FORM 27 Rev 4/21

State of Colorado
Oil and Gas Conservation Commission

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Report taken by: BOB CHESSON

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 Form27.
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: 370 17TH STREET - SUITE 2500
City: DENVER State: CO Zip: 80202
Contact Person: Chandler Cole Email: cecole@dcpmidstream.com

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PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 18964 Initial Form 27 Document #: 402742310

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: Groundwater workplan and progress update

SITE INFORMATION

No Multiple Facilities

Facility Type: GAS GATHERING PIPELINE SYSTEM Facility ID: 480204 API #: County Name: WELD
Facility Name: Parmlee #1 Latitude: 40.254977 Longitude: -104.266078
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SENE Sec: 1 Twp: 3N Range: 62W Meridian: 6 Sensitive Area? No

SITE CONDITIONS

General soil type - USCS Classifications SP
Most Sensitive Adjacent Land Use Rangeland
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

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- [X] **E&P Waste**
  - [ ] Produced Water
  - [ ] 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
Yes	GROUNDWATER	2 monitoring well locations	Laboratory Analysis
Yes	SOILS	8000 sq ft	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 have previously been submitted to the COGCC in the Form 19 Initial (Document #402726017) and Form 27 Initial (Document #402742310). The COGCC issued a spill tracking facility ID # 480204 and a remediation project #18964 for the Site. During routine inspections, DCP personnel observed distressed vegetation at the project location and on June 9, 2021; DCP initiated site investigation activities with a third-party environmental consultant using direct push drilling equipment with continuous core sampling methods. During the initial investigation, five soil borings and groundwater monitoring wells were installed and based on laboratory results, both soil and groundwater samples collected had impacts above the COGCC standards. Following the initial investigation, further delineation of the soils and groundwater both horizontally and vertically may be warranted, however, as detailed within the Form 27-I, DCP proposed to begin quarterly groundwater monitoring prior to additional investigation or remediation. Details of the third quarter 2021 (3Q21) groundwater monitoring event are presented in this Supplemental Form 27. Additionally, DCP proposes to remediate the site soil through excavation and offsite disposal during the fourth quarter 2021 (4Q21), and a remediation work plan is included in this report.

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):

The results of the initial soil investigation during monitoring well installation were presented in the Form 27-I (Document #402742310). During the proposed 4Q21 remediation, the extents of the soil excavation will be determined by field screening, visual observation, and laboratory confirmation sampling. One laboratory confirmation sample will be collected for approximately each 20 linear feet of sidewall and one base confirmation sample for approximately each 400 square feet of excavation area. Source area and background samples were collected during the initial investigation reported in the Form 27-I. Based on the initial investigation results and approval of the 27-I, soil confirmation samples will be analyzed for Table 915-1 VOCs, TPH, 1-methylnaphthalene, and 2-methylnaphthalene. Once the excavation is delineated, it will be backfilled with clean material, and monitoring wells will be replaced accordingly.

Proposed Groundwater Sampling

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

As presented in previous approved COGCC documents, 5 monitoring wells were installed at the site and are shown on Figure 2. One borehole/well was placed in the center and the remaining well locations were placed at the extents of the distressed vegetation. Groundwater samples from these wells were collected on 9/15/21 and submitted to the laboratory for Table 915-1 organic analysis with COGCC's approval of the F27-I. The potentiometric surface is presented on Figure 3, the lab results are illustrated on Figure 4, and laboratory reports are included in Appendix A. DCP proposes to continue groundwater monitoring on a quarterly basis until analytical results are below the COGCC standards for four consecutive quarterly monitoring events, at which time an NFA determination for the Site will be requested from the COGCC. Following completion of the proposed remedial activities, monitoring wells will be replaced, if needed, and incorporated into the routine monitoring program.

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):

Groundwater was observed to be impacted at concentrations greater than Table 915-1 standards at Parm1-MW01 and MW05. DCP anticipates that the proposed remedial activities will remove the impacted source material and the groundwater conditions will naturally attenuate to below COGCC standards. Details of the approved remedial progress and ongoing groundwater monitoring will be presented to the COGCC in subsequent Form 27 workplans.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected: 0

Number of soil samples exceeeding 915-1: 0

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

Approximate areal extent (square feet): 8000

NA / ND

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

NA — Highest concentration of SAR:

BTEX > 915-1: No

Vertical Extent > 915-1 (in feet): 33

Groundwater

Number of groundwater samples collected: 5

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet): 30`

Number of groundwater monitoring wells installed: 5

Number of groundwater samples exceeding 915-1: 2

-- — Highest concentration of Benzene (µg/l): 2160

-- — Highest concentration of Toluene (µg/l): 1830

-- — Highest concentration of Ethylbenzene (µg/l): 2920

-- — Highest concentration of Xylene (µg/l): 4890

NA — Highest concentration of Methane (mg/l):

Surface Water

0 Number of surface water samples collected

0 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?

Based on the high concentrations observed in groundwater at the site, further site investigation and remediation are necessary as natural attenuation is not expected to be a viable remediation option. DCP proposes to excavate impacted source material for offsite disposal during the 4Q21.

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.

Based on the initial investigation and inspections, DCP was unaware of a potential release on the gathering line that had been previously shut-in and inspected the area due to distressed vegetation. Based on the initial investigation results, the extents of impacts cover an approximate 8,000 square foot area to approximately 30 feet below ground surface (ft bgs); source removal and remediation activities are proposed to be completed during the 4Q21. The extents of petroleum hydrocarbon impacts will be delineated to Table 915-1 standards based on the site-specific sampling and analysis plan (SAP) approved in the 27-I (Document #402742310), and impacted soil will be hauled offsite for disposal at an appropriate waste facility. The anticipated extents of excavation are shown on Figure 5. A summary of the remedial activities and investigation confirmation results will be provided in a subsequent Form 27 Supplemental.

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.

Based on the original inspection, DCP was not aware of a gathering line release and performed investigative activities based on a distressed vegetation area. During the initial investigation activities performed in June 2021, DCP installed five monitoring wells and impacts were observed in the soils and groundwater at two of the five locations. During the proposed 4Q21 remediation, the extents of the soil excavation will be determined by field screening, visual observation, and laboratory confirmation sampling. Impacted soil will be hauled offsite for disposal at an appropriate waste facility. Laboratory confirmation samples will be collected along the sidewalls and bases from the excavation area. Source area and background samples were collected during the initial investigation detailed in the Form 27-I, which also established the interim site-specific groundwater and soil sampling plan for the site. The anticipated extents of excavation are shown on Figure 5, and a summary of the remediation will be provided in a subsequent Form 27 Supplemental.

Monitoring wells that are removed during excavation activities will be replaced and the soils will be screened with a PID, samples will be collected during the well installation activities and an initial groundwater monitoring event will be conducted following well development activities. Ongoing groundwater monitoring is scheduled to be performed at the Site and will continue until a period of four consecutive monitoring events have demonstrated that groundwater impacts are below COGCC Table 915-1 standards. At that time, a no further action (NFA) determination for the Site will be requested from the COGCC.

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) 12000
  - 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
- ____ 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.

Ongoing quarterly groundwater monitoring was performed during the 3Q21 at the Site at the five monitoring well locations illustrated on the attached Figure 2. Groundwater monitoring activities include Site-wide groundwater gauging and sampling. Groundwater levels are measured to evaluate hydraulic characteristics and provide information regarding seasonal fluctuations at the Site. Groundwater samples were collected on 09/15/2021 from the five well locations using standard hand-bailing sampling methods and submitted to Origins Laboratory for Table 915-1 organics parameters. Concentrations of Table 915-1 organic constituents were below the standards at three of the five monitoring well locations during the 3Q21 sampling event. Groundwater elevations are presented on Table 1 and illustrated on Figure 3. The laboratory results are presented on Table 2 and Figure 4, and laboratory reports are included as Appendix A.
Ongoing groundwater monitoring will continue on a quarterly basis until a period of four consecutive quarterly monitoring events have demonstrated that groundwater impacts are below COGCC Table 915-1 standards. At that time, a no further action (NFA) determination for the Site will be requested from the COGCC.

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

[X] Other 3Q21 Groundwater Monitoring Summary and Remediation Work Plan

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?

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 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 investigation and ongoing remedial activities, site surfaces will be backfilled with a landowner approved fill material and regraded to match existing conditions. Ground surfaces at the Site currently match surrounding areas and are fully vegetated with wild grasses like surfaces in adjacent areas. Final reclamation will be conducted following completion of groundwater monitoring requirements, source remediation, no further action determination, and eventual site closure per COGCC and landowner approval.

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.

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. 07/22/2021

Actual Spill or Release date, or date of discovery.

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 07/09/2021

Proposed site investigation commencement.

Proposed completion of site investigation. 12/31/2022

REMEDIAL ACTION DATES

Proposed start date of Remediation. 10/25/2021

Proposed date of completion of Remediation. 12/31/2022

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

Groundwater sampling was performed during the third quarter 2021 according to the site-specific sampling plan approved in the Form 27-I (#402742310). Due to elevated organic concentrations of observed during the initial soil and subsequent groundwater investigations, additional remedial activities are being propose and includes the excavation and delineation of impacted source material. DCP proposes to implement these activities during the fourth quarter 2021 and the soils will be delineated through field screening, visual observation, and laboratory confirmation samples following the site-specific sampling and analysis plan (SAP) outlined in the Form 27-I. Source material will be excavated and disposed offsite at an approved waste facility, and the impacted area will be backfilled with clean fill material with landowner and COGCC approval. A summary of the source area remediation activities will be presented in a subsequent Form 27 Supplemental progress update report/
Ongoing groundwater monitoring will continue on a quarterly basis until a period of four consecutive quarterly monitoring events have demonstrated that groundwater impacts are below COGCC Table 915-1 standards. At that time, a no further action (NFA) determination for the Site will be requested from the COGCC.

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

Signed:` Chandler Cole

Title: Compliance Coordinator

Submit Date:` 10/08/2021

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: BOB CHESSON

Date: 10/08/2021

Remediation Project Number: 18964

Condition of Approval

COA Type	Description
0 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
402833357	FORM 27-SUPPLEMENTAL-SUBMITTED
402833429	ANALYTICAL RESULTS

Total Attach: 2 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)