

# State of Colorado Oil and Gas Conservation Commission

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Document Number:

402004215

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		
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 #: Initial Form 27 Document #: 402004215

#### PURPOSE INFORMATION

- |  |  |
|--|--|
| <input type="checkbox"/> 901.e. Sensitive Area Determination                                       | <input 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 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 Exterior and Sub-Slab Soil Hydrocarbon Vapor Assessment Workplan |

#### SITE INFORMATION

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

Facility Type: SPILL OR RELEASE	Facility ID: 463819	API #:	County Name: WELD
Facility Name: CR42 and CR13		Latitude: 40.292285	Longitude: -104.941832
		** correct Lat/Long if needed: Latitude:	Longitude:
QtrQtr: SESE	Sec: 24	Twp: 4N	Range: 68W Meridian: 6 Sensitive Area? Yes

#### SITE CONDITIONS

General soil type - USCS Classifications SC

Most Sensitive Adjacent Land Use Private residence located at 20008 Colorado Blvd (CR13), Johnstown, CO

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

Livestock approximately 260 feet east.

# 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)

## DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	Undetermined	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.

A release of raw natural gas materials/condensate liquid from a DCP gas gathering pipeline was identified on the northwest corner of the intersection of CR42 and CR 13. A Form 19 Initial Report (Document # 401997249) was submitted by DCP to the COGCC. Approximately 510 cubic yards of impacted soil has been removed from the source area for disposal. DCP is performing ongoing activities to ascertain the pipeline release location, characterize the impacted soils and excavate impacted soils associated with the subject pipeline. Additionally, the release of raw natural gas materials/condensate has impacted nearby subsurface soils adjacent to the residence located to the east and has subsequently prompted an investigation to assess the potential for intrusion of petroleum hydrocarbon impacted vapors into the building. Please refer to the attached Exterior and Sub-Slab Soil Hydrocarbon Vapor Assessment Workplan for additional information.

## 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 ):

Subsequent to implementing the Exterior and Sub-Slab Soil Hydrocarbon Vapor Assessment Workplan activities, additional investigation efforts will be conducted to delineate the lateral and vertical extents of petroleum hydrocarbon impacts at the Site. Soil samples will be collected from excavation extents and/or investigation soil borings and submitted for laboratory analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) by USEPA Method 8260B and TPH diesel range organics by USEPA Method 8015.

### Proposed Groundwater Sampling

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

To date, groundwater has not been encountered at the Site.

### 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 ):

The attached Exterior and Sub-Slab Soil Hydrocarbon Vapor Assessment Workplan details proposed exterior and sub-slab soil vapor sample collection activities to evaluate the potential for petroleum hydrocarbon soil vapor intrusion into the residence for the protection of human health and safety.

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

Number of soil samples collected 46

Number of soil samples exceeding 910-1 12

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

Approximate areal extent (square feet) 0

### NA / ND

-- Highest concentration of TPH (mg/kg) 2830

NA Highest concentration of SAR

BTEX > 910-1 Yes

Vertical Extent > 910-1 (in feet) 14

### Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet) \

Number of groundwater monitoring wells installed 0

Number of groundwater samples exceeding 910-1 0

NA Highest concentration of Benzene (µg/l)

NA Highest concentration of Toluene (µg/l)

NA Highest concentration of Ethylbenzene (µg/l)

NA Highest concentration of Xylene (µg/l)

NA Highest concentration of Methane (mg/l)

### Surface Water

0 Number of surface water samples collected

0 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?

Impacted soil was encountered up to approximately 120 feet east of the DCP pipeline where the source originated and at 14 feet below ground surface.

☐ 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) 510

Volume of liquid waste (barrels) 0

☒ Is further site investigation required?

Ongoing Site investigation is being performed at the Site to delineate the lateral and vertical extents of impacts. Additionally, investigation efforts have been transitioned to evaluate the potential for petroleum hydrocarbon soil vapor intrusion into the private residence located adjacent to the site for the protection of human health and safety. An Exterior and Sub-Slab Soils Hydrocarbon Vapor Assessment Workplan is attached.

# REMEDIAL ACTION PLAN

## SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Following notification of the suspected pipeline release, the pipeline and source of contamination was isolated, blown down and placed out of service until further repairs can be made. Initial efforts have been conducted to remove visibly impacted surface soils, delineate subsurface impacts, and to locate the point of pipeline release. To date, approximately 510 cubic yards (CY) of petroleum impacted soils were removed from the site and disposed at the approved Waste Management (WM) North Weld County Landfill location. Subsequent to additional investigation and delineation activities, various methods for the remediation of impacted soils will be evaluated, and the method best suited for this application will be presented to the COGCC in a subsequent Form 27 remediation work plan, for review.

## 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.

For purposes of this Form 27 submittal, remediation discussions are specific to the on-going subsurface investigations currently being conducted near the adjacent residence to assess the potential for intrusion of petroleum hydrocarbon impacted vapors into the building. A series of exterior soil vapor sampling points and sub-slab soil vapor sampling points are proposed to be installed inside and near the property to further assess the potential for vapor intrusion. Please refer to the attached Exterior and Sub-Slab Soil Hydrocarbon Vapor Assessment Workplan for additional information. Regarding the removal of petroleum impacted soil, subsequent to additional investigation and delineation activities, various methods for the remediation of impacted soils will be evaluated, and the method best suited for this application will be presented in a subsequent Form 27 soil remediation work plan, for COGCC review. In the area west of the residential building, a series of soil boring investigations have been performed and additional delineation, via soil borings, is scheduled.

## 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) \_\_\_\_\_ 510  
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.

## REMEDIATION PROGRESS UPDATE

### PERIODIC REPORTING

**Frequency:** ☐ Quarterly ☐ Semi-Annually ☐ Annually ☒ Other Reporting requirements will be determined following completion of further Site investigations

**Report Type:** ☐ Groundwater Monitoring ☐ Land Treatment Progress Report ☐ O&M Report ☒ Other Exterior and Sub-Slab Soil Hydrocarbon Vapor Assessment Workplan

### WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? Yes

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

Impacted soils have been disposed of at the Waste Management North Weld County Landfill.

Volume of E&P Waste (solid) in cubic yards 510

E&P waste (solid) description Petroleum hydrocarbon impacted soils

COGCC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-COGCC Disposal Facility: Waste Managment North Weld County Landfill

Volume of E&P Waste (liquid) in barrels 0

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.

Investigation and delineation of impacted soils are on-going at the Site. Subsequent to implementation of a Site remediation work plan, a reclamation plan will be issued to the COGCC.

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. 04/02/2019

Actual Spill or Release date, if known. 04/02/2019

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 04/02/2019

Date of commencement of Site Investigation. 04/04/2019

Date of completion of Site Investigation. \_\_\_\_\_

### REMEDIAL ACTION DATES

Date of commencement of Remediation. 04/04/2019

Date of completion of Remediation. \_\_\_\_\_

### SITE RECLAMATION DATES

Date of commencement of Reclamation. \_\_\_\_\_

Date of completion of Reclamation. \_\_\_\_\_

### OPERATOR COMMENT

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

Email: cecole@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

402010517	SITE INVESTIGATION PLAN
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Total Attach: 1 Files

### General Comments

### User Group

### Comment

### Comment Date

		Stamp Upon Approval
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Total: 0 comment(s)