

State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

402724950

Receive Date:

Report taken by:

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.

Closure request is not available for an Initial Site Investigation and Remediation Workplan.

OPERATOR INFORMATION

Name of Operator: <u>PROSPECT ENERGY LLC</u>	Operator No: <u>10312</u>	Phone Numbers
Address: <u>1036 COUNTRY CLUB ESTATES DR</u>		Phone: <u>(303) 489-8773</u>
City: <u>CASTLE ROCK</u>	State: <u>CO</u>	Zip: <u>80108</u>
Contact Person: <u>Ward Giltner</u>	Email: <u>prospectenergy@icloud.com</u>	Mobile: <u>(303) 489-8773</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 9188 Initial Form 27 Document #: 2495221

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

No Multiple Facilities

Facility Type: <u>LOCATION</u>	Facility ID: <u>333083</u>	API #: _____	County Name: <u>LARIMER</u>
Facility Name: <u>MSSU-68N68W 30NWNW</u>		Latitude: <u>40.638260</u>	Longitude: <u>-105.053433</u>
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNW</u>	Sec: <u>30</u>	Twp: <u>8N</u>	Range: <u>68W</u>
Meridian: <u>6</u>		Sensitive Area? <u>Yes</u>	

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use RESIDENTIAL

Is domestic water well within 1/4 mile? Yes

Is surface water within 1/4 mile? Yes

Is groundwater less than 20 feet below ground surface? Yes

Other Potential Receptors within 1/4 mile

992' FROM SURFACE WATER 302' FROM WETLANDS 303' FROM NEAREST OCCUPIED BUILDING 600' NEAREST WTR WELL

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	SOILS	TO BE DETERMINED	SOIL BORING W/LAB ANALYSIS OF SAMPL

INITIAL ACTION SUMMARY

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

PLEASE REFER TO SPILL DOCUMENTS #400845210, 400847822. THIS IS FOR THE INITIAL SPILL AND A SUBSEQUENT RELEASE THAT OCCURRED AT THE EXCAVATION DURING MITIGATION OF THE INITIAL RELEASE. SOIL FROM THE EXCAVATION HAS BEEN STORED ON LOCATION (SUNDRY DOCUMENT #400858349 (REJECTED)). THE TWO AREAS WHERE SOIL IS STORED ON LOCATION HAVE BEEN TREATED WITH 35 GALLONS OF ACT. TOTAL SOIL IS ESTIMATED AT APPROXIMATELY 300 YARDS, WHICH IS LESS THAN PREVIOUS ESTIMATES. SOIL SAMPLES HAVE BEEN COLLECTED FROM THE SOIL TREATMENT AREAS AND ARE BEING ANALYZED FOR BTEX, TPH-GRO AND DRO. IF ANALYTICAL RESULTS PASS COGCC TABLE 910-1 THRESHOLD CONCENTRATIONS, THE SOIL WILL BE REMOVED AND USED AS EXCAVATION BACKFILL OR ELSEWHERE ON SITE. IF ANALYTICAL RESULTS DO NOT PASS COGCC TABLE 910-1 THRESHOLD CONCENTRATIONS, THE SOIL WILL BE REMOVED AND TREATED BY "SOIL SHREDDING", A PROPRIETARY TREATMENT USED BY TALON LPE FROM AMARILLO TEXAS.

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

Groundwater will be sampled from monitoring wells MW-1, MW-2A, MW-3A, MW-4, MW-6, and a DUP on a quarterly basis. Samples will be analyzed for BTEX. Sample Location is provided in attached Analytical Results.

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 915-1 0

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

Approximate areal extent (square feet) 0

NA / ND

-- Highest concentration of TPH (mg/kg) 0

NA Highest concentration of SAR

BTEX > 915-1 No

Vertical Extent > 915-1 (in feet) 0

Groundwater

Number of groundwater samples collected 6

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet) 25'

Number of groundwater monitoring wells installed 5

Number of groundwater samples exceeding 915-1 0

-- Highest concentration of Benzene (µg/l) 2

-- Highest concentration of Toluene (µg/l) 0.1

-- Highest concentration of Ethylbenzene (µg/l) 1

-- Highest concentration of Xylene (µg/l) 0.2

NA Highest concentration of Methane (mg/l)

Surface Water

0 Number of surface water samples collected

0 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?

☐ 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?

YES. SEE PAGE 1

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? Yes

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

THE EXTENT OF CONTAMINATION (AERIAL AND DEPTH) WILL BE DETERMINED BY ADVANCING SOIL BORINGS IN AN ITERATIVE MANNER EXTENDING OUTWARD FROM THE PRESENT EXCAVATION. SOIL SAMPLES WILL BE COLLECTED FROM THE BORINGS AND ANALYZED FOR BTEX, TPH-GRO AND DRO. IF GROUNDWATER IS ENCOUNTERED IN THE BORINGS, SAMPLES WILL BE COLLECTED AND ANALYZED FOR THE SAME COMPOUNDS. FURTHER REMEDIATION WILL DEPEND UPON THE SCOPE OF IMPACT ENCOUNTERED. IF SOIL IMPACT IS ACCESSABLE, THE OPERATOR PROPOSES TO EXCAVATE AND TREAT THE SOIL BY "SOIL SHREDDING" (TALON LPE). IF INACCESSABLE SOIL IMPACT OR SIGNIFICANT GROUNDWATER IMPACT IS ENCOUNTERED, THE OPERATOR PROPOSES IN-SITU TREATMENT OF THE SOIL AND GROUNDWATER THROUGH INJECTION OF A PROPRIETARY COMPOUND (TALON LPE) BASED ON HYDROGEN PEROXIDE. BEFORE ANY INJECTION TREATMENT IS STARTED, THE OPERATOR WILL AMEND THE REMEDIATION WORKPLAN AND GET ANY NEEDED APPROVALS FROM THE COGCC, CDPHE AND EPA (INJECTION APPROVAL).

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.

Based on previous sampling results, Prospect is requested to plug and abandon monitoring well MW-9A, request was approved. Summary will show plug on second quarter 2018 in Form 27 and Monitoring Report.

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.

IF GROUNDWATER IS ENCOUNTERED DURING THE INVESTIGATION, SAMPLES WILL BE COLLECTED AND ANALYZED. IF GROUNDWATER CONCENTRATIONS EXCEED TABLE 910-1 CONCENTRATIONS, A GROUNDWATER REMEDIATION PLAN WILL BE PUT INTO PLACE, SUBJECT TO COGCC APPROVAL.

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

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? Yes

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? Yes

Does the previous reply indicate consideration of background concentrations? No

Does Groundwater meet Table 915-1 standards? Yes

Is additional groundwater monitoring to be conducted? No

Operator shall comply with the COGCC 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 AREA OF IMPACT IS AT AN EXISTING TANK BATTERY. THE SURFACE IS OWNED BY THE OPERATOR. THE DISTURBED AREA WILL BE MACHINE COMPACTED, LEVELED, CONTOURED AND COVERED WITH ROAD BASE.

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. _____

Proposed date of completion of Reclamation. _____

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. _____

Actual Spill or Release date, or date of discovery. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). _____

Proposed site investigation commencement. 05/17/2015

Proposed completion of site investigation. _____

REMEDIAL ACTION DATES

Proposed start date of Remediation. 05/14/2015

Proposed date of completion of Remediation. 12/31/2020

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

Please see attached groundwater monitoring reports/request for NFA.

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

Signed: Mary C Griggs

Title: Consultant

Submit Date: _____

Email: griggs.mary@comcast.net

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: 9188

COA Type**Description**

--	--

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**

402724968	MONITORING REPORT
402739612	MONITORING REPORT
402739627	MONITORING REPORT
402741493	MONITORING REPORT
402750644	ANALYTICAL RESULTS

Total Attach: 5 Files

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

Environmental	Operator attached Second, Third and Fourth Quarter 2020 reports. First Quarter 2021 report still required. Return to Draft.	07/16/2021
Environmental	Return to Draft: Please attach laboratory analytical reports as backup (or the full monitoring reports if you have them) for the Second, Third and Fourth Quarter 2020 and First Quarter 2021 monitoring events and resubmit the Form 27.	06/25/2021

Total: 2 comment(s)