

State of Colorado
Oil and Gas Conservation Commission

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Report taken by:
Candice (Nikki) Graber

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

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 14898 Initial Form 27 Document #: 402282471

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: <u>GAS PROCESSING PLANT</u>	Facility ID: <u>469293</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>SPILL/RELEASE POINT</u>	Latitude: <u>40.267356</u>	Longitude: <u>-104.735617</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESE</u>	Sec: <u>35</u>	Twp: <u>4N</u>	Range: <u>66W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use Agriculture farmland and an irrigation ditch to the north of the Site.

Is surface water within 1/4 mile?

Is domestic water well within 1/4 mile? Yes

Yes

Is groundwater less than 20 feet below ground surface? No

Other Potential Receptors within 1/4 mile

The Colorado Division of Water Resources Water Well Database was consulted for depth to groundwater around the Site. The nearest registered water well (Permit #141254) has a noted static water level of 107 feet below ground surface. However, another registered water well (Permit #34070-MH), located approximately 1,650 feet southwest of the spill area has a noted static water level of 21 feet below ground surface. A water supply canal named the Platte Valley Canal owned by the Farmer's Reservoir & Irrigation Company (FRICO) is located to the north of the Gas Plant.

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 type="checkbox"/> Oil | <input checked="" 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	GROUNDWATER	See Figures from Previous Reports	Monitoring Wells and Lab Analysis
Yes	SOILS	15' x 30'	Soil sample 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.

This site has previously been assigned Spill Tracking Facility ID #469293 and Remediation Project #14898. Site investigation and remediation details have been presented in previously approved forms including: Form 19 Initial (#402242020), Form 19 Supplemental (#40228236), Form 27 Initial (#402282471), and Form 27 Supplemental reports (most recently #402831616). This Form 27 Supplemental has been prepared in accordance with COGCC Rule 911.a to provide prior notice of closure and removal of two fiberglass 80-bbl produced water vessels (PWV) at the Facility. The piping that was connected the PWVs will be removed and re-routed to an existing refurbished 60,000 gallon bullet tank on site. Visual inspection and field screening of soils will be conducted following decommissioning of the associated infrastructure. Based on these observations, soil and groundwater (if present) samples will be collected and submitted for laboratory analysis per the COGCC Site Specific Soil Sampling plan.

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):

Following removal of the facility infrastructure referenced above, discrete soil samples will be collected from the remedial area as shown on Figure 2, from the surfaces and excavation area(s) in accordance with COGCC Operator Guidance - Rule 911.A.(4) - Oil and Gas Facility Closure and Rules 913 and 915. Soil samples will be collected per the COGCC approved site-specific soil sampling plan and submitted to an accredited laboratory for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX), naphthalene, and total petroleum hydrocarbons (TPH) – GRO, DRO and ORO, Benz (a)anthracene, Fluorene, 1-methylnaphthalene and 2-methylnaphthalene.

Proposed Groundwater Sampling

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

If groundwater is encountered during closure of the produced water vessels, a minimum of one grab sample will be collected as soon as practical. Groundwater samples will be submitted to an accredited laboratory for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene, using appropriate methods. Groundwater monitoring is being in performed on a quarterly basis at the existing monitoring well network on and offsite.

Proposed Surface Water Sampling

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

The FRICO owned Platte Valley Canal is approximately 80 feet north of the northeast corner of the Mewbourn Gas Plant facility boundary and is not anticipated to be impacted by the removal of the produced water vessels.

Additional Investigative Actions

Additional alternative investigative actions described in attached Site Investigation Plan (summary):

DCP acknowledges that these produced water vessels were the likely source of the ongoing site investigation and remedial activities and anticipates some impacts to be present. DCP will attempt to remove as much material around the vessels within the limits of health and safety. If impacts are not encountered, a minimum of one soil sample will be submitted for laboratory analysis from the base of the excavation and photo documentation of the activities will be presented to the COGCC in subsequent form 27-S. Facility infrastructure and the proposed soil screening and sample locations are provided on Figure 2.

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? _____
Approximate areal extent (square feet) _____

NA / ND

_____ Highest concentration of TPH (mg/kg) _____
_____ Highest concentration of SAR _____
_____ BTEX > 915-1 _____
_____ Vertical Extent > 915-1 (in feet) _____

Groundwater

Number of groundwater samples collected 0
Was extent of groundwater contaminated delineated? No
Depth to groundwater (below ground surface, in feet) 15'
Number of groundwater monitoring wells installed 11
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?

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.

During the excavation activities in December 2020, approximately 2,000 cubic yards (yd³) of material was removed for disposal. Soil samples from the southeast, southwest, and northwest sidewalls of the excavation indicate that impacted shallow soil above 16 feet bgs has been removed. Based on the samples collected from the southeast wall closer to the PWV, additional impacted material remains below 16 feet bgs. Once that PWV's have been removed, clean backfill material will be used to fill in open excavation, however, due to the proximity to facility infrastructure, any remaining source material at that location will likely require in-situ remediation.

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.

The release was discovered on November 17, 2019, when Operations noticed a drain valve on a condensate stabilizer re-boiler was leaking by to the produced water sump and overflowing the sump with a mixture of condensate and produced water. Operations immediately actuated the valve stopping the release. A vac truck was quickly deployed to remove the liquids within the sump and on the ground. Due to consistent freezing temperatures after the release, further Site investigation and remediation activities were delayed due to a thick frost layer. A Site Investigation was completed on May 13, 2020, to assist in defining the extents of the impacted soils vertically and horizontally. Impacted soils encountered during the December 2020 excavation were removed via mechanical and hydro vacuum excavation, and hand shoveling near facility infrastructure. Based on the soil and groundwater sample analytical results from the December 2020 through September 2021 remediation and investigation activities as provided in this Form 27, additional Site characterization is warranted prior to implementing further remedial actions. Field observations, screening results and applicable laboratory analytical results will be provided in the Form 27- Supplemental. E&P waste records of material transported off-site will be kept on file and available upon request.

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 COGCC Facility ID # _____
- _____ Excavate and onsite remediation
- _____ Land Treatment
- _____ Bioremediation (or enhanced bioremediation)
- _____ Chemical oxidation
- _____ Other _____

Groundwater Remediation Summary

- No _____ Bioremediation (or enhanced bioremediation)
- No _____ Chemical oxidation
- No _____ Air sparge / Soil vapor extraction
- No _____ Natural Attenuation
- No _____ 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.

A total of eleven monitoring wells are currently installed at the Site (Figure 2) and groundwater monitoring activities are being conducted on a quarterly basis. DCP also plans to install 3 additional monitoring wells in December 2022.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

Quarterly Semi-Annually Annually Other

Results of the tank removal will be provided after the decommissioning.

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 Form 27 Supplemental Produced Water Vessel Decommissioning Work Plan

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? No

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

Impacted soils will be disposed of at the Waste Management Buffalo Ridge Landfill.

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.

The excavated area at the northern boundary of the facility has been backfilled with clean structural fill, and the facility perimeter wall and fence that were removed to allow for excavation have been reconstructed. Following implementation of remedial actions at the Site, landscaping and grading on the outside of the facility will be completed to match pre-remediation conditions.
The site will be reclaimed in accordance with COGCC Series 9000 Reclamation Rules.

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. 11/17/2019

Actual Spill or Release date, or date of discovery. 11/17/2019

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 11/18/2019

Proposed site investigation commencement. 05/13/2020

Proposed completion of site investigation. _____

REMEDIAL ACTION DATES

Proposed start date of Remediation. 12/20/2021

Proposed date of completion of Remediation. 12/31/2021

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

This Form 27S is being submitted as a work plan for the decommissioning of two 80-bbl fiberglass produced water vessels (TK-21A and TK-21B) at the DCP Mewbourn Gas Plant. Plant operations plans to reconfigure the pipeline system that went to the PWVs and use a repurposed 60,000-gallon vessel bullet tank (TK2) controlled by a combustor with the flare as a backup currently on Site. The former area where the PWVs were will be backfilled and regraded to match existing site conditions. A subsequent Form 27-S will be presented with results of the decommissioning efforts, and an additional remediation work plan will be prepared if impacts are discovered.

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

Signed: Stephen Weathers _____

Title: Environmental Specialist _____

Submit Date: 12/07/2021 _____

Email: COGCCnotification@dcpmistream.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: Candice (Nikki) Graber _____

Date: 12/27/2021 _____

Remediation Project Number: 14898 _____

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

	A supplemental Form 27 must be submitted within 90 days of the completion of this environmental investigation
	Operator will field screen all areas disturbed (bell holes, trenches, etc.) during flowline abandonment. Refer to the Rule 911.a.(4) Guidance Document for additional information.
	Operator shall notify COGCC EPS personnel no less than 72 hours prior to tank removal.
	If impacted soil indicative of a Spill/Release is discovered during field screening the lateral and vertical extent of impact will be determined with appropriate confirmation soil sampling, and Operator will expand the analyte list to include full Table 915-1. Operator shall report a discovered release on a Form 19 as appropriate. Housekeeping and de minimis amounts of stained soil removed during facility dismantling are not necessarily considered a Spill/Release.
	Operator will collect confirmation soil samples as described in the Rule 915.e.(2) Guidance Document. Operator will analyze soil samples for the proposed list as well as Table 915-1 Soil Suitability for Reclamation (Electrical conductivity, Sodium adsorption ratio, and pH by saturated paste method, boron (hot water soluble)).
5 COAs	

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**

402886141	FORM 27-SUPPLEMENTAL-SUBMITTED
402889950	SITE MAP
402889952	AERIAL IMAGE

Total Attach: 3 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)