

State of Colorado Energy & Carbon Management Commission

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403599777

Receive Date:

11/20/2023

Report taken by:

Steven Arauza

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>SUMMIT MIDSTREAM PARTNERS LLC</u>	Operator No: <u>200565</u>	Phone Numbers
Address: <u>910 LOUISIANA ST STE 4200</u>		Phone: <u>(832) 6086137</u>
City: <u>HOUSTON</u>	State: <u>TX</u>	Zip: <u>77002</u>
Contact Person: <u>Sherri Gregg</u>	Email: <u>sherri.gregg@summitmidstream.com</u>	Mobile: <u>()</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 27509 Initial Form 27 Document #: 403290427

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: _____

SITE INFORMATION

No Multiple Facilities

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>480836</u>	API #: _____	County Name: <u>GARFIELD</u>
Facility Name: <u>Gathering Line just off D24W pad</u>		Latitude: <u>39.458000</u>	Longitude: <u>-107.730000</u>
		** correct Lat/Long if needed: Latitude: <u>39.437489</u>	Longitude: <u>-107.730275</u>
QtrQtr: <u>NWSW</u>	Sec: <u>12</u>	Twp: <u>7S</u>	Range: <u>93W</u>
		Meridian: <u>6</u>	Sensitive Area? <u>No</u>

SITE CONDITIONS

General soil type - USCS Classifications SC Most Sensitive Adjacent Land Use Non crop 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? No

Other Potential Receptors within 1/4 mile

West Mamm Creek located approximately 400 feet to the northeast. Gantt Gulch, and ephemeral stream is located 660' southeast.

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	~450 sqft	Visual, field screen, excavation

INITIAL ACTION SUMMARY

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

Pipeline was excavated and sampled.

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):

Entrada recommends the collection of additional background soil samples to provide additional context for SAR and EC levels.

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):

Entrada recommends the collection of a produced water sample in order to understand the chemistry of the produced water, specifically arsenic concentration.

SITE INVESTIGATION REPORT**SAMPLE SUMMARY**

Soil

NA / ND

Number of soil samples collected 5

Number of soil samples exceeding 915-1 4

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

Approximate areal extent (square feet) 450

-- Highest concentration of TPH (mg/kg) 15.27
7

-- Highest concentration of SAR 9.99

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 11

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?

Two background samples were collected. See the attached Report of Work Complete for details.

☐ 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?

Entrada recommends the collection of a produced water sample in order to understand the chemistry of the produced water, specifically arsenic concentration, and the collection of additional background soil samples to provide additional context for SAR and EC levels.

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.

Pipeline was excavated and repaired.

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.

A remediation plan will be developed once background and produced water sampling is complete.

Soil Remediation Summary

☐ In Situ

☐ Ex Situ

Bioremediation (or enhanced bioremediation)

Chemical oxidation

Air sparge / Soil vapor extraction

Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards)

Name of Licensed Disposal Facility or COGCC Facility ID #

_____ Natural Attenuation
_____ Other _____

_____ 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

☐ 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

Adequacy of Operator's General Liability Insurance and Financial Assurance

Describe the adequacy of the Operator's general liability insurance and Financial Assurance to fully address the anticipated costs of Remediation, including the estimated remaining cost for this project (below).

If this information has been provided on a Form 27 within the last 12 months, provide the Document Number of that form.

Operator anticipates the remaining cost for this project to be: \$

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:

REMEDIATION COMPLETION REPORT

REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? No

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?

Does the previous reply indicate consideration of background concentrations?

Does Groundwater meet Table 915-1 standards?

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.

A reclamation plan will be developed once remediation is complete.

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 provide the seed mix? _____

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

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

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. _____

Proposed date of completion of Reclamation. _____

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. _____

Actual Spill or Release date, or date of discovery. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 10/13/2021

Proposed site investigation commencement. _____

Proposed completion of site investigation. 07/01/2023

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

This Site was drilled and sampled in July 2023 to delineate inorganic impacts identified in the original excavation. Four borings were advanced around the excavation area (SB01-SB04). SB01 was moved slightly as the original location could not be safely accessed due to the D24W gathering line.

Analytical results from these borings indicate that the SAR and EC impacts have not been fully delineated. Please see the attached Analytical Data, Table, Figure, and Boring Logs. Please also see the previously submitted data (Doc #403290559) and approved Form 27 (Doc #403503617).

However, Grand River Gathering contends that SB04, SB03, and SB02 are far enough away from the original spill area that they can be considered as background concentrations. The SAR of 11.2 found in SB03 is greater than any identified in the original excavation. In addition, the EC of 6.840 in SB02, while not greater than what was found in the original excavation, is considerably elevated. This indicates that naturally occurring high SAR and EC are found in this area. Based on this Grand River Gathering requests that the ECMC apply Table 915-1 footnote 1 to this spill.

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

Signed: Sherri Gregg

Title: Env Compliance Specialist

Submit Date: 11/20/2023

Email: sherri.gregg@summitmidstream.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: Steven Arauza

Date: 12/11/2023

Remediation Project Number: 27509

COA Type**Description**

	ECMC is unable to make a determination on the application of Table 915-1, Footnote 1 for EC and SAR exceedances due to inconsistency between background soil samples and the soil boring/delineation samples described in this report. The Operator's request to utilize Table 915-1, Footnote 1 is NOT approved at this time. Additional sampling and waste characterization is required to assess naturally occurring background levels of these contaminants of concern and to assess delineation of potential impacts.
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**

403599777	FORM 27-SUPPLEMENTAL-SUBMITTED
403600159	ANALYTICAL RESULTS
403600174	ANALYTICAL RESULTS
403600175	LOGS
403600178	SITE MAP

Total Attach: 5 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)