

State of Colorado
Oil and Gas Conservation Commission

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



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Report taken by:
PETER GINTAUTAS

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 INFORMATION

Name of Operator: DCP OPERATING COMPANY LP	Operator No: 4680	Phone Numbers Phone: (303) 605-1718 Mobile: (303) 619-3042
Address: 370 17TH STREET - SUITE 2500		
City: DENVER	State: CO	Zip: 80202
Contact Person: Steve Weathers	Email: swweathers@dcpmidstream.com	

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.
- 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: 4Q21 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
 Other E&P Waste
 Non-E&P Waste
- Produced Water
 Workover Fluids
- Oil
 Tank Bottoms
- Condensate
 Pigging Waste
- Drilling Fluids
 Rig Wash
- Drill Cuttings
 Spent Filters
- Pit Bottoms
- Other (as described by EPA) TPH impacted soils

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 COGCC in the Form 19 Initial with Supplemental (Document # 402226829) and the Form 27 Initial (Document # 402247877), approved December 2, 2019 and COGCC issued Remediation Project #14694 for the Site. Additional Site investigation activities and ongoing quarterly groundwater monitoring information has been provided to COGCC via approved eform 27 supplemental documents. The results of the fourth quarter 2021 (4Q21) groundwater monitoring event and continued investigation and remediation alternatives are described herein.

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):

Previously completed soil investigation activities were discussed in approved eform 27 documents and the Initial Action Summary. A total of 9 monitoring wells have been installed at the Site and are illustrated on Figure 2. Based on the current field observations, future delineation and remedial activities may be needed. Further Soil Sampling is not anticipated at this time. If warranted, with approval of an access agreement with the landowner, a soil sampling workplan will be provided to COGCC for approval.

Proposed Groundwater Sampling

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 27S reports, and a total of nine monitoring wells have been installed which are illustrated on Figure 2. However, during the 3Q20 and 4Q20 event observations, BH10 was not found and presumed destroyed by the landowner and could not be sampled. Groundwater samples are being analyzed for BTEX, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene using USEPA Method 8260B. Analytical results from the 4Q21 sampling event are presented herein. Groundwater monitoring will continue on a quarterly basis until analytical results demonstrate concentrations below COGCC standards for four consecutive quarterly monitoring events, at which time a no further action (NFA) determination for the Site will be requested from the COGCC.

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 0
Was the areal and vertical extent of soil contamination delineated? _____
Approximate areal extent (square feet) 1000

NA / ND

NA Highest concentration of TPH (mg/kg) _____
NA Highest concentration of SAR _____
BTEX > 915-1 No
Vertical Extent > 915-1 (in feet) 18

Groundwater

Number of groundwater samples collected 8
Was extent of groundwater contaminated delineated? Yes
Depth to groundwater (below ground surface, in feet) 13'
Number of groundwater monitoring wells installed 9
Number of groundwater samples exceeding 915-1 4

ND Highest concentration of Benzene (µg/l) _____
ND Highest concentration of Toluene (µg/l) _____
-- Highest concentration of Ethylbenzene (µg/l) 104
-- Highest concentration of Xylene (µg/l) 728
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

Were impacts to adjacent property or offsite impacts identified?

During the initial 2013 investigation, three soil borings were advanced to approximately 3-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 COGCC standards. During a subsequent investigation in March 2020, two soil borings were advanced to 20 and 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 applicable COGCC standards, however, TPH concentrations in soil at BH09 (16-17 feet bgs) and BH10 (18-19 feet bgs) were above applicable COGCC standards. During the 3Q20, two more soil borings were advanced in the vicinity of the former BH10 location with COGCC approval. The results of that investigation 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) _____

Is further site investigation required?

DCP does not anticipate completing additional soil or groundwater delineation activities at this time and will continue quarterly groundwater monitoring activities at the eight existing monitoring well locations. Based on current observations, if warranted, DCP would evaluate an alternative remediation approach applicable to the Site and present a workplan to the COGCC for approval.

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 fourth quarter 2021.

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 through the fourth quarter 2021 and will continue until a period of four consecutive quarterly monitoring events have demonstrated that groundwater impacts are below COGCC standards. At that time, an NFA determination for the Site will be requested from the COGCC. Based on observations of low-level concentrations above the COGCC standards at two locations, if warranted, DCP would evaluate an alternative remediation approach applicable to the Site with COGCC approval, which may include, but not limited to the potential use of additional EFR treatment methods in order to mitigate the impacted area beneath the surface.

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) _____ 400
_____ Air sparge / Soil vapor extraction	_____ Name of Licensed Disposal Facility or COGCC Facility ID # _____
_____ Natural Attenuation	_____ 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

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 location was destroyed due to activities by the landowner shortly after it was installed and was not sampled. During the 4Q21 monitoring event, performed on 10/28/21, groundwater levels and samples were collected from the eight remaining well locations using standard hand-bailing sampling methods, and were submitted to Origins Laboratory Inc. (Origins) for analysis using USEPA method 8260B (BTEX, 1,2,4-trimethylebenzene, 1,3,5-trimethylebenzene and naphthalene) per the approved Site Sampling and Analysis Plan. Groundwater elevations and flow trends are presented in Table 1 and illustrated on Figure 3. Fourth quarter 2021 laboratory analytical data for sampled constituents are summarized on Table 2 and presented on Figure 4. The historical groundwater data is summarized in Table 3, and the 4Q21 laboratory reports are attached. BTEX concentrations were below the Table 915-1 COGCC standards at all eight monitoring locations, however, four wells (BH02, BH03, BH07 and BH09) were above the standards for 1,2,4-TMB and/or 1,3,5-TMB during the fourth quarter 2021 event. Ongoing quarterly monitoring and groundwater data analysis will be conducted to evaluate site trends over time and whether additional investigation may be warranted.

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 _____

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? 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. 09/01/2015

REMEDIAL ACTION DATES

Proposed start date of Remediation. 07/22/2013

Proposed date of completion of Remediation. _____

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

With COGCC approval of the Form 27S (document #402625909), groundwater samples were analyzed for Table 915-1 organic compounds. DCP will continue to perform quarterly groundwater monitoring and submit updates and quarterly reports to COGCC via eform 27 documents. If warranted, further investigative or remedial activities will need to be discussed/approved with the landowner and COGCC.

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

Signed: Steve Weathers

Title: Environmental Specialist

Submit Date: 12/08/2021

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: PETER GINTAUTAS

Date: 12/08/2021

Remediation Project Number: 14694

Condition of Approval**COA Type****Description**

0 COA	
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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**

402886574	FORM 27-SUPPLEMENTAL-SUBMITTED
402886614	ANALYTICAL RESULTS

Total Attach: 2 Files

General Comments**User Group****Comment****Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)