

State of Colorado
Energy & Carbon Management Commission

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Report taken by:
Alexander Ahmadian

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 ECMC 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>CRESTONE PEAK RESOURCES OPERATING LLC</u>	Operator No: <u>10633</u>	Phone Numbers Phone: <u>(303) 8293811</u> Mobile: <u>(303) 8293811</u>
Address: <u>555 17TH STREET SUITE 3700</u>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Jacob Evans</u>	Email: <u>jevans@civiresources.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 34305 Initial Form 27 Document #: 403666824

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

Yes Multiple Facilities

Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>013-06104</u>	County Name: <u>BOULDER</u>
Facility Name: <u>DONIPHAN-SHIELDS 2</u>		Latitude: <u>40.069674</u>	Longitude: <u>-105.086651</u>
** correct Lat/Long if needed: Latitude: _____ Longitude: _____			
QtrQtr: <u>NENW</u>	Sec: <u>11</u>	Twp: <u>1N</u>	Range: <u>69W</u> Meridian: <u>6</u> Sensitive Area? <input type="checkbox"/> Yes

Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>013-06541</u>	County Name: <u>BOULDER</u>
Facility Name: <u>DONIPHAN SHIELDS 12-11</u>		Latitude: <u>40.069660</u>	Longitude: <u>-105.086690</u>
** correct Lat/Long if needed: Latitude: _____ Longitude: _____			
QtrQtr: <u>NENW</u>	Sec: <u>11</u>	Twp: <u>1N</u>	Range: <u>69W</u> Meridian: <u>6</u> Sensitive Area? <input type="checkbox"/> Yes

Facility Type: LOCATION	Facility ID: 336380	API #:	County Name: BOULDER
Facility Name: DONIPHAN-SHIELDS-61N69W 11NENW	Latitude: 40.069660	Longitude: -105.086690	
** correct Lat/Long if needed: Latitude:		Longitude:	
QtrQtr: NENW	Sec: 11	Twp: 1N	Range: 69W Meridian: 6 Sensitive Area? Yes

Facility Type: SPILL OR RELEASE	Facility ID: 487161	API #:	County Name: BOULDER
Facility Name: Doniphan-Shields-61N69W 11NENW	Latitude: 40.069418	Longitude: -105.086268	
** correct Lat/Long if needed: Latitude:		Longitude:	
QtrQtr: NENW	Sec: 11	Twp: 1N	Range: 69W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use Cropland

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

There is an Un-Named Lake 630-ft to the S. The Boulder Creek is 730-ft to the SE. There is an Un-Named Lake 1185-ft to the SE. The Residential Well (DWR Receipt 0204090, Permit 114403-) approx 1055-ft to the NW is the nearest permitted water well. This well was constructed to 210-ft, static water level recorded at 40-ft. Residential Well (DWR Receipt 9012046, Permit 56190-) is approx 1250-ft to the NW. This well was constructed to 45-ft, static water level recorded at 23-ft. Residential Well (DWR Receipt # 3678465, Permit 184820--A) is approx 1240-ft NW. This well was constructed to 300-ft, static water level recorded at 40-ft. Groundwater has potential to be less than 20 ft at the disturbance location. This location is not within a HPH area. CPW consultation not required.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> E&P Waste | <input type="checkbox"/> Other E&P Waste | <input type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | _____ |
| <input checked="" type="checkbox"/> Oil | <input type="checkbox"/> Tank Bottoms | |
| <input checked="" 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
Yes	GROUNDWATER	Base of Excavation	Laboratory Analysis
Yes	SOILS	120' X 60' X 4' bgs	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 site investigation will be conducted pursuant to COGCC rule 911 at the DONIPHAN-SHIELDS-61N69W 11NENW (336380) oil and gas location pertaining to the cut/cap of the DONIPHAN-SHIELDS 2 (05-013-06104), cut/cap of the DONIPHAN SHIELDS 12-11 (05-013-06541), decommission of production facilities and decommission of all on-location flowlines. 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):

Fifteen grab soil samples were collected from the decommissioned facilities and three composite soil sample were collected from the stockpiled overburden. All soil samples were submitted to a certified laboratory for analysis of Table 915-1 metals and organic compounds, TPH C6-36, EC, SAR, pH, and boron.

Proposed Groundwater Sampling

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

Two grab groundwater sample were collected from the base of the excavation and submitted to a certified laboratory for analysis of BTEX, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, chlorides, sulfates, TDS.

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

NA / ND

Number of soil samples collected 18

-- Highest concentration of TPH (mg/kg) 1200

Number of soil samples exceeding 915-1 18 -- Highest concentration of SAR 7.92
 Was the areal and vertical extent of soil contamination delineated? No BTEX > 915-1 Yes
 Approximate areal extent (square feet) 7200 Vertical Extent > 915-1 (in feet) 4

Groundwater

Number of groundwater samples collected 2 -- Highest concentration of Benzene (µg/l) 1.66
 Was extent of groundwater contaminated delineated? No -- Highest concentration of Toluene (µg/l) 0.348
 Depth to groundwater (below ground surface, in feet) 5 -- Highest concentration of Ethylbenzene (µg/l) 8.7
 Number of groundwater monitoring wells installed 0 -- Highest concentration of Xylene (µg/l) 0.471
 Number of groundwater samples exceeding 915-1 1 NA 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?
 Twenty-two background soil samples were collected from homogenous soil horizons and/or corresponding excavation confirmation soil sample depths.
 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.
 Source removal is ongoing through mechanical excavation. Grab soil samples were collected for Table 915-1 metals, organics, TPH C6-36, EC, SAR, pH, and boron. Data is being compiled and will be submitted on the next form 27.

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.
 Source removal is ongoing. A site assessment was completed to the south of the excavation to determine the extent of impacts. Bore logs will be submitted on the next form 27. A groundwater site assessment will be completed subsequent to source removal. A site assessment to collect additional background samples will be scheduled. An estimated timeframe to achieve a no further action will be May 31, 2026.

Soil Remediation Summary

In Situ Ex Situ

Bioremediation (or enhanced bioremediation) Yes Excavate and offsite disposal
 Chemical oxidation If Yes: Estimated Volume (Cubic Yards) 1230
 Air sparge / Soil vapor extraction Name of Licensed Disposal Facility or ECOM Facility ID #
 Natural Attenuation No Excavate and onsite remediation

Other _____

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.

A groundwater site assessment will be conducted. Groundwater samples will be collected on a quarterly basis and submitted to a certified laboratory for analysis of BTEX, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, chlorides, sulfates, TDS. A groundwater elevation figure and bore logs will be submitted on a supplemental form 27.

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 Decommission and Excavation Data

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.

The General Liability coverage within the Civitas Resources insurance program includes coverage for bodily injury, property damage, and pollution clean-up costs arising from qualifying pollution events of a sudden and accidental nature subject to a \$1,000,000 per occurrence limit and \$2,000,000 aggregate limit. The Civitas Resources insurance program includes Excess Liability coverage of \$110,000,000 per occurrence and in the aggregate which sits over the sudden and accidental pollution within the General Liability coverage. It is the opinion of Civitas Resources that this total tower of limit is adequate to address the costs of remediation associated with any qualifying pollution event.

Operator anticipates the remaining cost for this project to be: \$ 200000

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:

No beneficial use

Volume of E&P Waste (solid) in cubic yards 1230

E&P waste (solid) description EP solid waste derived from excavation activities

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: Front Range Landfill

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

E&P waste (liquid) description _____

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC 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? No

Does the previous reply indicate consideration of background concentrations? _____

Does Groundwater meet Table 915-1 standards? No

Is additional groundwater monitoring to be conducted? Yes

Operator shall comply with the ECMC 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 will be in accordance with ECMC 1000 Series Rules.

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 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. 01/09/2024

Actual Spill or Release date, or date of discovery. 06/19/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 05/31/2024

Proposed site investigation commencement. 05/31/2024

Proposed completion of site investigation. 06/19/2024

REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/20/2024

Proposed date of completion of Remediation. 05/31/2026

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

Additional source removal will be scheduled once the meter shed is removed.

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

Signed: Jacob EvansTitle: Environmental AdvisorSubmit Date: 12/18/2024Email: jevans@civiresources.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with ECMC Rules and applicable orders and is hereby approved.

ECMC Approved: _____

Date: _____

Remediation Project Number: 34305**COA Type****Description**

0 COA	
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ATTACHMENT 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**

404033950	FORM 27 DENIED
404034150	ANALYTICAL RESULTS
404034152	ANALYTICAL RESULTS
404034154	REMEDATION PROGRESS REPORT
404034160	SITE INVESTIGATION REPORT
404083165	FORM 27-SUPPLEMENTAL-SUBMITTED

Total Attach: 6 Files

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

Environmental	ECMC has denied this Form 27 for data validation. Operator will provide laboratory analytical report(s) as a stand-alone attachment(s) on the replacement Supplemental Form 27. The Laboratory Report PDF(s) must be secured by the issuing laboratory; If there is a difference between the creation date and secured date of the PDF, Operator shall provide an explanation in the case narrative of the associated report. ECMC will not review combined PDFs with lab reports.	02/05/2025
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Total: 1 comment(s)