

State of Colorado Oil and Gas Conservation Commission

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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.

Refer to Rules 340, 905, 906, 907, 908, 909, and 910

OPERATOR INFORMATION

Name of Operator: DCP OPERATING COMPANY LP	Operator No: 4680	Phone Numbers
Address: 370 17TH STREET - SUITE 2500		
City: DENVER State: CO Zip: 80202		
Contact Person: Steve Weathers	Email: swweathers@dcpmidstream.com	
		Phone: (303) 6051718
		Mobile: (303) 6193042

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 14694

Initial Form 27 Document #: 402247877

PURPOSE INFORMATION

- | | |
|--|--|
| <input type="checkbox"/> 901.e. Sensitive Area Determination | <input checked="" type="checkbox"/> 909.c.(5), Rule 910.b.(4): Remediation of impacted ground water |
| <input type="checkbox"/> 909.c.(1), Rule 905: Pit or PW vessel closure | <input type="checkbox"/> Rule 909.e.(2)A.: Notice completion of remediation in accordance with Rule 909.b. |
| <input checked="" type="checkbox"/> 909.c.(2), Rule 906: Spill/Release Remediation | <input type="checkbox"/> Rule 909.e.(2)B.: Closure of remediation project |
| <input type="checkbox"/> 909.c.(3), Rule 907.e.: Land treatment of oily waste | <input type="checkbox"/> Rule 906.c.: Director request |
| <input type="checkbox"/> 909.c.(4), Rule 908.g.: Centralized E&P Waste Management Facility closure | <input checked="" type="checkbox"/> Other 4Q 2020 groundwater progress report. |

SITE INFORMATION

N Multiple Facilities (in accordance with Rule 909.c.)

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
No	SOILS	12 ft bgs	Soil excavation and borings

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 #402274677, #402315577, #402423677 and #402474513. 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. Based on COGCC comments DCP installed three additional borings and monitoring wells downgradient of BH02 and BH07 to establish the horizontal extent of impacts to the soil and groundwater at the Site in March 2020. However, during the 3Q20 monitoring event, BH10 was not found and presumed destroyed by landowner. Based on this, DCP completed two additional soil borings, one near the former BH10 and one downgradient of BH10 to delineate horizontal impacts to the soil and are illustrated on Figure 3. Soil borings were logged to evaluate geological conditions and provided as an attachment and samples were submitted for laboratory analysis for BTEX and TPH-GRO/DRO and the results are provided in Table 1.

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. DCP installed three additional borings and monitoring wells downgradient of BH02 and BH07 to establish the horizontal extent of impacts to groundwater in March 2020, which are illustrated on Figure 2. However, during the 3Q or 4Q event observations, BH10 was not found and presumed destroyed by the landowner efforts and could not be sampled. Based on the recent boring sample results and historical observations, impacts are not believed to remain in the soil or groundwater around or downgradient of BH10. Details of the fourth quarter 2020 groundwater monitoring event is provided within this Form 27.

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 5
Number of soil samples exceeding 910-1 0
Was the areal and vertical extent of soil contamination delineated? No
Approximate areal extent (square feet) 1000

NA / ND

ND Highest concentration of TPH (mg/kg) _____
NA Highest concentration of SAR _____
BTEX > 910-1 No
Vertical Extent > 910-1 (in feet) 18

Groundwater

Number of groundwater samples collected 8
Was extent of groundwater contaminated delineated? No
Depth to groundwater (below ground surface, in feet) 13'
Number of groundwater monitoring wells installed 9
Number of groundwater samples exceeding 910-1 2

ND Highest concentration of Benzene (µg/l) _____
ND Highest concentration of Toluene (µg/l) _____
-- Highest concentration of Ethylbenzene (µg/l) 318
-- Highest concentration of Xylene (µg/l) 1600
NA Highest concentration of Methane (mg/l) _____

Surface Water

0 Number of surface water samples collected
Number of surface water samples exceeding 910-1 _____
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?

DCP does not anticipate to complete additional soil or groundwater delineation activities at this time and continue quarterly groundwater monitoring activities at the eight existing monitoring well locations.

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 2020.

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 previously submitted 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 2020. Based on observations of low level concentrations of xylenes at four 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

☐ 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.

Quarterly groundwater monitoring was performed at the Site at eight out of nine monitoring well locations illustrated on Figure 2 to assess the dissolved phase petroleum hydrocarbon impacts in groundwater. BH10 could not be located and presumed destroyed due to activities by the landowner. Quarterly monitoring reports will continue to be submitted to the COGCC via Form 27 for future quarterly monitoring activities conducted at the Site. The 4Q 2020 groundwater monitoring activities were conducted on November 9, 2020 and included Site-wide groundwater gauging and sampling. Groundwater levels were measured to evaluate hydraulic characteristics and provide information regarding seasonal fluctuations at the Site. Groundwater levels and converted elevations are summarized on Table 2 and a groundwater elevation contour map is attached as Figure 4. Groundwater samples were collected from eight of the nine well locations using standard hand-bailing sampling methods and were submitted to Origins Laboratory Inc. (Origins) for BTEX analysis using USEPA method 8260B. Monitoring well locations BH02 and BH03 was reported with a total xylene concentration above the applicable COGCC standards during the 4Q 2020 monitoring event. In addition, BH02 had 0.02 feet of measurable LNAPL, which was bailed off prior to sample collection and based on the sample results indicates that the only impacts remaining are degraded and naturally attenuating. All remaining monitoring wells exhibited concentrations below COGCC Table 910-1 standards. The 4Q20 laboratory analytical data is summarized in Table 3 and on Figure 5. The historical groundwater data is summarized in Table 4, and the 4Q20 laboratory reports are attached. Ongoing groundwater monitoring will continue until a period of four consecutive quarterly monitoring events have demonstrated that groundwater impacts are below COGCC Table 910-1 standards. At that time, an NFA determination for the Site will be requested from the COGCC.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Frequency: ☒ Quarterly ☐ Semi-Annually ☐ Annually ☐ Other _____

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 _____

Do all soils meet Table 910-1 standards? Yes _____

Does the previous reply indicate consideration of background concentrations? Yes _____

Are the only residual soil impacts pH, SAR, or EC at depths greater than 3 feet below ground surface? _____

Does Groundwater meet Table 910-1 standards? No _____

Is additional groundwater monitoring to be conducted? Yes _____

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 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 approve the seed mix? _____

If NO, does the seed mix comply with local soil conservation district recommendations? _____

IMPLEMENTATION SCHEDULE

PRIOR DATES

Date of Surface Owner notification/consultation, if required. 07/22/2013

Actual Spill or Release date, if known. 07/22/2013

SITE INVESTIGATION DATES

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

Date of commencement of Site Investigation. 07/22/2013

Date of completion of Site Investigation. 09/01/2015

REMEDIAL ACTION DATES

Date of commencement of Remediation. 07/22/2013

Date of completion of Remediation.

SITE RECLAMATION DATES

Date of commencement of Reclamation. 07/22/2013

Date of completion of Reclamation.

OPERATOR COMMENT

If warranted, further investigative or remedial activities will need to be discussed/approved with the landowner and COGCC. DCP will continue to perform quarterly groundwater monitoring and submit updates and quarterly reports to COGCC via eform 27.

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: 11/24/2020

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: 11/24/2020

Remediation Project Number: 14694

COA Type

Description

	Submit reports of site investigation and progress of remediation including results of sampling and analysis at a minimum on a quarterly basis until remediation is closed.
	Operator may pursue additional source removal efforts (some NAPL still present in one well) if they choose to.

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

402538277	FORM 27-SUPPLEMENTAL-SUBMITTED
402539650	MONITORING REPORT

Total Attach: 2 Files

General Comments

User Group

Comment

Comment Date

		Stamp Upon Approval
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Total: 0 comment(s)