

State of Colorado
Oil and Gas Conservation Commission

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Document Number:
402257924

Receive Date:

Report taken by:

Site Investigation and Remediation Workplan (Initial 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>MAGPIE OPERATING INC</u>	Operator No: <u>52530</u>	Phone Numbers
Address: <u>2707 SOUTH COUNTY RD 11</u>		Phone: <u>(970) 669-6308</u>
City: <u>LOVELAND</u> State: <u>CO</u> Zip: <u>80537</u>		Mobile: <u>(720) 233-0875</u>
Contact Person: <u>Ryan Warner</u>	Email: <u>magpieoil@yahoo.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: _____ Initial Form 27 Document #: 402257924

PURPOSE INFORMATION

- | | |
|--|--|
| <input checked="" type="checkbox"/> 901.e. Sensitive Area Determination | <input type="checkbox"/> 909.c.(5), Rule 910.b.(4): Remediation of impacted ground water |
| <input checked="" 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 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

Y Multiple Facilities (in accordance with Rule 909.c.)

Facility Type: <u>PIT</u>	Facility ID: <u>101099</u>	API #: _____	County Name: <u>MORGAN</u>
Facility Name: <u>REDIESS</u>	Latitude: <u>40.048775</u>	Longitude: <u>-103.691090</u>	
	** correct Lat/Long if needed: Latitude: <u>40.049034</u>	Longitude: <u>-103.691272</u>	
QtrQtr: <u>NESW</u> Sec: <u>18</u> Twp: <u>1N</u> Range: <u>56W</u> Meridian: <u>6</u>	Sensitive Area? <u>Yes</u>		
Facility Type: <u>PIT</u>	Facility ID: <u>101100</u>	API #: _____	County Name: <u>MORGAN</u>
Facility Name: <u>REDIESS</u>	Latitude: <u>40.049393</u>	Longitude: <u>-103.691139</u>	
	** correct Lat/Long if needed: Latitude: <u>40.049543</u>	Longitude: <u>-103.691340</u>	
QtrQtr: <u>NESW</u> Sec: <u>18</u> Twp: <u>1N</u> Range: <u>56W</u> Meridian: <u>6</u>	Sensitive Area? <u>Yes</u>		
Facility Type: <u>PIT</u>	Facility ID: <u>101101</u>	API #: _____	County Name: <u>MORGAN</u>
Facility Name: <u>REDIESS</u>	Latitude: <u>40.049508</u>	Longitude: <u>-103.691508</u>	
	** correct Lat/Long if needed: Latitude: <u>40.049627</u>	Longitude: <u>-103.691671</u>	
QtrQtr: <u>NESW</u> Sec: <u>18</u> Twp: <u>1N</u> Range: <u>56W</u> Meridian: <u>6</u>	Sensitive Area? <u>Yes</u>		

Facility Type: PIT Facility ID: 119191 API #: County Name: MORGAN
Facility Name: REDEISS Latitude: 40.049827 Longitude: -103.691349
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: NESW Sec: 18 Twp: 1N Range: 56W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SP Most Sensitive Adjacent Land Use Pasture

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? Yes

Other Potential Receptors within 1/4 mile

Stock well - Permit #30920 - 1780' ESE

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	TBD	Laboratory Analytical

INITIAL ACTION SUMMARY

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

Prior to decommissioning the entire facility, site assessment activities must be completed. Soil samples will be collected from a previous skim pit (Facility ID 119191) and within three produced water pits onsite (Facility IDs 101099, 101100, and 101101). Produced water pit/vessel sampling will be completed per COGCC Rule 905b.

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):

One (1) soil boring will be completed via stainless-steel hand auger adjacent to the previous skim pit (Facility ID 119191). The boring will be advanced to approx. 5 feet bgs. The soil sample will be analyzed for Full TPH following EPA Methods 8260 and 8015. In addition, the soil sample will be analyzed for EC, SAR, and pH following Modified 9050A, 20B saturated paste, and EPA Method 9045D, respectively.

Two (2) soil samples will be collected via stainless-steel hand auger from each of the produced water pits (Facility IDs 101099, 101100, and 101101) onsite, 6 total samples. The soil samples will be analyzed for Full TPH following EPA Methods 8260 and 8015. In addition, the samples will be analyzed for EC, SAR, and pH following Modified 9050A, 20B saturated paste, and EPA Method 9045D, respectively.

Proposed Groundwater Sampling

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

If groundwater is encountered during assessment activities, groundwater samples will be collected and analyzed for BTEX following EPA Method 8260.

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

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

No E&P waste currently generated.

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.

One (1) soil boring will be completed via stainless-steel hand auger adjacent to the previous skim pit (Facility ID 119191). The boring will be advanced to approx. 5 feet bgs. The soil sample will be analyzed for Full TPH following EPA Methods 8260 and 8015. In addition, the soil sample will be analyzed for EC, SAR, and pH following Modified 9050A, 20B saturated paste, and EPA Method 9045D, respectively.

Three (3) produced water pits (Facility IDs 101099, 101100, and 101101) onsite will be assessment for potential impacts subsequent to a produced water pit closure - in accordance with COGCC Rule 905b. Two (2) soil samples will be collected via stainless-steel hand auger from each of the pits, 6 total samples. The soil samples will be analyzed for Full TPH following EPA Methods 8260 and 8015. In addition, the samples will be analyzed for EC, SAR, and pH following Modified 9050A, 20B saturated paste, and EPA Method 9045D, respectively.

If groundwater is encountered during assessment activities, groundwater samples will be collected and analyzed for BTEX following EPA Method 8260.

All samples collected will be compared to COGCC Table 910-1 standards. If any impacts above COGCC Table 910-1 are identified, a supplemental 27 will be submitted to remediate any/all impacts.

Soil Remediation Summary

In Situ

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

Ex Situ

- Excavate and offsite disposal
- If Yes: Estimated Volume (Cubic Yards) _____
- 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 _____

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

Other Site Assessment Report and/or Production Pit Closure _____

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: _____

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 COGCC 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 approve the seed mix? _____

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

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). 01/06/2020

Date of commencement of Site Investigation. _____

Date of completion of Site Investigation. _____

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

A new Form 27 is being submitted to close previous Remediation #3683 and begin the process of closing the Rediess #1 & #2 location based on the proposed assessment plan detailed above. The proposed assessment work is scheduled for the week of January 6, 2020. However, assessment activities may be rescheduled due to weather and/or other unforeseen circumstances. A supplemental 27 will be submitted within 90 days.

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

Signed: Ryan Warner _____

Title: Vice President _____

Submit Date: _____

Email: magpieoil@yahoo.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: _____

Date: _____

Remediation Project Number: _____

COA Type**Description**

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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**

402258051	SITE INVESTIGATION PLAN
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Total Attach: 1 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)