

State of Colorado Oil and Gas Conservation Commission

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Document Number:

402679588

Receive Date:

05/04/2021

Report taken by:

RICK ALLISON

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>BAYSWATER EXPLORATION & PRODUCTION LLC</u>	Operator No: <u>10261</u>	Phone Numbers
Address: <u>730 17TH ST STE 500</u>		Phone: <u>(303) 893-2503</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u>		Mobile: <u>()</u>
Contact Person: <u>Andy Verbonitz</u>	Email: <u>averbonitz@bayswater.us</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 16828Initial Form 27 Document #: 402603321

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 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 checked="" type="checkbox"/> Other <u>Rule 911 Closure of Oil and Gas Facilities (Offsite well and flowline)</u> |

SITE INFORMATION

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

Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>123-25733</u>	County Name: <u>WELD</u>
Facility Name: <u>LAMB 33-23</u>	Latitude: <u>40.528690</u>	Longitude: <u>-104.670970</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NESW</u>	Sec: <u>33</u>	Twp: <u>7N</u>	Range: <u>65W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SMMost Sensitive Adjacent Land Use Building Unit within 500'Is domestic water well within 1/4 mile? YesIs surface water within 1/4 mile? YesIs groundwater less than 20 feet below ground surface? Yes

Other Potential Receptors within 1/4 mile

Irrigation Ditch, Building Unit

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	GROUNDWATER	Unknown	Laboratory analytical
UNDETERMINED	SOILS	Unknown	Laboratory analytical and field screening
UNDETERMINED	SURFACE WATER	Unknown	Laboratory analytical

INITIAL ACTION SUMMARY

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

The five wells associated with the Lamb EF Pad production facility are being plugged and abandoned. The flowlines are being completely removed and the production facility is being decommissioned. This submittal is associated with closure of one offsite well (Lamb 33-23) and its flowline. A Form 44 pre-abandonment notification was filed on 12/22/2020, at which time the surface owner and Weld County were simultaneously notified.

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 soil sample will be collected from the base of the offsite wellhead excavation. In the absence of any elevated PID readings, the soil sample will be submitted for laboratory analysis of TPH (C6-C36), BTEX, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, pH, EC, SAR, and boron. The analytical results will be compared to COGCC Table 915-1. Soil associated with the flowline removal will also be field screened visually and with a PID. If any visual staining or any PID readings exceeding background VOC concentrations are observed anywhere onsite or at any field screening location, soil samples from those locations will also be submitted for laboratory analysis. A Soil Investigation Map is attached.

Proposed Groundwater Sampling

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

Groundwater is not expected to be encountered during P&A activities or flowline abandonment. If groundwater is encountered, one grab sample will be collected from each area groundwater has accumulated and samples will be submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. Analytical results will be compared to COGCC Table 915-1.

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):

A minimum of one soil sample will be collected from an adjacent, undisturbed location to document inorganic background concentrations. The soil sample(s) will be field screened by an independent 3rd party consultant for visual staining and VOCs will be measured with a properly calibrated PID. The soil sample(s) will be placed on hold at the laboratory.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 3

Number of soil samples exceeding 910-1 1

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

Approximate areal extent (square feet) 0

NA / ND

ND Highest concentration of TPH (mg/kg)

-- Highest concentration of SAR 3.44

BTEX > 910-1 No

Vertical Extent > 910-1 (in feet) 0

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? Yes

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?

Two soil samples (BG01 and BG02) were collected from an adjacent, undisturbed location for pH analysis. Soil samples BG01 and BG02 were both compliant with allowable levels for pH at 8.01 and 7.91, respectively.

☐ 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 impacts related to oil and gas operations were encountered as a result of this investigation. .

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 soil sample was collected from the base of the wellhead excavation. The soil sample was collected from a depth of 7.75' below ground surface (bgs) and was compliant with Table 915-1 applicable standards for TPH (C6-C36), BTEX, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, EC, SAR, and boron. The sample exceeded the Table 915-1 allowable range for pH at 8.41; however, this sample was collected from below the root zone defined as 0' to 3' bgs.

Additionally, fourteen potholes excavated for flowline removal were also field screened visually and with a photoionization detector (PID). There were no soil staining or elevated PID readings encountered in the potholes or at the wellhead sample location. Based on the actions taken and the results of this investigation, Bayswater is requesting a no further action status for this investigation project. The laboratory analytical reports, soil analytical results table, site map depicting soil sampling and field screening location, and photographic documentation are attached.

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.

REMEDIATION 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? _____

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: _____

REMEDIATION COMPLETION REPORT

REMEDIATION 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? 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.

Following abandonment and decommissioning, all former locations of oil and gas facilities will be re-contoured and reclaimed in accordance with COGCC 1000 series regulations.

Is the described reclamation complete? _____

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. 12/22/2020

Actual Spill or Release date, if known. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/08/2021

Date of commencement of Site Investigation. 03/25/2021

Date of completion of Site Investigation. 03/31/2021

REMEDIAL ACTION DATES

Date of commencement of Remediation. _____

Date of completion of Remediation. _____

SITE RECLAMATION DATES

Date of commencement of Reclamation. 03/31/2021

Date of completion of Reclamation. _____

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: ` Andy Verbonitz _____

Title: Environmental Coordinator _____

Submit Date: ` 05/04/2021 _____

Email: averbonitz@bayswater.us _____

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: RICK ALLISON _____

Date: 05/10/2021 _____

Remediation Project Number: 16828 _____

Condition of Approval**COA Type****Description**

	Removed closure request: The pH of soil samples collected at the site exceeds the allowable level for Table 915-1 soil suitability for reclamation for pH and exceeds the background sample presented. Therefore, Operator will define the extent of soil with elevation pH, and if Operator proposes to leave soil with elevated pH in place, Operator will submit a Reclamation plan pursuant to Rule 915.b.
1 COA	

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**

402679588	FORM 27-SUPPLEMENTAL-SUBMITTED
402679683	ANALYTICAL RESULTS
402679686	ANALYTICAL RESULTS
402679690	SITE MAP
402679692	PHOTO DOCUMENTATION
402679693	ANALYTICAL RESULTS

Total Attach: 6 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)