

# State of Colorado Oil and Gas Conservation Commission

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Document Number:

402668175

Receive Date:

04/28/2021

Report taken by:

ROB YOUNG

## 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: <u>MCELVAIN ENERGY INC</u> | Operator No: <u>55575</u>              | <b>Phone Numbers</b>         |
| Address: <u>511 16TH STREET SUITE 700</u>    |                                        | Phone: <u>(303) 962-6495</u> |
| City: <u>DENVER</u>                          | State: <u>CO</u>                       | Zip: <u>80202</u>            |
| Contact Person: <u>Kyle Shefte</u>           | Email: <u>kyle.shefte@mcelvain.com</u> | Mobile: <u>( )</u>           |

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 1519 Initial Form 27 Document #: 1120237

#### 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 checked="" type="checkbox"/> Rule 909.e.(2)B.: Closure of remediation project                       |
| <input checked="" 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: <u>PIT</u>                      | Facility ID: <u>102680</u> | API #: _____               | County Name: <u>WASHINGTON</u> |
| Facility Name: <u>SHEIBLEY 1</u>               |                            | Latitude: <u>40.157285</u> | Longitude: <u>-103.398123</u>  |
| ** correct Lat/Long if needed: Latitude: _____ |                            | Longitude: _____           |                                |
| QtrQtr: <u>NENE</u>                            | Sec: <u>10</u>             | Twp: <u>2N</u>             | Range: <u>54W</u>              |
| Meridian: <u>6</u>                             |                            | Sensitive Area? <u>No</u>  |                                |

#### SITE CONDITIONS

General soil type - USCS Classifications SW

Most Sensitive Adjacent Land Use PASTURE

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)

## DESCRIPTION OF IMPACT

| Impacted? | Impacted Media | Extent of Impact | How Determined |
|-----------|----------------|------------------|----------------|
| Yes       | SOILS          | oil stained      | visual         |

## INITIAL ACTION SUMMARY

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

On April 9, 2021, residual oily soil existing at the site was excavated for offsite disposal. The final extent of the excavated area was approximately 0.6 acres to a maximum depth of approximately 18 inches. A third-party consultant, WSP USA INC, was on site to observe/photodocument excavation activity and field screen the final extent of the scraped area with a photoionization detector. A photolog is attached. No staining or odor was observed along the final extent of excavation and all photoionization detector readings were below 1 part per million.

Approximately 190 cubic yards of residual stained soil was excavated and hauled to Waste Management's Buffalo Ridge Landfill for final disposal.

On April 10, 2021, the excavation was backfilled with clean topsoil. The disturbed area was then deep ripped to between 12 inches and 18 inches below grade, drill seeded with an NRCS approved seed mix, and crimped with a straw mulch at a rate of 2 tons per acre. The site was then fenced in to prevent disturbance from cattle.

## 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 ):

### 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 \_\_\_\_\_ 0  
Number of soil samples exceeding 910-1 \_\_\_\_\_  
Was the areal and vertical extent of soil contamination delineated? \_\_\_\_\_  
Approximate areal extent (square feet) \_\_\_\_\_

### NA / ND

\_\_\_\_\_ Highest concentration of TPH (mg/kg) \_\_\_\_\_  
\_\_\_\_\_ Highest concentration of SAR \_\_\_\_\_  
\_\_\_\_\_ BTEX > 910-1 \_\_\_\_\_  
\_\_\_\_\_ Vertical Extent > 910-1 (in feet) \_\_\_\_\_

### 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

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.

Oily soils were removed by excavation to approximately 18 inches below ground surface.

## 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.

After removal of residual oily soil, the excavation was backfilled with clean topsoil. The disturbed area was then deep ripped to between 12 inches and 18 inches below grade, drill seeded with an NRCS approved seed mix, and crimped with a straw mulch at a rate of 2 tons per acre. The site was then fenced in to prevent disturbance and allow vegetation to become established.

## 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) \_\_\_\_\_ 190

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 One time

**Report Type:** ☐ Groundwater Monitoring ☐ Land Treatment Progress Report ☐ O&M Report  
☒ Other Residual oily soil removal

### 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:

NONE

Volume of E&P Waste (solid) in cubic yards 190

E&P waste (solid) description Residual oily soil

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

Non-COGCC Disposal Facility: Buffalo Ridge

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

E&P waste (liquid) description \_\_\_\_\_

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

Non-COGCC Disposal Facility: \_\_\_\_\_

## REMEDATION COMPLETION REPORT

### REMEDATION COMPLETION SUMMARY

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

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? Yes

Is additional groundwater monitoring to be conducted? No

## 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.

Clean topsoil was hauled in to replace the excavated soil and was tilled with the native soils to a depth of eighteen inches below ground surface. An NRCS recommended seed mix was applied per their recommendations using a no-till drill seeder. Soil amendments were applied including 2 tons straw mulch, Organic Richlawn 4-62 with Biochar, Mycorrhizae, and Humates at 2,000lbs/acre. After seeding, the area will be stabilized with 2000 pounds of weed free straw mulch crimped into the soil. The area was fenced which will remain for approximately 2 years until vegetation is well established. A Form 4 (doc. 402671785) submitted on 4/28/2021 documents the reclamation efforts.

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 approve the seed mix? No

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

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

Date of commencement of Site Investigation. \_\_\_\_\_

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

### **REMEDIAL ACTION DATES**

Date of commencement of Remediation. 02/22/2002

Date of completion of Remediation. 04/10/2021

### **SITE RECLAMATION DATES**

Date of commencement of Reclamation. 04/09/2021

Date of completion of Reclamation. 04/10/2021

**OPERATOR COMMENT**

|  |
|--|
|  |
|--|

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

Signed: RYAN DIAL

Title: SR. CONSULTANT

Submit Date: 04/28/2021

Email: RYAN.DIAL@WSP.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: ROB YOUNG

Date: 04/28/2021

Remediation Project Number: 1519

**Condition of Approval****COA Type****Description**

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Based on the information presented, it appears that no further 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 ground water is found to be impacted, then further investigation and/or remediation activities may be required. In addition, the surface area disturbed by the remediation activity shall be reclaimed in accordance with the 1000 Series Reclamation Rules. |
| 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**

|           |                                |
|-----------|--------------------------------|
| 402668175 | FORM 27-SUPPLEMENTAL-SUBMITTED |
| 402668416 | PHOTO DOCUMENTATION            |

Total Attach: 2 Files

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

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

Total: 0 comment(s)