

State of Colorado  
**Oil and Gas Conservation Commission**

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FOR OGCC USE ONLY  
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**SITE INVESTIGATION AND REMEDIATION WORKPLAN**

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

**CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED**

Spill or Release    Plug & Abandon    Central Facility Closure    Site/Facility Closure    Other (describe): \_\_\_\_\_

OGCC Operator Number: _____	Contact Name and Telephone: _____
Name of Operator: _____	_____
Address: _____	No: _____
City: _____ State: _____ Zip: _____	Fax: _____
API Number: _____	County: _____
Facility Name: _____	Facility Number: _____
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): _____ Latitude: _____ Longitude: _____	

**TECHNICAL CONDITIONS**

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): \_\_\_\_\_

Site Conditions: Is location within a sensitive area (according to Rule 901e)?      Y      N      If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): \_\_\_\_\_

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: \_\_\_\_\_

Potential receptors (water wells within 1/4 mi, surface waters, etc.): \_\_\_\_\_

\_\_\_\_\_

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
Soils	_____	_____
Vegetation	_____	_____
Groundwater	_____	_____
Surface Water	_____	_____

**REMEDIALTION WORKPLAN**

Describe initial action taken (if previously provided, refer to that form or document):

Describe how source is to be removed:

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:



**REMEDIATION WORKPLAN (Cont.)**

Tracking Number: N/A  
Name of Operator: Noble Energy, Inc.  
OGCC Operator No: 100322  
Received Date: 6/4/2015  
Well Name & No: \_\_\_\_\_  
Facility Name & No: \_\_\_\_\_

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

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. Use additional sheet for description if required.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required?      Y      N      If yes, describe:

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

**IMPLEMENTATION SCHEDULE**

Date Site Investigation Began: \_\_\_\_\_ Date Site Investigation Completed: \_\_\_\_\_ Date Remediation Plan Submitted: \_\_\_\_\_  
Remediation Start Date: \_\_\_\_\_ Anticipated Completion Date: \_\_\_\_\_ Actual Completion Date: \_\_\_\_\_

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

Print Name: \_\_\_\_\_ Signed: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

OGCC Approved: \_\_\_\_\_ Title: Northeast EPS Date: 6/10/2015

## **Noble Energy, Inc.**

### **Closure of Buried or Partially Buried Produced Water Vessels**

This document outlines the operational requirements per Colorado Oil and Gas Conservation Commission (COGCC) Rule 905.b.(1-4). A third party environmental consultant will collect confirmation soil and/or groundwater on the base of the water vessel and the sidewall which exhibits the highest PID reading. Subsequent to lab results, if soil and/or groundwater exceeds Table 910-1 standards, the spill will be reported to the COGCC per Rule 905.c.

During sampling, the base/floor soil sample at the low point of the water vessel, will be collected and analyzed by a certified lab, for BTEX, TPH-DRO, TPH-GRO, and Naphthalene. The sidewall soil sample will be analyzed for BTEX, TPH-DRO, TPH-GRO, Naphthalene, SAR, pH, and EC. If groundwater is encountered at the base of the previous water vessel, the sample will be collected and analyzed for BTEX.

If analytical results indicate an exceedance of Table 910-, Noble Energy Inc. will submit an E-Form 19 spill report to the COGCC in accordance with Rule 906. Spills shall be closed and remediated in accordance with Rules 909 and 910. Noble Energy, Inc. will provide the COGCC with subsequent closure data and will submit a Form 27 Remediation Work Plan. All E&P waste will be disposed of in accordance with COGCC rule 907.

If lab analytical indicates soil and groundwater is below COGCC Table 910-1 standards, an E-form 4 will be submitted as a notice that no impacts were noted. A site figure and lab analytical will be attached.

Reclamation of plugged and abandoned facilities will be in accordance with COGCC rule 1004. If impacts are discovered above COGCC Table 910-1, remediation will be conducted prior to reclamation of the location.