05) were not present on site at the time of decommissioning, therefore screening samples were collected at the approximate infrastructure locations based on historical imagery. Additionally, field observations indicated that the eastern separator was historically removed prior to decommissioning activities, and that the related flowlines were connected to the western separator. As such, confirmation soil samples were only collected from the flowline and dump line risers of the western separator during initial decommissioning.

Proposed Groundwater Sampling

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

If groundwater is encountered during future site investigations, a groundwater sample will be collected and analyzed for all organic compounds and inorganic parameters per ECOM 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 of the tank battery area occurred during tank battery decommissioning activities. Personnel field screened all disturbed areas using visual and olfactory senses to determine if laboratory confirmation sampling was required. A detailed summary of tank battery decommissioning activities, including field notes, site photos, figures, and laboratory analytical results, was attached to prior Form 27 Doc # 404245562.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 11

Number of soil samples exceeding 915-1 5

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

Approximate areal extent (square feet) 500

NA / ND

 Highest concentration of TPH (mg/kg)

 Highest concentration of SAR

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 5

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?

On 06/19/25, 6 background soil samples were collected from 2 discrete locations (BKG01, BKG02) adjacent to the tank battery and analyzed for metals in soil per ECMC Table 915-1, pH, EC, SAR, and boron. Background soil samples were collected from depths ranging between 1 to 5 feet below ground surface. The maximum background concentration with a 1.25x multiplier applied for arsenic was 3.0 mg/kg. All arsenic concentrations observed during decommissioning activities were below 1.25x the maximum background level.

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?

To assess the extent of impacted soil and scope of remedial excavation that will be needed, a supplemental site investigation (SSI) will first be conducted to vertically and horizontally delineate the 1,2,4-Trimethylbenzene (TMB), 1,3,5-TMB, naphthalene, total petroleum hydrocarbons (TPH), benzo (a)anthracene, 1- Methylnaphthalene (M), and 2-M) observed at sample locations AST01@0-6", PWV01-B@4', PWV01-B@4.5', and PWV01-N@2.5'. The SSI proposed in previous Form 27# 404245562 has been revised to remove proposed verification sampling at SEP-01-DL01@4', per recent ECMC guidance that sampling at the same collection interval to confirm or deny an exceedance is no longer valid. Instead, 5 soil borings will be advanced proximal to the SEP01-DL01@4' soil sample location to vertically and laterally delineate pH levels below Table 915-1 regulatory standards. All delineation samples will be analyzed for full Table 915-1 constituents.

Concurrently with the SSI, additional background samples (BKG03 - BKG07) will be collected to further assess inorganic and metals concentrations in native soil conditions at the site. Background soil samples will analyzed for metals in soil per ECMC Table 915-1, pH, SAR, EC, and boron. Proposed soil boring locations are illustrated in the Site Investigation Plan attached to this Form 27. The SSI will be completed in accordance with the proposed implementation schedule, and the results of the SSI will be submitted on a subsequent Form 27.

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? Yes

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Refer to the Remediation Summary Section below.

REMEDICATION 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.

Following the 2Q25 initial decommissioning at the tank battery, organic concentrations exceeding regulatory standards, and pH levels below regulatory standards and background levels remain in situ.

To assess the extent of impacted soil and scope of remedial excavation that will be needed, a supplemental site investigation (SSI) will first be conducted to vertically and horizontally delineate the 1,2,4-Trimethylbenzene (TMB), 1,3,5-TMB, naphthalene, total petroleum hydrocarbons (TPH), benzo (a)anthracene, 1- Methyl naphthalene (M), and 2-M) observed at sample locations AST01@0-6", PWV01-B@4', PWV01-B@4.5', and PWV01-N@2.5'. The SSI proposed in previous Form 27# 404245562 has been revised to remove proposed verification sampling at SEP-01-DL01@4', per recent ECMC guidance that sampling at the same collection interval to confirm or deny an exceedance is no longer valid. Instead, 5 soil borings will be advanced proximal to the SEP01-DL01@4' soil sample location to vertically and laterally delineate pH levels below Table 915-1 regulatory standards. All delineation samples will be analyzed for full Table 915-1 constituents.

Concurrently with the SSI, additional background samples (BKG03 - BKG07) will be collected to further assess inorganic and metals concentrations in native soil conditions at the site. Background soil samples will analyzed for metals in soil per ECMC Table 915-1, pH, SAR, EC, and boron. Proposed soil boring locations are illustrated in the Site Investigation Plan attached to this Form 27. The SSI will be completed in accordance with the proposed implementation schedule, and the results of the SSI will be submitted on a subsequent Form 27.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

_____ Excavate and offsite disposal

_____ Chemical oxidation

_____ If Yes: Estimated Volume (Cubic Yards) _____

_____ Air sparge / Soil vapor extraction

_____ Name of Licensed Disposal Facility or ECMC Facility ID # _____

_____ Natural Attenuation

_____ Excavate and onsite remediation

_____ Other _____

_____ 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 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: \$ 65000

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.

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. 06/17/2025

Proposed date of completion of Reclamation. 10/11/2027

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. 09/28/2023

Actual Spill or Release date, or date of discovery. 06/17/2025

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 06/17/2025

Proposed site investigation commencement. 04/10/2026

Proposed completion of site investigation. 04/11/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 04/11/2026

Proposed date of completion of Remediation. 04/11/2027

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 has not changed from the schedule proposed in previous Form 27 Doc #404245562. The proposed site investigation is tentatively scheduled for commencement in April 2026. The ECMC will be notified regarding any updates to the implementation schedule in a subsequent Form 27.

OPERATOR COMMENT

This Form 27 is being submitted as a 4Q25 update for the proposed site investigation at the National Hog Farm-65N63W 21SWNE Facility (REM # 32723). This Form also serves to address the comment issued on denied Form 27 Doc # 404327614.

The supplemental site investigation proposed in previous Form 27 Doc # 404245562 has been revised to remove proposed verification sampling at SEP-01-DL01 @4', per recent ECMC guidance that sampling at the same collection interval to confirm or deny an exceedance is no longer valid. Instead, 5 soil borings will be advanced proximal to the SEP01-DL01 @4' soil sample location to vertically and laterally delineate pH levels below Table 915-1 regulatory standards. All delineation samples will be analyzed for full Table 915-1 constituents. The updated proposed soil boring locations are illustrated in the Site Investigation Plan attached to this Form 27.

In response to the comment issued on previously denied Form 27 Doc # 404327614, an updated proposed site investigation map that aligns with current ECMC guidance has been attached.

The SSI will be completed in accordance with the proposed implementation schedule, and the results of the SSI will be submitted on a subsequent Form 27. Pursuant to 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: 12/16/2025

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: 01/06/2026

Remediation Project Number: 32723

COA Type**Description**

	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.
	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**

404460044	INVESTIGATION/REMEDATION WORKPLAN (SUPPLEMENTAL)
404469572	SITE INVESTIGATION PLAN
404496439	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 3 Files

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

Environmental	Resampling for organic impacts has not been considered a valid practice.	01/06/2026
---------------	--	------------

Total: 1 comment(s)