

# State of Colorado Oil and Gas Conservation Commission

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



Document Number:

401721640

Receive Date:

10/16/2018

Report taken by:

BOB CHESSON

## 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: <u>HIGHPOINT OPERATING CORPORATION</u>	Operator No: <u>10071</u>	<b>Phone Numbers</b>
Address: <u>1099 18TH ST STE 2300</u>		Phone: <u>(303) 312-8718</u>
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Rusty Frishmuth</u>	Email: <u>rfrishmuth@hpres.com</u>	Mobile: <u>( )</u>

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 11937Initial Form 27 Document #: 401721640

#### 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 checked="" 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 type="checkbox"/> Other _____   |

#### SITE INFORMATION

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

Facility Type: <u>PIT</u>	Facility ID: <u>101166</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>LISA 14-28</u>		Latitude: <u>40.016448</u>	Longitude: <u>-104.562661</u>
		** correct Lat/Long if needed: Latitude: <u>40.016239</u>	Longitude: <u>-104.562655</u>
QtrQtr: <u>SWSW</u>	Sec: <u>28</u>	Twp: <u>1N</u>	Range: <u>64W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

  

Facility Type: <u>PIT</u>	Facility ID: <u>118199</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>LISA 1</u>		Latitude: <u>40.016510</u>	Longitude: <u>-104.562574</u>
		** correct Lat/Long if needed: Latitude: <u>40.016239</u>	Longitude: <u>-104.562655</u>
QtrQtr: <u>SWSW</u>	Sec: <u>28</u>	Twp: <u>1N</u>	Range: <u>64W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

#### SITE CONDITIONS

General soil type - USCS Classifications SCMost Sensitive Adjacent Land Use residentialIs domestic water well within 1/4 mile? YesIs surface water within 1/4 mile? NoIs 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)

### DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
No	SOILS	Pit was 12'x12'x8' deep	Hand auger assessment

### INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

Facility to be decommissioned and during records research the two pits were listed as part of the facility. Only one pit was utilized and the location was determined from historic aerial imagery. The pit was previously backfilled.

### 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 ):

Three hand augers borings were advanced to 10 feet below ground surface. The locations are in the former pit location and shown on the attached figure. The soil was field screened via visual and olfactory observations, and VOCs were measured with a PID. No staining, odor, or PID response was observed in any of the soil borings. As a result, a grab sample was collected from each boring at 8 feet bgs at the estimated depth of the former pit. The samples were analyzed by a certified laboratory for TPH-GRO, TPH-DRO, BTEX, pH, EC, SAR, and Table 910-1 metals. The soil boring logs are attached.

Laboratory results indicated all samples were above the Table 910-1 standard for arsenic with concentrations ranging from 1.64 mg/kg to 1.70 mg/kg but were below the USGS background for all Colorado land uses of 11 mg/kg. SB01 @8' slightly exceeded the Table 910-1 standard for pH of 9 at a value of 9.08. All other soil sample results were in compliance with applicable Table 910-1 standards.

#### Proposed Groundwater Sampling

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

Groundwater was not encountered.

#### 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 3

Number of soil samples exceeding 910-1 3

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

Approximate areal extent (square feet) 0

### NA / ND

ND Highest concentration of TPH (mg/kg)           

-- Highest concentration of SAR 4.02

BTEX > 910-1 No

Vertical Extent > 910-1 (in feet) 0

### 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           

Number of groundwater samples exceeding 910-1           

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 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?

# REMEDIAL ACTION PLAN

## SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

No impacted soil was identified during the site assessment.

## REMEDICATION 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.

NA

## Soil Remediation Summary

### ☐ In Situ

- \_\_\_\_\_ Bioremediation ( or enhanced bioremediation )
- \_\_\_\_\_ Chemical oxidation
- \_\_\_\_\_ Air sparge / Soil vapor extraction
- \_\_\_\_\_ Natural Attenuation
- \_\_\_\_\_ Other \_\_\_\_\_

### ☐ Ex Situ

- \_\_\_\_\_ 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

- \_\_\_\_\_ ☐ Bioremediation ( or enhanced bioremediation )
- \_\_\_\_\_ ☐ Chemical oxidation
- \_\_\_\_\_ ☐ Air sparge / Soil vapor extraction
- \_\_\_\_\_ ☐ Natural Attenuation
- \_\_\_\_\_ ☐ 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.

## REMEDATION 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? No

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.

Reclamation will be completed under a separate correspondence.

Is the described reclamation complete? \_\_\_\_\_

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. \_\_\_\_\_

Actual Spill or Release date, if known. \_\_\_\_\_

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 09/27/2018

Date of commencement of Site Investigation. 09/27/2018

Date of completion of Site Investigation. 09/27/2018

### REMEDIAL ACTION DATES

Date of commencement of Remediation. \_\_\_\_\_

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

### SITE RECLAMATION DATES

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

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

**OPERATOR COMMENT**

Pit #101166 location is not correct in COGCC data base - pit is not located in Rio Blanco County. Also note that based on historical research there was only actually one pit located at this facility.

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

Signed: Rusty Frishmuth

Title: EHS Manager

Submit Date: 10/16/2018

Email: rfrishmuth@hpres.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: BOB CHESSON

Date: 10/16/2018

Remediation Project Number: 11937

**COA Type****Description**

--	--

**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**

401721640	FORM 27-INITIAL-SUBMITTED
401723583	SITE MAP
401796710	ANALYTICAL RESULTS
401796711	SOIL SAMPLE LOCATION MAP
401796718	ANALYTICAL RESULTS
401796888	LOGS

Total Attach: 6 Files

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

Environmental	Location of the Lisa 14-12 pit was corrected in the COGCC DB on 9/6/18.	10/16/2018
---------------	---	------------

Total: 1 comment(s)