

# State of Colorado Oil and Gas Conservation Commission

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Document Number:

402247877

Receive Date:

Report taken by:

## Site Investigation and Remediation Workplan (Initial 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	<b>Phone Numbers</b>
Address: 370 17TH STREET - SUITE 2500		Phone: (303) 605-1718
City: DENVER State: CO Zip: 80202		Mobile: (303) 619-3042
Contact Person: Steve Weathers	Email: swweathers@dcpmidstream.com	

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 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 type="checkbox"/> Other                                                                             |

#### 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

# 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.

In July 2013, a leak was identified within a 6-inch DCP gas gathering pipeline and resulted in a hydrocarbon release to soils at CR20 and Highway 85 pipeline release (Site), located approximately 0.2 miles east on CR20 from the intersection with Hwy 85, in Ft. Lupton, CO. At the time of the release, the pipeline was isolated and blown down while repairs were completed. DCP contracted a third-party environmental contractor to delineate and remove impacted soils in the area of the release. Approximately 400 CY of impacted soils were excavated and transported for off-site disposal. Confirmation sampling was completed at excavation sidewalls and base of excavation at locations illustrated on Figure 2 of the approved F19/S (# 402226829). Analytical results indicated soil impacts remained in place, however the extent of the excavation was limited at the time due to buried fiber optic utilities to the south and agricultural ditch to the north. Historical soil, excavation and boring analytical data and laboratory reports are provided as an attachment to this submittal and in the approved Form 19 Initial with Supplemental (# 402226829). Additional soil borings were advanced and completed as monitoring wells to evaluate impacts to groundwater in June 2014. Between June 2014 and September 2015, six soil borings were advanced to approximately 18-foot bgs and completed as monitoring wells at locations illustrated on Figure 2 of the quarterly groundwater reports. Following well installation, ongoing groundwater monitoring has been performed at the Site on a quarterly basis through the third quarter 2019. Further, mobile vacuum enhanced fluid recovery (EFR) groundwater remediation efforts were conducted from the third quarter 2015 through the fourth quarter 2016 at which point light non-aqueous phase liquid (LNAPL) was no longer observed at the Site. Quarterly groundwater reports from the second quarter 2015 through the third quarter 2019 are provided as attachments.

## 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 ):

Historical soil, excavation and boring analytical data and laboratory reports are provided as an attachment to this Form 27 submittal and in Table 1 of the approved Form 19 Initial with Supplemental (Document# 402226829).

### Proposed Groundwater Sampling

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

Between June 2014 and September 2015, six soil borings were advanced to approximately 18-foot bgs and completed as one-inch monitoring wells at locations illustrated on the attached Figure 2. Following monitoring well installation, ongoing groundwater monitoring has been performed at the Site on a quarterly basis through the third quarter (August) 2019. Collected groundwater samples are analyzed for BTEX using USEPA Method 8260B. Groundwater monitoring will continue on a quarterly basis until analytical results demonstrate BTEX concentrations below COGCC standards for four consecutive quarterly monitoring events, at which time a NFA determination for the Site will be requested from the COGCC. Details of the Third Quarter 2019 groundwater monitoring event are provided within this Form 27 submittal.

### 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 16

Number of soil samples exceeding 910-1 3

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

Approximate areal extent (square feet) 1000

### NA / ND

-- Highest concentration of TPH (mg/kg) 1740

NA Highest concentration of SAR

BTEX > 910-1 Yes

Vertical Extent > 910-1 (in feet) 12

### Groundwater

Number of groundwater samples collected 6

Was extent of groundwater contaminated delineated? Yes

Depth to groundwater (below ground surface, in feet) 12'

Number of groundwater monitoring wells installed 6

Number of groundwater samples exceeding 910-1 1

ND Highest concentration of Benzene (µg/l)

ND Highest concentration of Toluene (µg/l)

-- Highest concentration of Ethylbenzene (µg/l) 203

-- Highest concentration of Xylene (µg/l) 1640

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?

During the initial July 2013 investigation, three soil borings were advanced to approximate 3-feet 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.

☐ 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) 400

Volume of liquid waste (barrels) 307

☐ Is further site investigation required?

# REMEDIAL ACTION PLAN

## SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

As referenced in the previously submitted Form 19 Initial with Supplemental (Document # 402226829) initial source remediation efforts, performed during July 2013, 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. Following completed EFR remediation activities, light non-aqueous phase liquid (LNAPL) was no longer observed at the site. Ongoing groundwater monitoring has been performed at the Site on a quarterly basis through the third quarter 2019.

## 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) initial source remediation efforts, performed during July 2013, 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. Following completed EFR remediation activities, light non-aqueous phase liquid (LNAPL) was no longer observed at the site. Ongoing groundwater monitoring has been performed at the Site on a quarterly basis through the third quarter 2019.

## Soil Remediation Summary

☐ In Situ

☒ Ex Situ

<input type="checkbox"/> Bioremediation ( or enhanced bioremediation )	Yes	Excavate and offsite disposal
<input type="checkbox"/> Chemical oxidation		If Yes: Estimated Volume (Cubic Yards) 400
<input type="checkbox"/> Air sparge / Soil vapor extraction		Name of Licensed Disposal Facility or COGCC Facility ID #
<input type="checkbox"/> Natural Attenuation		Excavate and onsite remediation
<input type="checkbox"/> Other		Land Treatment
		Bioremediation (or enhanced bioremediation)
		Chemical oxidation
		Other

## Groundwater Remediation Summary

<input type="checkbox"/>	Bioremediation ( or enhanced bioremediation )
<input type="checkbox"/>	Chemical oxidation
<input type="checkbox"/>	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 has been performed at the Site at the 6 monitoring well locations illustrated on Figure 2 of the attached quarterly summary reports through the third quarter 2019 to assess the dissolved phase petroleum hydrocarbon impacts in groundwater. Quarterly reports have been prepared for monitoring events conducted between May 2015 and August 2019 are provided as attachments to this eForm 27 submittal. Quarterly monitoring reports will continue to be submitted to the COGCC via Form 27 for all future quarterly monitoring activities conducted at the Site. Third quarter 2019 groundwater monitoring activities were conducted on August 29, 2019 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 1 and a groundwater elevation contour map is attached as Figure 3. Groundwater samples were collected from the 6 well locations using standard hand-bailing sampling methods and were submitted to Origins Laboratory Inc. (Origins) for BTEX analysis using USEPA method 8260B. Except for one well location (BH03), the other 5 monitoring wells exhibited concentrations below COGCC Table 910-1 standards. Third Quarter 2019 laboratory analytical data is summarized in Table 2 and on Figure 4. Historical Site groundwater data is summarized in Table 3, and the laboratory analytical report is attached. Groundwater monitoring will continue on a quarterly basis until analytical results demonstrate BTEX concentrations below COGCC standards for four consecutive quarterly monitoring events, at which time a 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: \_\_\_\_\_

## 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 similar to 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**

In addition to this third quarter 2019 progress report, supplemental information and previous unsubmitted quarterly reports are attached with this document including historical soil excavation and boring analytical data and quarterly groundwater reports prepared from the second quarter 2015 through the third quarter 2019. Please note on the Remediation Completion Report section of this F27, the operator could not choose the tab for additional groundwater monitoring is to be conducted.  
Also, DCP is submitting this Initial Form 27 to obtain a remediation number for the Site and subsequently close out the spill via a Form 19S.

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: ` \_\_\_\_\_

Email: [swweathers@dcpmidstream.com](mailto:swweathers@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: \_\_\_\_\_

Date: \_\_\_\_\_

Remediation Project Number: \_\_\_\_\_

**COA Type****Description**

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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**

402248199	SOIL SAMPLE LOCATION MAP
402248257	MONITORING REPORT
402249076	MONITORING REPORT
402249078	MONITORING REPORT
402249079	MONITORING REPORT
402249082	MONITORING REPORT
402249084	MONITORING REPORT
402249085	MONITORING REPORT
402249086	MONITORING REPORT
402249089	MONITORING REPORT
402249093	MONITORING REPORT
402249095	MONITORING REPORT
402249097	MONITORING REPORT
402249100	MONITORING REPORT
402249102	MONITORING REPORT
402249105	MONITORING REPORT
402249109	MONITORING REPORT
402249110	MONITORING REPORT
402249113	MONITORING REPORT

Total Attach: 19 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)