

State of Colorado
Energy & Carbon Management Commission

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Document Number:
404297129
Receive Date:
07/30/2025

Report taken by:
Candice (Nikki) Graber

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>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>()</u>
Contact Person: <u>Seyma Yilmaz</u>	Email: <u>seyma.magpieoil@gmail.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 32769 Initial Form 27 Document #: 403566244

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>123-05153</u>	County Name: <u>WELD</u>
Facility Name: <u>SCHRADER 1</u>	Latitude: <u>40.347489</u>	Longitude: <u>-105.049524</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NENW</u>	Sec: <u>6</u>	Twp: <u>4N</u>	Range: <u>68W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: <u>LOCATION</u>	Facility ID: <u>317494</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>SCHRADER-64N68W 6NENW</u>	Latitude: <u>40.347514</u>	Longitude: <u>-105.049540</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NENW</u>	Sec: <u>6</u>	Twp: <u>4N</u>	Range: <u>68W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: SPILL OR RELEASE Facility ID: 488432 API #: _____ County Name: WELD
Facility Name: Schrader 1 Latitude: 40.347489 Longitude: -105.049524
** correct Lat/Long if needed: Latitude: _____ Longitude: _____
QtrQtr: NENW Sec: 6 Twp: 4N Range: 68W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

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

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

Residences ~500' west and ~500' southwest. Site is within HPH (Bald Eagle Active Nest Half Mile).

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
No	GROUNDWATER	NA	Not encountered
UNDETERMINED	SOILS	TBD	Soil samples/laboratory analytical results

INITIAL ACTION SUMMARY

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

Maggie states that the wellhead floor has been delineated. Two floor confirmation samples were collected on 10/2/2024 at 10' bgs. Analytical results confirmed that there are no impacts remaining on the floor. Per Rule 915.E.(2) – Soil Sampling and Analysis Guidance (8/4/2020); 2 samples are required for a 500-1000 sq-ft area. The wellhead excavation square footage is 625 sq-ft based on Ardor's measurements. The 2 samples from 10/2/2024 meet Rule 915.E.(2); no further floor samples are needed (even based on ECMC's google map measurements of 644 sq-ft an additional sample is not warranted). Floor samples were spaced ~7' apart.

Based FL-SS-02 and FL-SS-N01 sample locations collected in 9/9/2024, excavation was conducted on 11/05/2024 and 11/08/2024 at the Flowline endpoint. Confirmation samples were collected on 3/17/2025 along with additional samples at the wellhead per COA on approved Form 27S (Document No. 404078765). Notification for the 3/17/2025 sampling was sent to ECMC. Analytical results showed TPH exceedances at WH-SS-W03, WH-S03, FL-SS-N02. Additionally, Beno(a)-anthracene exceedances were seen at WH-SS-S03 and FL-SS-N02.

After consultation with CPW and approval to commence work during Eagle Nesting Season, excavation was conducted on 6/2/2025 along the South and West wall at the Wellhead excavation and the North wall at the Flowline endpoint excavation. 3 samples were collected on 6/2/2025 and analyzed for BTEX, Naphthalene, TPH, 1,2,4-TMB, 1,3,5-TMB, 1-Methylnaphthalene, 2-Methylnaphthalene, Benzo(a)-anthracene, and pH. After excavation and samples were collected, the excavation areas were back filled per the request of the surface owner due to safety concerns with his horses and an open excavation. Analytical results showed there were no impacts remaining.

The Flowline endpoint has been fully delineated; not further investigation is needed.

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):

Due to the extents of the Wellhead Excavation, additional samples will be collected along each sidewall for full delineation. The additional samples along the walls will be collected utilizing a power/hand auger to a depth of 5' and 10' from 4 locations. Proposed sample location map is attached.

The wellhead excavation is 625 sq-ft; 2 floor samples were collected on 10/2/2024 confirmed impacts at the floor had been removed.

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 33

Number of soil samples exceeding 915-1 18

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 776

NA / ND

-- Highest concentration of TPH (mg/kg) 4286

-- Highest concentration of SAR 8.36

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 6

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?

On 12/15/2023, 2 BG samples (BG01 @4' and BG02 @4') were collected. Additional samples were collected on 9/9/2024 at BG01 (5' and 7' bgs) and BG02 5' and 7' bgs). Background pH levels are 8.54, Arsenic Local Clean-up Levels are 7.0375 mg/kg (1.25 * 5.63 mg/kg), Barium Local Clean-up Levels are 258.75 mg/kg (1.25 * 207 mg/kg), and Selenium Local Clean-up Levels are 0.41375 mg/kg (1.25 * 0.331 mg/kg).

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

Volume of solid waste (cubic yards) 177

Volume of liquid waste (barrels) 0

Is further site investigation required?

Due to the extents of the Wellhead Excavation, additional samples will be collected along the along each walls for full delineation, 1 additional sample from each side wall will be collected. The additional samples along the walls will be collected utilizing a power auger to a depth of 5'. Proposed sample location map is attached.

The wellhead excavation is 625 square feet; 2 floor samples were collected on 10/2/2024 confirming impacts at the floor had been removed.

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.

Facility has been decommissioned. Impacted soils have been removed and transported to Pawnee Waste.

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.

Impacted soils have been removed and transported to Pawnee Waste.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

Yes _____ Excavate and offsite disposal

_____ Chemical oxidation

_____ If Yes: Estimated Volume (Cubic Yards) _____ 177

_____ Air sparge / Soil vapor extraction

_____ Name of Licensed Disposal Facility or ECMC Facility ID # _____

_____ Natural Attenuation

_____ 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.

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 _____

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.

Maggie Operating has complied with General Liability Insurance requirements per Rule 705 and is fully bonded per Rule 702 to fully address the anticipated costs of remediation. This is the initial assessment for WH/FL closure the costs represent the estimated cost for labor and analytical samples.

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:

NA

Volume of E&P Waste (solid) in cubic yards _____ 177

E&P waste (solid) description Contaminated Soils

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: Pawnee Waste

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.

The site will be reclaimed in accordance with ECMC 1000 Series Reclamation Rules or as per surface owner direction.

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. 10/01/2025

Proposed date of completion of Reclamation. 10/31/2026

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. 10/22/2024

Actual Spill or Release date, or date of discovery. 12/15/2023

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 12/01/2023

Proposed site investigation commencement. 12/01/2023

Proposed completion of site investigation. 08/18/2025

REMEDIAL ACTION DATES

Proposed start date of Remediation. 12/01/2023

Proposed date of completion of Remediation. 09/01/2025

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

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

Signed: Amber Barnett

Title: Compliance Specialist

Submit Date: 07/30/2025

Email: abarnett@ardorenvironmental.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: Candice (Nikki) Graber

Date: 07/31/2025

Remediation Project Number: 32769

COA Type**Description**

	Per comment on denied Form 27 doc no 404242187, Operator will schedule sampling within 14 of submittal of the replacement Form 27 (doc no 404290735 - submitted 7/25/2025). Operator will schedule sampling by 8/8/2025.
	Operator shall abandon the soil borings wells in accordance with DWR regulations and in a manner protective of livestock immediately after sample collection. Operator also must inspect the abandoned borings 14 days and 30 days after sample collection to ensure no subsidence is present.
	On the next Form 27, Operator shall provide an explanation why no topsoil was used during backfill.
	Operator selected "No" to "Is domestic water well within ¼ mile?" however a Domestic water well is present 0.21 miles SE. Operator shall correct this omission on the next Form 27.
	Operator failed to select ""Rule 913.c.(3): Remediation of Spill and Releases pursuant to Rule 912." Operator shall correct this omission on the next Form 27.
	Operator did not discuss livestock as potential receptors within a quarter mile despite livestock being injured due to this work. Operator shall correct this omission on the next Form 27.
	If field observations indicate that the proposed borings are located inside the previous excavation extent additional soil borings will be required. Additionally, depending on the results of the current site investigation plan, Operator may be required to perform additional soil borings to fully delineate soil impacts.
	Operator will collect samples from the depth showing the highest PID reading or any visual and/or olfactory indicators of impacts. In the absence of indicators of impacts, Operator will collect soil samples from the proposed depth of 5'.
	Operator will perform power augering for sample collection to a depth of at least 10'. Operator will provide boring logs for borings created by power augering, including, at a minimum, PID readings and soil type.
	In addition to the sidewall samples proposed, Operator will collect verification soil samples from the areas sampled 6/2/2025 without required ECMC notice.
	Operator has not collected soil samples from the southern portion of the floor of the excavation where impacts were documented in sidewalls. Operator will collect additional soil samples from the floor of the southern portion of the excavation. As required by Rule 915.e.(2).B., The number and location of samples will be appropriate to determine the horizontal and vertical extent of the impact.
	Operator will provide notice to ECMC EPS Kari Brown (kari.l.brown@state.co.us) and Nikki Graber (nikki.graber@state.co.us) at least 48 hours prior to any sampling events performed on location.

12 COAs

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
404297129	FORM 27-SUPPLEMENTAL-SUBMITTED
404298694	ANALYTICAL RESULTS
404298695	ANALYTICAL RESULTS
404298698	ANALYTICAL DATA SUMMARY TABLE(S)
404298701	DISPOSAL MANIFESTS
404298885	OTHER
404298886	CORRESPONDENCE
404298887	CORRESPONDENCE
404299662	SOIL SAMPLE LOCATION MAP

Total Attach: 9 Files

General Comments

User Group	Comment	Comment Date
Environmental	Operator has stated "The site will be reclaimed in accordance with ECMC 1000 Series Reclamation Rules or as per surface owner direction." A variance must be requested if Operator would like to propose reclamation outside of ECMC 1000 Series Rules. Approval of this Form 27 does not imply approval of any variance of ECMC 1000 Series Reclamation Rules.	07/31/2025
Environmental	Operator provided email notice for 3/17/2025 however, per comment on denied Form 27 doc no 404242187, Operator failed to provide notice for samples collected on 6/2/2025 and for backfill performed.	07/31/2025

Total: 2 comment(s)