

State of Colorado
Energy & Carbon Management Commission

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



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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: DCP OPERATING COMPANY LP Operator No: 4680 Phone Numbers
Address: 2331 CITYWEST BLVD., S812-02 Phone: (970) 939-0329
City: HOUSTON State: TX Zip: 77042 Mobile: (970) 9396-0329
Contact Person: Chandler Cole Email: chandler.e.cole@p66.com

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 36993 Initial Form 27 Document #: 403905387

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: SPILL OR RELEASE Facility ID: 486404 API #: _____ County Name: WELD
Facility Name: CR57/CR6 (AT-1-1-1-1-6-4-5) 3/2024 Latitude: 40.018473 Longitude: -104.527227
** correct Lat/Long if needed: Latitude: _____ Longitude: _____
QtrQtr: SWSW Sec: 26 Twp: 1N Range: 64W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SC Most Sensitive Adjacent Land Use Agricultural and Prospect Reservoir
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? No

Other Potential Receptors within 1/4 mile

The mapped area of the Prospect Reservoir extents is located approximately 250 feet to the northeast of the project location.

The site is located within the following High Priority Habitats:

- Mule Deer Winter Concentration Area
- Mule Deer Severe Winter Range
- Bald Eagle 1/2 Mile Nest Site
- Bald Eagle Roost Site
- Freshwater Lake

The nearest registered water well (Permit #335535) indicates an approximate depth to water at 15 feet below ground surface (bgs). However, excavation activities at this site were advanced to 32 feet bgs and groundwater did not infiltrate the excavation area during multiple days that the excavation was open. Additionally, drilling activities performed on November 21, 2024, and October 2, 2025, were advanced up to 29 feet bgs and groundwater was not encountered during either event.

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 type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | _____ |
| <input 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
Yes	SOILS	7000 square feet	laboratory 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.

Initial actions were submitted to the ECOM in Form 19-Initial (F19-I) #403730927, Form 19-Supplemental (F19-S) #403756044, and F19-S #403831948. Remediation work plans have been presented in F27-I #403905387, F27-S #404033269, F27-S #404129861, and F27-S #404243314. On 03/26/2024, approximately 69 barrels (bbls) of mixed liquid was removed from the surface and transported to the Pawnee Waste facility for disposal. Due to eagle nesting, work activities were postponed until after 07/01/2024. Impacted soil excavation, disposal, and delineation activities were performed between 07/09/24 and 07/24/24. Approximately 1,993 tons/1,533 cubic yards of soil were transported to Buffalo Ridge Landfill for disposal. During excavation activities, soils were evaluated using visual and olfactory indicators, and field screened with a photoionization detector (PID). Laboratory analytical results indicated that petroleum hydrocarbon volatile organic compound (VOC) and polyaromatic hydrocarbon (PAH) impacts above the Table 915-1 protection of groundwater standards were mitigated through excavation and disposal remediation methods. Additional background and confirmation soil sampling was performed at the site on 11/21/2024 and 10/2/2025 for delineation and evaluation of soil suitability and metals concentrations near the previous Ewall02@23' sample as well as organics discovered during drilling activities at EastCS@24'. Based on the results of the 11/24/2024 and 10/25/2025 investigation activities, DCP has evaluated multiple in-situ remediation treatment options, and the tentatively chosen remedial alternative is presented in this report. Based on recent communication and an inspection by CPW personnel on December 5, 2025, an eagle's nest located near the site is currently active.

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):

Use of Table 915-1 residential soil screening level standards has been approved for the site. In accordance with F27-S #404355319, drilling and soil sampling activities were performed 10/2/2025 at the locations illustrated on the attached Soil Boring/Sample Location Map (Figure 1). Based on laboratory analytical results for soil samples collected from each soil boring, the area of impacted soil with organic concentrations above Table 915-1 residential soil screening level standards have been delineated. Remaining soil impacts are limited between 23 and 24 feet below ground surface (bgs) in a relatively small aerial footprint at the previous EastCS@24' sample/soil boring location and the recent SWWall@23-24' (SB06) sample/soil boring location. Confirmation soil samples will be collected subsequent to in-situ remediation activities, once complete.

Proposed Groundwater Sampling

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

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):

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? Yes

Approximate areal extent (square feet) 400

NA / ND

 Highest concentration of TPH (mg/kg)

 Highest concentration of SAR

BTEX > 915-1 Yes

Vertical Extent > 915-1 (in feet) 24

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?

Three background samples (BG01@8', BG02@8', and BG03@8') were collected previously and analyzed for the ECMC Table 915-1 analyte list. Background analytical data were returned with elevated levels of pH, SAR, arsenic, and barium above the Table 915-1 standards and are unrelated to spilled material from the DCP gathering line. On November 21, 2024, additional background samples (BG4@2', BG5@1', BG6@3', BG7@4') were collected and analyzed for arsenic as approved in the Form 27-1 #403905387. Background analytical data were returned with elevated levels of arsenic. The levels of arsenic for BG04 through BG07 are consistent with the previous background samples, indicative of native soils at the site.

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?

On 10/2/2025, in accordance with F27-S #404355319, drilling and soil sampling activities were performed as summarized in Form 27-S #404470554. Based on laboratory analytical results for soil samples collected from each soil boring, the area of impacted soil with organic concentrations above Table 915-1 residential soil screening level standards have been delineated and are limited to between 23 and 24 feet below ground surface (bgs) in a relatively small aerial footprint at the previous EastCS@24' sample/soil boring and the recent SWWall@23-24' (SB06) sample/soil boring location. During the 10/2/2025 drilling, DCP did not convert the soil borings into remediation wells screened across the impacted zone for in-situ remediation purposes because in-situ remediation will likely be better facilitated through multiple individual remediation points. DCP has evaluated multiple in-situ remediation treatment options including in-situ chemical oxidation (chemox), in-situ ozone injections, and in-situ biological amendment injections and the preferred remedial alternative is presented in this report. Please see the Operator Comments for information pertaining to remediation activities at the site. Additional confirmation soil samples will be collected following in-situ remediation activities, once complete.

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.

Approximately 69 barrels of mixed liquid was removed from the site during the initial response effort in March 2024. Between July 9 and 24, 2024, Approximately 1,993 tons/1,533 cubic yards of soil was excavated and transported to the Waste Management Buffalo Ridge Landfill in Keenesburg, CO for disposal. Arsenic concentrations above background conditions were observed at soil sample locations Ewall02@23', SF-001SWall@4', SF-004NWall@1.5', SF-007Base@3', and SF-008EWall@2'. Additional background and confirmation soil sampling was performed at the site on November 21, 2024, for delineation and evaluation of soil suitability and metals concentrations. Based on the background samples BG04 through BG07, soil samples SF-004NWall@1.5', SF-008EWall@2', and SF-007Base@3' are within 1.25 times background concentrations for arsenic. Soil sample locations Ewall02@23', SF-001SWall@4', EastCS02@23', SEWall@9-10' and SEWall@25-26' are above 1.25 times background concentrations for arsenic. However, using data from the excavation base soil samples as well as the deeper samples collected from the drilling and soil boring locations which were within background levels, arsenic at the site does not pose a threat to groundwater. Based on drilling and soil sampling completed on 10/2/2025, the aerial footprint of remaining soil impacts is approximately 400 square feet and less than 2 feet thick at approximately 23-25 bgs (estimated at approximately 30 cubic yards of soil).

REMIEDIATION 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.

Approximately 69 barrels of mixed liquid was removed from the site during the initial response effort in March 2024. Between July 9 and 24, 2024, Approximately 1,993 tons/1,533 cubic yards of soil was excavated and transported to the Waste Management Buffalo Ridge Landfill in Keenesburg, CO for disposal. Arsenic concentrations above background conditions were observed at soil sample locations Ewall02@23', SF-001SWall@4', SF-004NWall@1.5', SF-007Base@3', and SF-008EWall@2'. Additional background and confirmation soil sampling was performed at the site on November 21, 2024, for delineation and evaluation of soil suitability and metals concentrations. Based on the background samples BG04 through BG07, soil sample location SF-004NWall@1.5', SF-008EWall@2', and SF-007Base@3' are within 1.25 times background concentrations for arsenic. Soil sample locations Ewall02@23', SF-001SWall@4', EastCS02@23', SEWall@9-10' and SEWall@25-26' are above 1.25 times background concentrations for arsenic. However, using data from the excavation base soil samples as well as the deeper samples collected from the drilling and soil boring locations which were within background levels, arsenic at the site does not pose a threat to groundwater. Soil samples EastCS@24' and SWall@24'-25' indicate that there are remaining petroleum hydrocarbon VOC impacts above the Table 915-1 residential soil screening level standards at those depths and locations and is the primary driver for additional remediation activities. Based on drilling and soil sampling completed on 10/2/2025, the aerial footprint of remaining soil impacts is approximately 400 square feet and less than 2 feet thick at approximately 23-25 bgs (estimated at approximately 30 cubic yards of soil). Using data collected from each drilling investigation, it does not appear that remaining impacts to soil are mobilizing further vertically or horizontally.

Soil Remediation Summary

<input type="checkbox"/> In Situ	<input checked="" type="checkbox"/> Ex Situ
_____ Bioremediation (or enhanced bioremediation)	Yes Excavate and offsite disposal
_____ Chemical oxidation	If Yes: Estimated Volume (Cubic Yards) _____ 1533
_____ Air sparge / Soil vapor extraction	Name of Licensed Disposal Facility or ECOM Facility ID # _____
_____ Natural Attenuation	No 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.

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 Remediation Alternative 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.

DCP maintains appropriate comprehensive general liability insurance to satisfy the requirements of Rule 705.B, with at least \$5MM in coverage and including coverage for sudden and accidental release events. The cost provided below for remediation is a preliminary estimate only, costs may change upwards or downward based on site-specific information. DCP makes no representation or guarantees as the accuracy of the preliminary estimate.

Operator anticipates the remaining cost for this project to be: \$ 100000

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:

E&P waste was disposed at the Pawnee Waste Facility (liquids) and the Buffalo Ridge Landfill (soil/solids)

Volume of E&P Waste (solid) in cubic yards 1533

E&P waste (solid) description E&P waste impacted soil

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: Buffalo Ridge Landfill

Volume of E&P Waste (liquid) in barrels 69

E&P waste (liquid) description Condensate and rainwater mixed liquid

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: Pawnee Waste Landfill

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.

The excavation area has been backfilled and compacted with imported clean structural fill material to match the surrounding landscape and pre-excavation conditions. The landowner has reclaimed the area into farmland. In-situ remediation activities will be performed subsequent to the eagle nesting period (December 1 – July 31) and agricultural harvest usually completed by September. The in-situ remediation activities that DCP is evaluating are minimally disruptive to surface areas and subsequent reclamation beyond landowner grading and seeding will likely not be required.

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. 10/01/2024

Proposed date of completion of Reclamation. 11/30/2025

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. 03/26/2024

Actual Spill or Release date, or date of discovery. 03/26/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/26/2024

Proposed site investigation commencement. 07/09/2024

Proposed completion of site investigation. 11/30/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 07/09/2024

Proposed date of completion of Remediation. 12/31/2028

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 COMMENT

Investigation and remediation activities performed to date have been presented in previous Form 19 and 27 reports. Based on drilling and soil sampling completed on 10/2/2025, the aerial footprint of remaining soil impacts is approximately 400 square feet and less than 2 feet thick at approximately 23-25 bgs (estimated at 30 cubic yards of soil). Using data collected from each drilling investigation, it does not appear that remaining impacts to soil are mobilizing further vertically or horizontally.

Proposed remediation activities were previously presented in in Form 27-S #404129861 and #404213314. However, due to the depth of impacts, an engineered excavation would be required to physically remove the soil for disposal. Because the large aerial footprint of an engineered excavation is inhibited by existing oil and gas infrastructure and below grade utilities as well as the relatively small estimated volume of impacted soil remaining (~30 cy), DCP has evaluated multiple in-situ remediation treatment options including in-situ chemox injections with calcium persulfate (multiple products), in-situ ozone injections, and in-situ biological amendment injections. During the 10/2/2025, drilling, DCP did not convert the soil borings into remediation wells screened across the impacted zone for in-situ remediation purposes because in-situ remediation will likely be better facilitated through multiple individual remediation points.

An in-situ ozone sparge and vapor recovery (OS/VR) pilot test has been chosen as the preferred remedial alternative for the site. OS/VR refers to an in-situ approach which utilizes ozone gas (O3), applied via subsurface injection, with the option of vapor recovery from a nearby extraction point. Ozone is a strong oxidant that enhances the degradation of organic contaminants through direct oxidation and the formation of secondary oxidants (hydroxyl radicals). Upon contact with ozone, organic contaminants may be partially or fully oxidized into carbon dioxide, water, and other oxidized byproducts.

This approach utilizes an ozone generator to inject a mixture of O3 and ambient air into the subsurface via sparging. The injected gas mixture moves outward from the injection point(s) from high pressure to low pressure zones through the areas of highest air permeability. As the ozone and air mixture contacts hydrocarbon-impacted soils, including volatile organic compounds (VOCs) and non-volatile organic compounds such as diesel range organics (DRO) and oil range organics (ORO), they are oxidized in-situ upon direct contact with ozone and can also be stripped from the soil particles, becoming entrained in the gas. The resulting vapors may be captured using an appropriate recovery system.

Important factors for successful ozone sparging are the air permeability and heterogeneity of the vadose zone, and the presence of naturally occurring constituents that consume ozone. OS/VR appears to be a favorable remedial option for the site due to several factors, including:

- Minimally invasive, considerate of nearby HPHs (bald eagle nesting site);
- High permeability lithology surrounding the treatment area;
- Concentrations of non-volatile TPH COCs (DRO/ORO);
- Absence of groundwater in the treatment zone;
- Limited extent of impacted area; and
- Refined remediation focus area.

Ozone sparge points will be installed within/adjacent to the impacted area with vapor recovery measures implemented as appropriate. Currently, it is planned that one vapor recovery point will be installed centralized between three injection/sparge points as illustrated on the attached pilot test system layout figure.

DCP's environmental remediation consultant(s) are currently formulating a full-scale OS/VR pilot test remediation workplan including remediation system design, implementation, construction, installation, and an operations, monitoring and maintenance plan which will be provided for ECMC consideration as soon as it is complete.

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

Signed: Chandler Cole

Title: Environmental Specialist

Submit Date: _____

Email: ECMCNotification@p66.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: 36993

<u>COA Type</u>	<u>Description</u>
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.

<u>Att Doc Num</u>	<u>Name</u>
404577146	SITE MAP

Total Attach: 1 Files

General Comments

User Group

Comment

Comment Date

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)