

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:

401283384

Receive Date:

07/18/2017

Report taken by:

ALEX FISCHER

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>DIVERSIFIED ENERGY LLC</u>	Operator No: <u>10428</u>	Phone Numbers
Address: <u>19501 E MAIN STREET #200</u>		Phone: <u>(303) 9950826</u>
City: <u>PARKER</u>	State: <u>CO</u>	Zip: <u>80138</u>
Contact Person: <u>JASON HAACK</u>	Email: <u>JHAACK@OAGPRODUCTION.COM</u>	Mobile: <u>()</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 10272Initial Form 27 Document #: 401283384

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>Removal of Previous Operators Dirt Stockpile on Southside of Oil Well</u> |

SITE INFORMATION

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

Facility Type: <u>LOCATION</u>	Facility ID: <u>313094</u>	API #: <u></u>	County Name: <u>MOFFAT</u>
Facility Name: <u>BINGMAN-65N96W 14NENE</u>		Latitude: <u>40.389076</u>	Longitude: <u>-108.136266</u>
** correct Lat/Long if needed: Latitude: <u></u>		Longitude: <u></u>	
QtrQtr: <u>NENE</u>	Sec: <u>14</u>	Twp: <u>5N</u>	Range: <u>96W</u>
Meridian: <u>6</u>		Sensitive Area? <u>Yes</u>	

SITE CONDITIONS

General soil type - USCS Classifications SMMost Sensitive Adjacent Land Use Dry land grazingIs domestic water well within 1/4 mile? NoIs surface water within 1/4 mile? NoIs groundwater less than 20 feet below ground surface? No

Other Potential Receptors within 1/4 mile

SITE INVESTIGATION PLAN

TYPE OF WASTE:

☐ E&P Waste

☐ Other E&P Waste

☒ Non-E&P Waste

☐ Produced Water

☐ Workover Fluids

SOILS

☐ 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	soil in small bermed area	Soil Testing

INITIAL ACTION SUMMARY

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

Visual inspection of Soil in question is bermed and piled in one area with good integrity and protection.

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):

7 SAMPLES HAVE BEEN TAKEN WITNESSED BY COGCC INSPECTOR FOR RANGE ORGANICS AND FULL LIST 910-1, EC, SAR, PH SEE PROVIDED SKETCH FOR SAMPLE LOCATION AND ID#

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 7

Number of soil samples exceeding 910-1 1

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

Approximate areal extent (square feet) 1625

NA / ND

 Highest concentration of TPH (mg/kg) 1830

 Highest concentration of SAR 0.2

 BTEX > 910-1 No

 Vertical Extent > 910-1 (in feet) 2

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

 0 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?

3 TAKEN TO SOUTH OF THE PUMPING UNIT LABELED SE, S AND SW

☐ 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.

Dirt stockpiled by previous operator shall be removed and hauled ott to an approved facility.

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.

SOIL IS CURRENTLY PROTECTED INSIDE A 2' HIGH BERM. THERE ARE NO KNOWN ENVIROMENTAL IMPACTS.

Soil Remediation Summary

☐ In Situ

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Air sparge / Soil vapor extraction

_____ Natural Attenuation

_____ Other _____

☒ Ex Situ

Yes _____ Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards) _____ 80

Name of Licensed Disposal Facility or COGCC Facility ID # _____

No _____ Excavate and onsite remediation

No _____ Land Treatment

No _____ Bioremediation (or enhanced bioremediation)

No _____ Chemical oxidation

No _____ Other _____

Groundwater Remediation Summary

No _____ Bioremediation (or enhanced bioremediation)

No _____ Chemical oxidation

No _____ Air sparge / Soil vapor extraction

No _____ 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? No

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.

THE AREA IS CURRENTLY FLAT WHERE THE SOIL HAS BEEN STOCKPILED BY PREVIOUS OPERATOR AND UPON COMPLETION OF SOIL REMOVAL THE GRADE SHALL BE RETURNED TO PRE-LEASE CONDITION (FLAT) AND SEEDED WITH NATIVE MIX. CONFIRMATION SOIL SAMPLE SHALL BE TAKEN.

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? Yes

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). _____

Date of commencement of Site Investigation. _____

Date of completion of Site Investigation. _____

REMEDIAL ACTION DATES

Date of commencement of Remediation. 07/19/2017

Date of completion of Remediation. _____

SITE RECLAMATION DATES

Date of commencement of Reclamation. 07/21/2017

Date of completion of Reclamation. _____

OPERATOR COMMENT

Operator has changed work plan from land farm application to complete removal of soils to off site approved facility. Please see attachment section for land owner approval.

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

Signed: JASON HAACK

Title: MANAGER

Submit Date: 07/18/2017

Email: JHAACK@OAGPRODUCTION.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: ALEX FISCHER

Date: 07/19/2017

Remediation Project Number: 10272

COA Type**Description**

	Provide haul tickets for final disposition of the E&P waste material.
	Enough discrete confirmations soil samples shall be collected from the foot print of the E&P waste pile after the E&P waste pile has been removed and analyzed for BTEX, TPH as gasoline range organics and as diesel range organics.
	Please include documentation of notification of the surface owner for land treatment of E&P waste.
	Progress updates by the first of each month until Table 910-1 concentrations are met.

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**

401283384	FORM 27-INITIAL-SUBMITTED
401283612	ANALYTICAL RESULTS
401283613	ANALYTICAL RESULTS
401283619	SOIL SAMPLE LOCATION MAP
401345898	CORRESPONDENCE

Total Attach: 5 Files

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

Environmental	Reviewed and Passed on behalf of Kris Neidel.	07/19/2017
Environmental	Pushed to DRAFT for additional information. Need surface owner approval.	07/18/2017

Environmental	<p>Pushed to DRAFT for additional information.</p> <p>July 14, 2017 email to Jason Haack.</p> <p>Jason-</p> <p>Surface owner approval is required to expand and treat the materials on location. Additionally, your plan does not describe how you will be adequately treating and remediating the materials. It merely states that the "Dirt inside bermed area will be rototilled every 14 days." How are you going to determine the effectiveness of treatment? (this was discussed during the June 1, 2017 meeting). I have pushed the F27 back to Draft.</p> <p>I see two options: By July 21, 2017 resubmit address all of what we discussed during the June meeting in how Diversified Energy will remediate the material. It is strongly suggested that you retain the services of an environmental professional or environmental consulting firm. Haul the materials off site to an approved facility.</p> <p>Jason-</p> <p>Surface owner approval is required to expand and treat the materials on location. Additionally, your plan does not describe how you will be adequately treating and remediating the materials. It merely states that the "Dirt inside bermed area will be rototilled every 14 days." How are you going to determine the effectiveness of treatment? (this was discussed during the June 1, 2017 meeting). I have pushed the F27 back to Draft.</p> <p>I see two options: By July 21, 2017 resubmit address all of what we discussed during the June meeting in how Diversified Energy will remediate the material. It is strongly suggested that you retain the services of an environmental professional or environmental consulting firm. Haul the materials off site to an approved facility. By August 4, 2017, provide additional financial assurance in the amount of \$20,000.00.</p> <p>Regards,</p> <p>Alex</p>	07/14/2017
Environmental	"site reclamation dates" is for reclaim of the site. please use Remedial Action dates for commencement and completion dates.	06/27/2017
Environmental	It is suggested that Diversified retain the services of a qualified Environmental professional to oversee the land treatment.	06/27/2017

Total: 5 comment(s)