

State of Colorado
Energy & Carbon Management Commission

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Document Number:
404380388

Receive Date:

Report taken by:

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
Address: <u>1099 18TH STREET SUITE 1500</u>		Phone: <u>(970) 304-5000</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u>		Mobile: <u>()</u>
Contact Person: <u>Dan Peterson</u>	Email: <u>RBUEUF27@chevron.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 40221 Initial Form 27 Document #: 404161522

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>333035</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Kodak North FD Pad 28-002HN</u>	Latitude: <u>40.459390</u>	Longitude: <u>-104.863360</u>	
	** correct Lat/Long if needed: Latitude: <u>40.458740</u>	Longitude: <u>-104.864441</u>	
QtrQtr: <u>SENW</u> Sec: <u>26</u> Twp: <u>6N</u> Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>			

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>491756</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Kodak North FD Pad 28-002HN</u>	Latitude: <u>40.458735</u>	Longitude: <u>-104.864433</u>	
	** correct Lat/Long if needed: Latitude: _____	Longitude: _____	
QtrQtr: <u>SENW</u> Sec: <u>26</u> Twp: <u>6N</u> Range: <u>67W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>			

SITE CONDITIONS

General soil type - USCS Classifications SW _____

Most Sensitive Adjacent Land Use Industrial _____

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 0.11m S, 0.18mi W, 0.22mi SE
Industrial Complex 0.08mi W, 0.16mi NW, 0.24mi SE

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 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.

A site investigation was conducted during the decommissioning of the partially buried vessel (Compressor pit) at the Kodak North FD Pad 28-002HN Facility on 10/03/25. Soil samples were field screened on the N-E-S-W sidewalls of the excavation, and a confirmation soil sample was collected at the base of the excavation (FS01).

Laboratory results indicated 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total petroleum hydrocarbons (TPH) were detected in exceedance of ECMC Table 915-1 regulation within sample FS01@7'. As such, a historic reportable release report (Form 19 # 404380460) was submitted to the ECMC and Spill / Release Point ID # 491756 was issued.

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, as per the approved sampling plan presented in Initial Form 27 # 404161522.

Soil samples were analyzed by a certified laboratory for the full extent of Table 915-1 using ECMC approved laboratory analysis methods, 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.

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 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 partially buried vessel area occurred during 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 partially buried vessel decommissioning activities, including field notes, site photos, figures, and laboratory analytical results is attached to this Form 27.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 9
Number of soil samples exceeding 915-1 7
Was the areal and vertical extent of soil contamination delineated? No
Approximate areal extent (square feet) 700

NA / ND

-- Highest concentration of TPH (mg/kg) 10300
-- Highest concentration of SAR 3.22
BTEX > 915-1 No
Vertical Extent > 915-1 (in feet) 9

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?

A supplemental site investigation (SSI) will be completed to vertically and horizontally delineate the EC, chromium, and selenium exceedances observed at sample locations SS08@7' and SS10@7' following the 4Q25 remedial excavation. During the SSI, soil samples will be collected and analyzed for full ECMC Table 915-1 constituents. Additionally, background samples will be collected to determine if EC, arsenic, barium, chromium, and selenium detected in exceedance of ECMC Table 915-1 are attributed to native soil conditions at the site. Background soil samples will be collected and analyzed for metals in soil per ECMC Table 915-1, pH, EC, SAR, and boron. The proposed sample locations are shown on the attached Site Investigation Plan attached to this Form 27. The investigation will be completed per the proposed implementation schedule, and the results will be submitted 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 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total petroleum hydrocarbons (TPH) exceedances observed at sample location FS01 @7' were removed through a remedial excavation conducted on 10/21/25 and 11/03/25. The final excavation extent was approximately 7' x 7' x 9' below ground surface (bgs), and approximately 20 bbls. of impacted material was removed via hydrovac and transported offsite for disposal at Pawnee Waste LLC in Grover, CO. Confirmation soil samples were collected from the base of the excavation (FS01@9') and the sidewalls in each cardinal direction (SS05 - SS10@7', SS11@9'). Excavation samples were analyzed for all Table 915-1 constituents. Analytical results indicate that all organic exceedances were successfully removed during the 4Q25 remedial excavation.

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 4Q25 remedial excavation, elevated concentrations of Table 915-1 inorganics and metals remain in situ. As such, a supplemental site investigation (SSI) will be conducted to vertically and horizontally delineate the EC, chromium, and selenium exceedances observed at sample locations SS08@7' and SS10@7'. During the SSI, soil samples will be collected and analyzed for full ECMC Table 915-1 constituents. Additionally, background samples will be collected to determine if EC, arsenic, barium, chromium, and selenium detected in exceedance of ECMC Table 915-1 are attributed to native soil conditions at the site. Background soil samples will be collected and analyzed for metals in soil per ECMC Table 915-1, pH, EC, SAR, and boron. The proposed sample locations are shown on the attached Site Investigation Plan attached to this Form 27. The investigation will be completed per the proposed implementation schedule, and the results will be submitted 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
- Yes _____ Other _____ Hydrovac Slurry _____

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 or remedial excavation activities.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

Quarterly Semi-Annually Annually Other 90 days from decom activities, the first SF27 will be submitted.

Request Alternative Reporting Schedule:

Semi-Annually Annually Other Quarterly

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 Decommissioning Sample Summary and Supplemental Site Investigation Report

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

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: \$ 15000

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? Yes

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

N/A

Volume of E&P Waste (solid) in cubic yards 0

E&P waste (solid) description

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility:

Volume of E&P Waste (liquid) in barrels 20

E&P waste (liquid) description Impacted Material, Hydrovac Slurry

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility: Pawnee Waste LLC

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? No

Does the previous reply indicate consideration of background concentrations? _____

Does Groundwater meet Table 915-1 standards? Yes

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? 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. 10/03/2025

Proposed date of completion of Reclamation. 06/26/2027

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. _____

Actual Spill or Release date, or date of discovery. 10/06/2025

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 10/03/2025

Proposed site investigation commencement. 06/29/2026

Proposed completion of site investigation. 06/29/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/29/2026

Proposed date of completion of Remediation. 12/29/2026

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 has been changed due to the decommissioning of the KODAK NORTH FD 26 SEC Facility compressor pit and necessity for supplemental site investigation activities adjacent to pit location. The proposed site investigation will be completed following the approval of this form and is tentatively scheduled for commencement in June, 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 to include the decommissioning results and historic reportable release discovered at the Kodak North FD Pad 28-002HN (REM # 40221). This Form also summarizes the remedial excavation conducted following discovery of the release, and proposes to conduct further supplemental site investigation activities and background sampling.

A site investigation was conducted during the decommissioning of the partially buried vessel (Compressor pit) at the Kodak North FD Pad 28-002HN Facility on 10/03/25. Soil samples were field screened on the N-E-S-W sidewalls of the excavation, and a confirmation soil sample was collected at the base of the excavation (FS01). Laboratory results indicated 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total petroleum hydrocarbons (TPH) were detected in exceedance of ECMC Table 915-1 regulation within sample FS01@7'. As such, a historic reportable release report (Form 19 # 404380460) was submitted to the ECMC and Spill / Release Point ID # 491756 was issued.

The 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total petroleum hydrocarbons (TPH) exceedances observed at sample location FS01@7' was removed through a remedial excavation conducted on 10/21/25 and 11/03/25.

Following the 4Q25 remedial excavation, elevated concentrations of Table 915-1 inorganics and metals remain in situ. As such, a supplemental site investigation (SSI) will be conducted to vertically and horizontally delineate the EC, chromium, and selenium exceedances observed at sample locations SS08@7' and SS10@7'. During the SSI, soil samples will be collected and analyzed for full ECMC Table 915-1 constituents. Additionally, background samples will be collected to determine if EC, arsenic, barium, chromium, and selenium detected in exceedance of ECMC Table 915-1 are attributed to native soil conditions at the site. Background soil samples will be collected and analyzed for metals in soil per ECMC Table 915-1, pH, EC, SAR, and boron. The proposed sample locations are shown on the attached Site Investigation Plan attached to this Form 27. The investigation will be completed per the proposed implementation schedule, and the results will be submitted in a subsequent Form 27.

Pursuant to Rule 913.e., quarterly reporting will be conducted until closure criteria are achieved for the remediation project. The results of the SSI will be submitted on a subsequent Form 27.

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

Signed: Elyse Hossink _____

Title: Environmental Scientist _____

Submit Date: _____

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: _____

Date: _____

Remediation Project Number: 40221 _____

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
404498233	LABORATORY ANALYTICAL REPORT
404498234	LABORATORY ANALYTICAL REPORT
404498235	LABORATORY ANALYTICAL REPORT
404498236	SITE INVESTIGATION REPORT
404498237	SITE INVESTIGATION PLAN
404498239	SITE INVESTIGATION PLAN

Total Attach: 6 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)