

# 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:

402825090

Receive Date:

09/28/2021

Report taken by:

Kari Brown

## 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>BONANZA CREEK ENERGY OPERATING COMPANY LLC</u> | Operator No: <u>8960</u>            | <b>Phone Numbers</b>         |
| Address: <u>410 17TH STREET SUITE #1400</u>                         |                                     | Phone: <u>(720) 315-8934</u> |
| City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u>              |                                     | Mobile: <u>( )</u>           |
| Contact Person: <u>Luke Kelly</u>                                   | Email: <u>lkelly@bonanzacrk.com</u> |                              |

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 17892 Initial Form 27 Document #: 402595603

#### 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: Wellhead cut/cap, off-location flowline removal, tank and associated production facilities closure

#### SITE INFORMATION

☐ Yes ☒ Multiple Facilities

|  |                            |                               |  |
|--|----------------------------|-------------------------------|--|
| Facility Type: <u>WELL</u>                       | Facility ID: <u></u>       | API #: <u>123-25829</u>       | County Name: <u>WELD</u>                                       |
| Facility Name: <u>NORTH PLATTE 23-24</u>         | Latitude: <u>40.382860</u> | Longitude: <u>-104.386920</u> |  |
| ** correct Lat/Long if needed: Latitude: <u></u> |                            | Longitude: <u></u>            |  |
| QtrQtr: <u>NESW</u>                              | Sec: <u>24</u>             | Twp: <u>5N</u>                | Range: <u>63W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u> |
| Facility Type: <u>LOCATION</u>                   | Facility ID: <u>310067</u> | API #: <u></u>                | County Name: <u>WELD</u>                                       |
| Facility Name: <u>North Platte 23-24</u>         | Latitude: <u>40.382860</u> | Longitude: <u>-104.386920</u> |  |
| ** correct Lat/Long if needed: Latitude: <u></u> |                            | Longitude: <u></u>            |  |
| QtrQtr: <u>NESW</u>                              | Sec: <u>24</u>             | Twp: <u>5N</u>                | Range: <u>63W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u> |

|  |                     |                        |   |
|--|---------------------|------------------------|---|
| Facility Type: OFF-LOCATION FLOWLINE     | Facility ID: 478703 | API #:                 | County Name: WELD                         |
| Facility Name: North Platte 23-24        | Latitude: 40.382860 | Longitude: -104.386920 |   |
| ** correct Lat/Long if needed: Latitude: |                     | Longitude:             |   |
| QtrQtr: NESW                             | Sec: 24             | Twp: 5N                | Range: 63W Meridian: 6 Sensitive Area? No |

## SITE CONDITIONS

|   |  |
|---|--|
| General soil type - USCS Classifications SM               | Most Sensitive Adjacent Land Use Rangeland |
| Is domestic water well within 1/4 mile? No                | Is surface water within 1/4 mile? No       |
| Is groundwater less than 20 feet below ground surface? No |  |

### Other Potential Receptors within 1/4 mile

No surface water within 1/4 of a mile.

The Monitoring Well (DWR Receipt 0014361) approx 850-ft to the NE is the nearest permitted water well. This well was never constructed. The planned construction depth was 150-ft, no static water level recorded. Monitoring Well (DWR Receipt 0304177H) is approx 2070-ft to the SE. This well was constructed to 90-ft, is now abandoned, no static water level recorded. Stock Well (DWR Receipt # 9065622) is approx 2170-ft S. This well was constructed to 88-ft, no static water level recorded.

Unknown Water Well (DWR Receipt # 2007113) is approx 2340-ft S. This well was constructed to 80-ft, is now abandoned, no static water level recorded. Monitoring Well (DWR Receipt # 0304177G) is approx 2540-ft SW. This well was constructed to 67-ft, is now abandoned, no static water level recorded.

Groundwater less than 20 ft is not expected at the disturbance location.

This location is within a HPH Pronghorn Winter Concentration Area.

## SITE INVESTIGATION PLAN

### TYPE OF WASTE:

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> E&P Waste       | <input type="checkbox"/> Other E&P Waste                   | <input checked="" type="checkbox"/> Non-E&P Waste |
| <input type="checkbox"/> Produced Water  | <input type="checkbox"/> Workover Fluids                   | No waste was generated _____                      |
| <input type="checkbox"/> Oil             | <input type="checkbox"/> Tank Bottoms                      |   |
| <input 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        |
|-----------|----------------|------------------|-----------------------|
| No        | SOILS          | N/A              | Laboratory Analytical |

### 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 site investigation will be conducted pursuant to COGCC rule 911 at the North Platte 23-24 oil and gas location pertaining to the cut/cap of the NP 24-24 wellhead (API: 05-0123-25829), decommission of production facilities and removal of the NP 23-24/4/GP Line. This flowline, approximately 480-ft, will be removed. See site map exhibit for details.

### 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 ):

Grab confirmation soil samples were collected from beneath the above ground oil tank, water vault, separator, wellhead, and flowline start/end points. Additional soil samples were field screened for possible impacts. Soil samples were analyzed by a certified laboratory for TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons), organic compounds in soil per COGCC Table 915-1, and EC, SAR, pH, and boron. All samples collected were analyzed by a certified laboratory using approved COGCC laboratory analysis methods.

#### Proposed Groundwater Sampling

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

#### 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 8

Number of soil samples exceeding 915-1 0

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

#### NA / ND

ND Highest concentration of TPH (mg/kg) \_\_\_\_\_

-- Highest concentration of SAR 1.64

BTEX > 915-1 No

Approximate areal extent (square feet) \_\_\_\_\_ 0

Vertical Extent > 915-1 (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 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.

N/A

#### REMEDIAL 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.

N/A

#### 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**

\_\_\_\_\_ 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.

## **REMEDIATION PROGRESS UPDATE**

### **PERIODIC REPORTING**

#### **Approved Reporting Schedule:**

☐ Quarterly

☐ Semi-Annually

☐ Annually

☒ Other

Closure Report

#### ☐ **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 Closure data

### **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: \_\_\_\_\_

## **REMEDIATION COMPLETION REPORT**

### **REMEDIATION COMPLETION SUMMARY**

Is this a Final Closure Request for this Remediation Project? Yes \_\_\_\_\_

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? Yes

Does the previous reply indicate consideration of background concentrations? \_\_\_\_\_

Does Groundwater meet Table 915-1 standards? Yes

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.

Reclamation occurred in accordance with COGCC 1000 Series Rules.

Is the described reclamation complete? Yes

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? Yes

If YES, does the seed mix comply with local soil conservation district recommendations? Yes

Did the local soil conservation district provide the seed mix? Yes

### SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. 07/14/2021

Proposed date of completion of Reclamation. 07/21/2021

## 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. 02/11/2021

Actual Spill or Release date, or date of discovery. \_\_\_\_\_

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 05/27/2021

Proposed site investigation commencement. \_\_\_\_\_

Proposed completion of site investigation. \_\_\_\_\_

### REMEDIAL ACTION DATES

Proposed start date of Remediation. \_\_\_\_\_

Proposed date of completion of Remediation. \_\_\_\_\_

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**

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

Signed: ` Luke Kelly

Title: Senior Env. Specialist

Submit Date: ` 09/28/2021

Email: lkelly@bonanzacrk.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: Kari Brown

Date: 10/04/2021

Remediation Project Number: 17892

### **Condition of Approval**

#### **COA Type**

#### **Description**

|       |   |
|-------|---|
|       | <p>Based on the information presented, it appears that no further remedial action is necessary at this time and the COGCC approves the closure request. However, should future conditions at the site indicate contaminant concentrations in soils exceeding COGCC standards or if groundwater is found to be impacted, then further investigation and/or remediation activities may be required.</p> <p>This no further action determination is limited to environmental remediation. Operator is required to comply with COGCC 1100 Series Rules for Flowline Regulations for all Flowline Abandonment activities and COGCC 400 Series Rules for Wellhead Plugging and Abandonment.</p> <p>The surface area disturbed by the remediation activity shall be reclaimed in accordance with the 1000 Series Reclamation Rules. For locations with active ongoing oil and gas operations, comply with Rule 1003 interim reclamation requirements and for locations that will no longer have active oil and gas operations, comply with Rule 1004 Final Reclamation requirements.</p> |
| 1 COA |   |

### **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**

|           |                                |
|-----------|--------------------------------|
| 402825090 | FORM 27-SUPPLEMENTAL-SUBMITTED |
| 402825102 | ANALYTICAL RESULTS             |

Total Attach: 2 Files

### **General Comments**

#### **User Group**

#### **Comment**

#### **Comment Date**

|  |  |                     |
|--|--|---------------------|
|  |  | Stamp Upon Approval |
|--|--|---------------------|

Total: 0 comment(s)