FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

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Receive Date: 10/16/2025
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 INFORMATON

Name of Operator: PDC ENERGY INC Operator No: 69175
Address: 1099 18TH STREET SUITE 1500
City: DENVER State: CO Zip: 80202
Contact Person: Lauren Hoff Email: RBUEUF27@chevron.com

Phone Numbers
Phone: (970) 304-5000
Mobile: ( )

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 32453 Initial Form 27 Document #: 403580972

PURPOSE INFORMATION

- [ ] Rule 913.c.(1): Pit or Cuttings Trench closure.
- [X] Rule 913.c.(2): Buried or partially buried vessel closure, which will be by removal.
- [X] 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.
- [ ] Other:

SITE INFORMATION

Yes Multiple Facilities

Facility Type: LOCATION Facility ID: 446742 API #: County Name: WELD
Facility Name: MDM Tank Battery 435363 Latitude: 40.134794 Longitude: -104.967770
** correct Lat/Long if needed: Latitude: 40.134794 Longitude: -104.967862
QtrQtr: SWSE Sec: 14 Twp: 2N Range: 68W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 488349 API #: County Name: WELD
Facility Name: MDM 33, 34-14 Latitude: 40.134828 Longitude: -104.967848
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SWSE Sec: 14 Twp: 2N Range: 68W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE Facility ID: 488352 API #: County Name: WELD

Facility Name: MDM 33, 34-14 Latitude: 40.134880 Longitude: -104.967810

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

QtrQtr: SWSE Sec: 14 Twp: 2N Range: 68W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM

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? Yes

Other Potential Receptors within 1/4 mile

Nearest Well: Stock - 586' SSW; Surface Water: Unnamed Creek - 128' NNE; Occupied Building: 251' SSW; Livestock: 205' SSW; FWS Wetlands: 118' NNE Freshwater Emergent Wetland (PEM1A); Tank Battery Within 100-Year Floodplain .

SITE INVESTIGATION PLAN

TYPE OF WASTE:

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

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.

In accordance with ECMC Rule 911, this form serves as notification for the decommissioning and abandonment of the MDM 33, 34-14 production facility on 10/16/2024. The ground and sub-surfaces were visually inspected for hydrocarbon impacts during equipment decommissioning. In addition, on-site dump lines located between the separator and tank battery were removed by pulling from either end during decommissioning activities.

On 10/17/2024, a soil sample was collected along the flowline beneath the separator riser (FL01R-S@4') and analyzed for full ECMC Table 915-1 contaminants of concern during decommissioning of the associated MDM 33-14 Flowline (Remediation #32449).

On 10/17/2024, a soil sample was collected along the flowline beneath the separator riser (FL01R-S@4') and analyzed for full ECMC Table 915-1 contaminants of concern during decommissioning of the associated MDM 34-14 Flowline (Remediation #32447).

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 confirmation soil samples were collected from the produced water vessel excavation (PWV01-W@2.5', PWV01-B@5', and WDL01@0-6"), beneath the ground oil tank (AST01@0-6"), and at the riser for the dumpline of the separator (SEP01-DL@4'). 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, and EC, SAR, pH, metals, and boron using approved ECMC laboratory analysis methods. A detailed summary of decommissioning activities, including field notes, site photos, figures, and laboratory analytical results, was submitted as an attachment to Form 27 document #403961432.

Proposed Groundwater Sampling

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

Groundwater was encountered at two locations during the 10/14/2025 site investigation (GW01@10' & GW02@15') and grab groundwater samples were collected and submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene 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):

Discrete soil samples were collected from the base of the produced water vessel excavation and excavation sidewall in areas most likely to be impacted and exhibiting the highest field screened VOC concentration. The soil samples were submitted for laboratory analysis of the full Table 915-1 analytical suite by ECMC approved methods. Assessment of off location flowlines will be addressed with their respective wellheads under a separate Form 27. A detailed summary of decommissioning activities, including field notes, site photos, figures, and laboratory analytical results, is attached to the previous Form 27, document #403961432.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected: 6
Number of soil samples exceeeding 915-1: 6
Was the areal and vertical extent of soil contamination delineated? No
Approximate areal extent (square feet): 600

NA / ND

-- Highest concentration of TPH (mg/kg): 3400
-- Highest concentration of SAR: 0.711
BTEX > 915-1: Yes
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?

[X] Were background samples collected as part of this site investigation?

Four background samples were collected from one discrete location near the tank battery (BKG01) from depths ranging between 0-0.5 to 5 feet below ground surface (ft bgs) and analyzed for full Table 915-1 analysis. The maximum background concentrations for pH was observed to be 8.35. The maximum background
concentrations with a 1.25x multiplier applied for arsenic and barium was calculated to be 6.05mg/kg and 141mg/kg, respectively. All arsenic and barium concentrations observed during decommissioning were below background levels.

In background soil sample BKG01@0-6", Benzo(a) anthracene and indeno(1,2,3-cd) pyrene were observed within the applicable Table 915-1 standards, but above the minimum laboratory detection limit. The analytical results of this background sample will not be used and additional background soil samples will be collected to assess Table 915-1 constituents in native soil.

[ ] Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards):
Volume of liquid waste (barrels):

[X] Is further site investigation required?

The supplemental site investigation (SSI) proposed in Form 27 #404154697 was completed on 10/14/2025. Borings BH01 - BH08 were advanced to vertically and horizontally delineate the ethyl-benzene, xylenes, 124-Trimethylbenzene (TMB), 1,3,5-TMB, naphthalene, TPH, 1-Methylnaphthalene (M), and 2-M exceedances observed during decommissioning. The proposed soil sampling locations are shown on the site investigation map attached to a previous Form 27 (ECMC Document # 404154697). During the SSI, soil samples were collected and analyzed for full ECMC Table 915-1 constituents. During the SSI, a total of 10 additional background samples were collected from BKG02 - BKG06 to determine if pH is attributed to native soil conditions at the site. The corresponding analytical reports have not been received as of the submission of this Form 27. The 4Q25 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.

Following supplemental site investigation activities, the impacted material observed at sample locations PWV01-W@2.5' and WC01@3' will be removed via remedial excavation prior to requesting No Further Action (NFA) for the Site. Remedial excavation confirmation soil samples will be collected in accordance with the pending proposed excavation map and analyzed for full ECMC Table 915-1 constituents. 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.

A supplemental site investigation (SSI) was completed on 10/14/2025 to vertically and horizontally delineate the ethyl-benzene, xylenes, 1,2,4-TMB, 1,3,5-TMB, naphthalene, TPH, 1-Methylnaphthalene (M) and 2-M exceedances observed during decommissioning at the waste characterization sample WC01@3', as well as the 1-M, 2-M, and pH exceedances observed at decommissioning soil sample PWV01-W@2.5'. Additionally, the pH exceedances observed at soil sample locations AST01@0-6" and PWV01-B@5' were vertically and horizontally delineated. During the SSI, soil samples were collected and analyzed for full ECMC Table 915-1 constituents. The corresponding analytical reports have not been received as of the submission of this Form 27. The results of the 4Q25 SSI will be summarized in a subsequent Form 27.

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.

Groundwater was encountered at two locations during the 10/14/2025 site investigation (GW01@10' & GW02@15') and grab groundwater samples were collected and analyzed for all organic and inorganic compounds per ECMC Table 915-1. The corresponding analytical reports have not been received as of the submission of this Form 27. Following completion of supplemental site investigation/remedial excavation activities at the former tank battery location, a monitoring well network will be proposed, as applicable.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

[X] 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

[X] Other Timeline Update

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?

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 1004 Series Rules.

Is the described reclamation complete? Yes

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

[X] 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. 10/16/2024

Proposed date of completion of Reclamation. 10/14/2026

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. 09/16/2023

Actual Spill or Release date, or date of discovery. 10/17/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/11/2024

Proposed site investigation commencement. 01/21/2025

Proposed completion of site investigation. 10/14/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 10/14/2025

Proposed date of completion of Remediation. 10/14/2026

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.

[X] Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

The implementation schedule was updated due to the completion of the proposed site investigation at the MDM 3,34-14 tank battery. The site investigation was completed on 10/14/25 and the corresponding analytical reports have not been received as of the submission of this Form 27. The implementation schedule has been changed to provide another quarter to summarize the analytical results and propose additional site actions as necessary. 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 timeline update for the proposed site investigation and remedial excavation at the MDM 3,34-14 tank battery.

The implementation schedule was updated following the completion of the proposed site investigation on 10/14/2025 as detailed in the Site Investigation Report section of this Form 27. Analytical data from the October 2025 SSI has not been received as of the submission of this Form 27 and will be submitted in the next report. The ECMC will be notified of any updates to the implementation schedule in 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: Andy Sagen Title: Environmental Consultant

Submit Date: 10/16/2025 Email: tas-chevron-1@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: 10/16/2025

Remediation Project Number: 32453

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
404344376	INVESTIGATION/REMEDIATION WORKPLAN (SUPPLEMENTAL)
404394702	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 2 Files

General Comments

User Group	Comment	Comment Date
Environmental	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.	10/16/2025

Total: 1 comment(s)