

State of Colorado Oil and Gas Conservation Commission

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402133940

Receive Date:

10/02/2019

Report taken by:

KRIS NEIDEL

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>MERRION OIL & GAS CORP</u>	Operator No: <u>56680</u>	Phone Numbers
Address: <u>610 REILLY AVENUE</u>		
City: <u>FARMINGTON</u> State: <u>NM</u> Zip: <u>87401</u>		
Contact Person: <u>Philana Thompson</u>	Email: <u>pthompson@merrion.bz</u>	
		Phone: <u>(505) 4861171</u>
		Mobile: <u>(505) 4861171</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 10405 Initial Form 27 Document #: 401379306

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 checked="" type="checkbox"/> 909.c.(2), Rule 906: Spill/Release Remediation | <input type="checkbox"/> Rule 909.e.(2)B.: Closure of remediation project |
| <input 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>WELL</u>	Facility ID: _____	API #: <u>103-10024</u>	County Name: <u>RIO BLANCO</u>
Facility Name: <u>PARK MOUNTAIN 10-7</u>	Latitude: <u>39.800660</u>	Longitude: <u>-108.994200</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWSE</u>	Sec: <u>7</u>	Twp: <u>3S</u>	Range: <u>103W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

SITE CONDITIONS

General soil type - USCS Classifications SC Most Sensitive Adjacent Land Use NA

Is domestic water well within 1/4 mile? No 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

none

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
UNDETERMINED	SOILS	5 bbls	estimated from tank

INITIAL ACTION SUMMARY

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

Contacted COGCC & BLM upon discovery of broken valve.

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):

See attached plan

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 30

Number of soil samples exceeding 910-1 11

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

Approximate areal extent (square feet) 25

NA / ND

-- Highest concentration of TPH (mg/kg) 844

-- Highest concentration of SAR 36.5

BTEX > 910-1 Yes

Vertical Extent > 910-1 (in feet) 13

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

NA Highest concentration of Benzene (µg/l)

NA Highest concentration of Toluene (µg/l)

NA Highest concentration of Ethylbenzene (µg/l)

NA Highest concentration of Xylene (µg/l)

NA Highest concentration of Methane (mg/l)

Surface Water

0 Number of surface water samples collected

0 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?

background was requested due to high levels of EC and Arsenic.

☐ 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?

Merrion Oil & Gas has revised the remediation plan please see the attached updated plan. As part of the plan Merrion Oil & Gas plans to test the East side of the pit that was showing a elevated TPH.

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.

Soil will be landfarmed on location. BLM has approved the process.

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.

- Sampling and analysis of the pit contaminants will be executed under the following guidelines as per Rule 910 (2,3):
 - o A TVA-1000B toxic vapor analyzer may be utilized to detect TPH for initial excavation. Once TPH levels are low enough, approved sampling will take place to determine if any additional excavation is required.
 - o If a liner is found while excavating the pit, the liner will be removed and disposed of at an approved disposal site.
 - o Once excavated, divide the pit area into quadrants and obtain grab samples. This will provide information to map out any further horizontal or vertical excavation
 - o Field measurements shall be conducted with approved calibrated sampling equipment by trained personnel.
 - o Samples shall be collected, preserved, and shipped using standard environmental sampling practices.
 - o Laboratory analysis shall use standard methods to detect contaminants to the same concentrations levels as those provided in the E&P Waste Management Table 910-1 as per rule 910b(3).
- Based on sampling results, continue any required excavation and sampling in any quadrants exceeding the soil organic and inorganic concentrations levels of the E&P Waste Management Table 910-1. Transfer the contaminated soil to the onsite landfarm.

Soil Remediation Summary

☒ In Situ

Yes Bioremediation (or enhanced bioremediation)

Yes Chemical oxidation

No Air sparge / Soil vapor extraction

Yes Natural Attenuation

No Other _____

☒ Ex Situ

No Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards) _____

Name of Licensed Disposal Facility or COGCC Facility ID # _____

Yes Excavate and onsite remediation

Yes Land Treatment

Yes Bioremediation (or enhanced bioremediation)

Yes Chemical oxidation

No 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 _____

Report Type: ☐ Groundwater Monitoring ☒ Land Treatment Progress Report ☐ O&M Report

☐ Other _____

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: _____

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.

- The pit will be backfilled with clean soil once sampling indicates soil inorganic and organic contaminants are under the COGCC 910-1 table threshold guidelines and approved by the COGCC.
- * The surface will be re-seeded using the seed mixture approved in the initial APD

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? Yes

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. 07/20/2017

Actual Spill or Release date, if known. 07/20/2017

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 07/21/2017

Date of commencement of Site Investigation. 07/21/2017

Date of completion of Site Investigation. 07/21/2017

REMEDIAL ACTION DATES

Date of commencement of Remediation. _____

Date of completion of Remediation. _____

SITE RECLAMATION DATES

Date of commencement of Reclamation. _____

Date of completion of Reclamation. _____

OPERATOR COMMENT

The pit is still open and will remain until approval of the closure request, once approved the soil that was landfarmed onsite will be used to backfill the pit.

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

Signed: Philana Thompson

Title: Regulatory Compliance

Submit Date: 10/02/2019

Email: pthompson@merrion.bz

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: KRIS NEIDEL

Date: 10/07/2019

Remediation Project Number: 10405

COA Type**Description**

	Based on review of the information provided, it appears that no further action is necessary at this time and COGCC approves the closure request. Should conditions at the site indicate contaminant concentrations in soils exceeding COGCC standards, or, if groundwater is found to be significantly impacted, further investigation and/or remediation activities may be required at the site.
	It appears that land treated soils have EC and SAR exceedances. Other constituents are below table 910-1 levels. This material can be used to backfill the pits, it should be placed below 3' feet of ground surface.

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**

402133940	FORM 27-SUPPLEMENTAL-SUBMITTED
402133978	ANALYTICAL RESULTS
402133982	SOIL SAMPLE LOCATION MAP
402134043	ANALYTICAL RESULTS
402134406	OTHER
402183056	ANALYTICAL RESULTS
402183059	ANALYTICAL RESULTS
402197143	MONITORING REPORT

Total Attach: 8 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)