

State of Colorado Oil and Gas Conservation Commission

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Report taken by:

Jason Kosola

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>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>
Contact Person: <u>Ryan Warner</u>	Email: <u>magpieoil@yahoo.com</u>	Mobile: <u>(720) 233-0875</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 13586 Initial Form 27 Document #: 402026730

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 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>116147</u>	API #: _____	County Name: <u>LINCOLN</u>
Facility Name: <u>SAFRANEK STATE 2-30 & 4-30</u>		Latitude: <u>39.242424</u>	Longitude: <u>-103.712509</u>
		** correct Lat/Long if needed: Latitude: <u>39.242416</u>	Longitude: <u>-103.713164</u>
QtrQtr: <u>NWNW</u>	Sec: <u>30</u>	Twp: <u>9S</u>	Range: <u>56W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

Facility Type: <u>PIT</u>	Facility ID: <u>119193</u>	API #: _____	County Name: <u>LINCOLN</u>
Facility Name: <u>SAFRANEK 2-30</u>		Latitude: <u>39.242424</u>	Longitude: <u>-103.712509</u>
		** correct Lat/Long if needed: Latitude: <u>39.242525</u>	Longitude: <u>-103.713178</u>
QtrQtr: <u>NWNW</u>	Sec: <u>30</u>	Twp: <u>9S</u>	Range: <u>56W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

SITE CONDITIONS

General soil type - USCS Classifications CL Most Sensitive Adjacent Land Use Non-crop land

Is domestic water well within 1/4 mile? Yes 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

Domestic Well - Permit #308838 - 1350' East

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 beneath a produced water vessel (Facility ID 119193) following removal and within a produced water pit onsite (Facility ID 116147). 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 sample will be collected via stainless-steel hand auger from beneath the produced water vessel (facility ID 119193) following removal. The soil sample will be analyzed for BTEX, TPH-GRO, and TPH-DRO following EPA Methods 8260c and 8015. In addition, the soil sample will be analyzed for EC, SAR, and pH following USDA Method 3, USDA Method 20B, and EPA Method 9045D, respectively. Five (5) soil samples will be collected via stainless-steel hand auger from the produced water pit (facility ID 116147) onsite. The soil samples will be analyzed for BTEX, TPH-GRO, and TPH-DRO following EPA Methods 8260c and 8015. In addition, one soil sample from this assessment area will be analyzed for EC, SAR, and pH following USDA Method 3, USDA Method 20B, and EPA Method 9045D, respectively. Historical review of the location indicates the produced water pit (facility ID 116147) was located north of its current location and appears backfilled. One soil sample will be collected via stain-less st

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 _____ 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

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.

No E&P waste 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 sample will be collected via stainless-steel hand auger from beneath the produced water vessel (facility ID 119193) following removal. The soil sample will be analyzed for BTEX, TPH-GRO, and TPH-DRO following EPA Methods 8260c and 8015. In addition, the soil sample will be analyzed for EC, SAR, and pH following UDSA Method 3, USDA Method 20B, and EPA Method 9045D, respectively.

Five (5) soil samples will be collected via stainless-steel hand auger from the produced water pit (facility ID 116147) onsite. The soil samples will be analyzed for BTEX, TPH-GRO, and TPH-DRO following EPA Methods 8260c and 8015. In addition, one soil sample from this assessment area will be analyzed for EC, SAR, and pH following UDSA Method 3, USDA Method 20B, and EPA Method 9045D, respectively.

Historical review of the location indicates the produced water pit (facility ID 116147) was located north of its current location and appears backfilled. One soil sample will be collected via stain-less steel hand auger from this historical location to ensure no petroleum hydrocarbon impacts above COGCC Table 910-1 are present. The soil samples will be analyzed for BTEX, TPH-GRO, and TPH-DRO following EPA Methods 8260c and 8015. In addition, the soil sample from this assessment area will be analyzed for EC, SAR, and pH following UDSA Method 3, USDA Method 20B, and EPA Method 9045D, respectively.

All collected soil samples will be compared to COGCC Table 910-1 standards. Pending analytical results, the above ground infrasture will be removed, production pit backfilled, and site reclaimed.

If any petroleum hydrocarbon impacts above COGCC 910-1 regulatory limits 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 Vessel 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: _____

REMEDATION COMPLETION REPORT

REMEDATION COMPLETION SUMMARY

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

Do all soils meet Table 910-1 standards? _____

Does the previous reply indicate consideration of background concentrations? _____

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? _____

Is additional groundwater monitoring to be conducted? _____

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). 08/05/2019

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 supplemental 27 is being submitted as assessment activities have been rescheduled for the week of August 5, 2019 due to weather and site conditions since the previous supplemental 27 was submitted. Assessment activities may be rescheduled further, due to weather 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: 07/11/2019

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: Jason Kosola

Date: 07/11/2019

Remediation Project Number: 13586

COA Type

Description

	Submit Form 27 Supplemental within 45 days following removal of produced water vessel.
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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

402104740	FORM 27-SUPPLEMENTAL-SUBMITTED
402104753	SITE INVESTIGATION PLAN

Total Attach: 2 Files

General Comments

User Group

Comment

Comment Date

		Stamp Upon Approval
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Total: 0 comment(s)