FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

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Report taken by: Laurel Anderson

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 COGCC 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: DCP OPERATING COMPANY LP Operator No: 4680
Address: 2331 CITYWEST BLVD., S812-02
City: HOUSTON State: TX Zip: 77042
Contact Person: Steve Weathers Email: stephen.weathers@p66.com

Phone Numbers
Phone: (303) 605-1718
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PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 14694 Initial Form 27 Document #: 402247877

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.
- [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.
- [X] 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.
- [X] Other: 3Q23 groundwater progress report.

SITE INFORMATION

No Multiple Facilities

Facility Type: SPILL OR RELEASE Facility ID: 468979 API #: County Name: WELD
Facility Name: CR20 and Hwy 85 Release Latitude: 40.130910 Longitude: -104.806776
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SWSW Sec: 17 Twp: 2N Range: 66W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications: SM
Most Sensitive Adjacent Land Use: Irrigation ditch and agricultural land
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

Irrigation ditch, county road, crop land

SITE INVESTIGATION PLAN

TYPE OF WASTE:

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

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	GROUNDWATER	18 ft bgs	Groundwater Sampling and Lab analysis
No	SOILS	12 ft bgs	Soil excavation and borings and lab 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 and completed remedial measures have been previously submitted to the Energy and Carbon Management Commission (ECMC) in the Form 19 Initial with Supplemental (Document # 402226829) and the Form 27 Initial (Document # 402247877), approved December 2, 2019, and ECMC issued Remediation Project #14694 for the Site. Additional Site investigation activities and ongoing quarterly groundwater monitoring information has been provided to ECMC via approved eForm 27 supplemental documents. The results of the third quarter 2023 (3Q23) groundwater monitoring event and continued investigation and remediation alternatives are described herein.

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):

Previous soil investigation activities were discussed in approved F27 documents and the Initial Action Summary. A total of 12 monitoring wells have been installed at the Site (Figure 2), but BH10 has not been located since 2Q20 and is presumed to be destroyed. Based on the 1Q23 event results, site limitations, plume stability and discussions with ECMC in regard to COAs on F27-S documents #403176691 & 403265033, DCP installed three additional monitoring wells on 6/26/23, one downgradient and one cross-gradient of BH-10, and another south/southwest of the source area. The soil borings were logged to evaluate geological conditions and identify any potential impacts to soil and groundwater at these locations. Soil samples were collected from zones with the highest PID detections and/or the total depth of boring. Samples were submitted for laboratory analysis for Table 915 organics. The soil laboratory results are presented in Tables 4 and 5, and boring logs are presented in Appendix B.

Proposed Groundwater Sampling

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

Previous groundwater monitoring activities were described in approved Form 27-S reports, and a total of twelve monitoring wells have been installed and are illustrated in Figure 2. However, BH10 has not been located since 2Q20 shortly after it was installed and is presumed to have been destroyed by the landowner based on field observations. Groundwater samples are being analyzed on a quarterly basis for BTEX; 1,2,4-trimethylbenzene (TMB); 1,3,5-TMB; and naphthalene using USEPA Method 8260D. Analytical results from the 3Q23 sampling event are presented herein. Three additional wells (Figure 2) have been installed, for a total of 11 active wells, and will be incorporated into the sampling events accordingly. Groundwater monitoring will continue on a quarterly basis until analytical results demonstrate concentrations below ECMC standards for four consecutive quarterly monitoring events, at which time a no further action (NFA) determination for the Site will be requested from the ECMC.

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):

Based on historical results and discussions with ECMCC, three additional Monitoring wells have been installed to establish the points of compliance based on the constraints onsite which are illustrated in Figure 2. The results of the installation are presented in this Form 27 report.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected: 6

Number of soil samples exceeeding 915-1: 0

Was the areal and vertical extent of soil contamination delineated? Yes

Approximate areal extent (square feet): 1000

NA / ND

ND — Highest concentration of TPH (mg/kg):

NA — Highest concentration of SAR:

BTEX > 915-1: No

Vertical Extent > 915-1 (in feet): 0

Groundwater

Number of groundwater samples collected: 11

Was extent of groundwater contaminated delineated? Yes

Depth to groundwater (below ground surface, in feet): 17

Number of groundwater monitoring wells installed: 12

Number of groundwater samples exceeding 915-1: 4

-- — Highest concentration of Benzene (µg/l): 3.26

ND — Highest concentration of Toluene (µg/l):

-- — Highest concentration of Ethylbenzene (µg/l): 539

-- — Highest concentration of Xylene (µg/l): 1480

NA — 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

[X] Were impacts to adjacent property or offsite impacts identified?

During the initial 2013 investigation, three soil borings were advanced to approximately 3-feet below ground surface (ft bgs) in the agricultural field north of the irrigation ditch and excavation area. Soil analytical results reported all TPH and BTEX concentrations below laboratory detection limits and below applicable ECMC standards.
During a subsequent investigation in March 2020, two soil borings were advanced to 20 & 23-ft bgs in the agricultural field north of the irrigation ditch and excavation area, and one boring was advanced west of the irrigation ditch. Soil analytical results reported BTEX concentrations below laboratory detection limits and below ECMC standards. However, TPH concentrations in soil at BH09 (16-17 ft bgs) and BH10 (18-19 ft bgs) were above ECMC standards. In the 3Q20, two more soil borings (BH11 & BH12) were advanced in the vicinity of the former BH10 location, and the soil results indicated impacts have attenuated in this area.

[ ] 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):

[X] Is further site investigation required?

The ECMC conditionally approved the 3Q22 Form 27-S (#403176691) with a COA requesting additional monitoring wells in accordance with Rule 914 to delineate 1,2,4-TMB; 1,3,5-TMB; and naphthalene concentrations greater than 915-1 standards cross-gradient of BH02 and BH09. Three additional monitoring wells were installed on June 26, 2023, to meet these criteria. The soil sample results are presented in Tables 4 and 5, and boring logs are presented in Appendix B, and if needed, a remedial and/or investigation workplan will be provided to ECMC.

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.

As referenced in the previously submitted Form 19 Initial with Supplemental (Document # 402226829) and Form 27 Initial (Document # 402247877), initial source remediation efforts successfully removed approximately 400 CY of impacted soils. Additionally, mobile vacuum enhanced fluid recovery (EFR) groundwater remediation efforts were conducted from the third quarter 2015 through the fourth quarter 2016 in which approximately 307 barrels of impacted groundwater were removed from the site. Ongoing groundwater monitoring has been performed at the Site on a quarterly basis through the third quarter 2023.

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.

As referenced in the approved Form 19 Initial with Supplemental (Document # 402226829) and Form 27 Initial (Document # 402247877), initial source remediation efforts removed approximately 400 CY of impacted soils. Additionally, mobile vacuum enhanced fluid recovery (EFR) groundwater remediation efforts were conducted from the third quarter 2015 through the fourth quarter 2016 in which approximately 307 barrels of impacted groundwater were removed from the site. Ongoing groundwater monitoring has been performed at the Site on a quarterly basis and will continue until a period of four consecutive quarterly monitoring events have demonstrated that groundwater impacts are below ECMC standards. At that time, an NFA determination for the Site will be requested from the ECMC. Based on continued observations of groundwater concentrations above the Table 915-1 standards at three to four locations since 1Q21, DCP has begun preliminary evaluation of alternative remediation approaches applicable to the Site. Following further discussion with ECMC, a work plan will be submitted prior to any additional investigation or remediation activities which may include, but not limited to, the use of additional EFR treatment, in situ chemical oxidation, and/or additional dig-and-haul excavation. Updates will be provided to ECMC accordingly.

Soil Remediation Summary

☐ **In Situ**

- ____ Bioremediation (or enhanced bioremediation)
- ____ Chemical oxidation
- ____ Air sparge / Soil vapor extraction
- ____ Natural Attenuation
- ____ Other ____

☒ **Ex Situ**

- Yes Excavate and offsite disposal
  - If Yes: Estimated Volume (Cubic Yards) 400
  - Name of Licensed Disposal Facility or COGCC 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
- Yes Natural Attenuation
- Yes Other From 3Q-2015 through 4Q-2016 vac enhanced fluid recovery remediation was performed. GW monitoring.

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.

Site-wide groundwater sampling is conducted on a quarterly basis at the monitoring well locations illustrated on the attached Figure 2. BH10 was destroyed during landowner activities shortly after it was installed and has not been located or sampled since the second quarter 2020. During the 3Q23 monitoring event, performed on 8/31/2023, groundwater levels and samples were collected from all eleven remaining well locations using standard hand-bailing sampling methods, and were submitted to Origins Laboratory Inc. (Origins) for analysis using USEPA method 8260D (BTEX; 1,2,4-TMB; 1,3,5-TMB; and naphthalene) per the approved Site Sampling and Analysis Plan.
Groundwater elevations and flow trends are presented in Table 1 and illustrated in Figure 3. Third quarter 2023 laboratory analytical data for sampled constituents are summarized in Table 2 and presented in Figure 4. The historical groundwater data is summarized in Table 3, and the 3Q23 laboratory reports are included as Appendix A. Benzene, Toluene, and Ethylbenzene concentrations were below the Table 915-1 ECMC standards at all eleven monitoring locations. Four wells (BH02, BH03, BH07, and BH09) were above the standards for Total Xylenes; 1,2,4-TMB; 1,3,5- TMB; and/or Naphthalene during the 3Q23 sampling event. Ongoing quarterly monitoring and groundwater data analysis will be conducted at the existing and newly installed wells to evaluate site trends over time and whether additional investigation may be warranted.

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: [X] Groundwater Monitoring [ ] Land Treatment Progress Report [ ] O&M Report

[ ] Other

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 has sufficient insurance to fully address the anticipated costs of Remediation, including the remaining estimated costs for this project. DCP currently has $5,000,000 in general liability insurance. 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 to the accuracy of the preliminary estimate.

Operator anticipates the remaining cost for this project to be: $ 200000

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

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

Volume of E&P Waste (liquid) in barrels

E&P waste (liquid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC 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? Yes

Does the previous reply indicate consideration of background concentrations?

Does Groundwater meet Table 915-1 standards? No

Is additional groundwater monitoring to be conducted? Yes

Operator shall comply with the COGCC 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.

Following completion of the initial July 2013 soil excavation activities, site surfaces were regraded to match existing conditions. Ground surfaces at the Site currently match the surrounding areas and are fully vegetated with wild grasses like surfaces in adjacent areas. No further reclamation is proposed at this time. Final reclamation will be conducted following completion of groundwater monitoring requirements and eventual site closure.

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. 07/22/2013

Proposed date of completion of Reclamation.

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. 07/22/2013

Actual Spill or Release date, or date of discovery. 07/22/2013

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 07/22/2013

Proposed site investigation commencement. 07/22/2013

Proposed completion of site investigation. 12/31/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 07/22/2013

Proposed date of completion of Remediation. 12/31/2026

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:

OPERATOR COMMENT

DCP will continue to perform quarterly groundwater monitoring and submit updates and quarterly reports to ECMC via eForm 27 documents. Based on the current landowner access agreement, Weld County Road limitations, and the relative stability of the groundwater plume, it is acknowledged that ECMC and DCP discussed the COA provided in the 3Q22 and 4Q22 Form 27-S reports (#403176691 & 403265033), requesting additional delineation in accordance with Rule 914. DCP has installed three additional wells (Figure 2). Soil analytical results and boring logs from the newly installed wells are included in Tables 4 and 5 and Appendix B. DCP is actively evaluating a potential alternative remediation approach with a third-party vendor to expedite the cleanup efforts. Once an updated network is established and site conditions are further assessed, DCP plans to submit a F27-S remedial work plan to the ECMC for approval, if warranted. Following ECMC review of this report and if there are any questions, DCP would like to request an onsite meeting and/or further discussion of the proposed scope of work.

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

Signed: Steve Weathers Title: Program Manager

Submit Date: 10/16/2023 Email: COGCCnotification@dcpmidstream.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Laurel Anderson Date: 01/04/2024

Remediation Project Number: 14694

COA Type	Description
	When surface water is present in the irrigation infrastructure/drainage system adjacent to impacted/historically impacted groundwater monitoring wells, Operator shall collect surface water samples adjacent to/downgradient of the impacted groundwater monitoring wells for laboratory analysis of Table 915-1 Organic Compounds in Groundwater. Operator shall provide GPS coordinates and reference elevation for the surface water sample locations, as well as, provide the location on the Site Map(s). Additionally, Operator shall provide a copy of laboratory analytical reports and an ongoing analytical summary table on subsequent Quarterly Reports.
1 COA	

Attachment Check 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
403557140	INVESTIGATION/REMEDIATION WORKPLAN (SUPPLEMENTAL)
403561225	MONITORING REPORT
403645152	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 3 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)