

State of Colorado  
Energy & Carbon Management Commission

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Document Number:  
404462854

Receive Date:

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Report taken by:

**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>IMPETRO RESOURCES LLC</u>	Operator No: <u>10690</u>	<b>Phone Numbers</b>
Address: <u>558 CASTLE PINES PKWY UNIT B-4</u>		Phone: <u>(361) 935-5633</u>
City: <u>CASTLE PINES</u> State: <u>CO</u> Zip: <u>80108</u>		Mobile: <u>( )</u>
Contact Person: <u>Brent Bongers</u>	Email: <u>bbongers@impetroresources.com</u>	

**PROJECT, PURPOSE & SITE INFORMATION**

**PROJECT INFORMATION**

Remediation Project #: 9053 Initial Form 27 Document #: 2086929

**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: Skim Pit Closure

**SITE INFORMATION**

No  Multiple Facilities

Facility Type: <u>PIT</u>	Facility ID: <u>107591</u>	API #: _____	County Name: <u>WASHINGTON</u>
Facility Name: <u>COWLES 1</u>	Latitude: <u>39.767648</u>	Longitude: <u>-103.151830</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWSE</u>	Sec: <u>25</u>	Twp: <u>3S</u>	Range: <u>52W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

**SITE CONDITIONS**

General soil type - USCS Classifications ML Most Sensitive Adjacent Land Use CULTIVATED

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**

Well Permit 17737 DTW= 76' bgs  
No surface water within 0.25 miles  
Location is not within any HPH  
Silt Loam

**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	TBD	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.

This Form is being submitted to meet quarterly reporting requirements. The previous Form (#404230585) requesting a reduced analytical suite is still in process. In 2015, the skim pit (facility ID #107591) was decommissioned and replaced by a tank on site by HRM Resources II, LLC (Operator #10548). Impacted soils were excavated and disposed (~255 cy) of at the Denver Arapahoe Disposal landfill or placed in an on-site landfarm (~300 cy). The landfarm was sampled biannually by a third-party consultant until June 2018. Additional soil was excavated from the portions of the land farm that exceeded COGCC Table 910-1 standards. All results of the soil that remained in place were below the allowable standards, and the land farm was closed. Additional confirmation samples were collected in May 2025 to compare to the ECMC Table 915-1 list of analytes.

**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 ):

Soil samples from the former skim pit and land farm area were analyzed by a NELAP-accredited lab for the ECMC Table 915-1 list of analytes. Based on the laboratory analytical data from the confirmation soil sampling event, all constituents of concern from the Series 900 Rules Table 915-1 are below the ECMC Table 915-1 allowable residential soil screening level concentrations or within background concentrations, except for SAR in SS07 and TPH in SS04. It is requested that the SAR impacts remain in place until facility decommissioning activities take place. TPH impacts at SS04 will be further investigated.  
Based on soil samples collected to date, the Operator is requesting a reduced analytical suite to include only TPH and SAR

**Proposed Groundwater Sampling**

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

[Empty text box for groundwater sampling details]

**Proposed Surface Water Sampling**

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

[Empty text box for surface water sampling details]

**Additional Investigative Actions**

Additional alternative investigative actions described in attached Site Investigation Plan ( summary ):

[Empty text box for additional investigative actions]

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

Number of soil samples collected 46

Number of soil samples exceeding 915-1 25

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

Approximate areal extent (square feet) 1250

### NA / ND

--            Highest concentration of TPH (mg/kg) 43600

--            Highest concentration of SAR 24.1

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 24

### 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?

Three (3) background samples were collected from the adjacent well pad area at comparable depths and soil horizons. The arsenic concentrations from all soil sample locations were above the Table 915-1 limits, which are attributed to background levels.

Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) 555

Volume of liquid waste (barrels) 0

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.

Soils will be assessed and samples will be analyzed at an approved lab, any identified contamination will be excavated and disposed of at an approved disposal facility. Previous waste disposal manifests were included in Doc #2087015 submitted in 2015. In May/June 2018 approximately 595 cy of impacted soil from the landfarm was sent to the landfill. Manifests from this event were provided in attachment #401684208.

### 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.

Skim pit was closed by previous operator; residual soil contamination (Doc# 2087015) was left in south sidewall of current operation pit in order to not affect the integrity of the current pit.

### Soil Remediation Summary

In Situ

Ex Situ

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

- Yes \_\_\_\_\_ Excavate and offsite disposal
- \_\_\_\_\_ If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_ 1150
- \_\_\_\_\_ Name of Licensed Disposal Facility or ECMC 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.

Impacts to groundwater have not been identified at the site.

# 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 Skim Pit Closure

## 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 carries general liability insurance of \$1,000,000.00 per occurrence and \$4,000,000.00 in excess. Operator carries \$25,000.00 blanket surface surety bond.

Operator anticipates the remaining cost for this project to be: \$ 5000

## 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:

Soil was placed in the on-site cell for treatment in 2015. In May/ June 2018 approximately 595 cy of impacted soil from the landfarm was sent to the landfill.

Volume of E&P Waste (solid) in cubic yards 595

E&P waste (solid) description hydrocarbon impacted soils

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

Non-ECMC Disposal Facility: Denver Arapahoe Disposal 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? \_\_\_\_\_

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 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 conducted at the time of facility closure per 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? No

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

Did the local soil conservation district provide the seed mix? No

### **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. 03/30/2015

### **SITE INVESTIGATION DATES**

Date of Initial Actions described in Site Investigation Plan (start date). 06/25/2025

Proposed site investigation commencement. 10/01/2015

Proposed completion of site investigation. 06/30/2026

### **REMEDIAL ACTION DATES**

Proposed start date of Remediation. 06/30/2026

Proposed date of completion of Remediation. 07/20/2026

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**

This Form is being submitted to meet quarterly reporting requirements. The previous Form (#404230585 submitted 6/12/2025) requesting a reduced analytical suite is still in process. Additional site investigation and sampling activities are on hold until a decision is made on the reduced analytical suite.

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

Signed: Lauren Glazier

Title: lglazier@cgrs.com

Submit Date: \_\_\_\_\_

Email: lglazier@cgrs.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: 9053

**COA Type**

**Description**

<u>COA Type</u>	<u>Description</u>
0 COA	

**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**

<u>Att Doc Num</u>	<u>Name</u>

Total Attach: 0 Files

**General Comments**

**User Group**

**Comment**

**Comment Date**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)