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State of Colorado Oil and Gas Conservation Commission

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RECEIVED FOR COGCC USE ONLY FEB 02 2011 COGCC COGCC Employee Tracking No: Rem # 5465

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

[X] Spill or Release [] Plug & Abandon [] Central Facility Closure [] Site/Facility Closure [] Other (describe):

OGCC Operator Number: 10120 Name of Operator: Noble Energy, Inc. Address: 804 Grand Avenue City: Platteville State: CO Zip: 80651 Contact Name and Telephone: Marty Faraguna No: 970-785-5000 Fax: 970-785-5099

API Number: 05-123-15139 County: Weld Facility Name: Lorenz F22-1,2 Tank Battery Facility Number: Well Name: Lorenz F22 Well Number: 2 Location: (QtrQtr, Sec, Twp, Rng, Meridian): NENE, 22, 5N, 65W, 6 Latitude: 40.389965 Longitude: -104.646478

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Crude oil Site Conditions: Is location within a sensitive area (according to Rule 901e)? [X] Y [] N If yes, attach evaluation. Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): pasture Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Aquolls and aquents, gravelly substratum Potential receptors (water wells within 1/4 mi, surface waters, etc.): Ditch 30 ft., water well 750 ft.

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

Table with 3 columns: Impacted Media (check), Extent of Impact, How Determined. Rows include Soils, Groundwater, and Surface Water.

REMEDIATION WORKPLAN

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

Production was ceased to assess and remediate the impacted soils and groundwater. Cone of depression was excavated and water/oil totalling (107 bbls) was removed via vacuum truck and transported to Conquest Disposal facility.

Describe how source is to be removed:

Impacted soil and groundwater was removed via excavation and a groundwater amendment was applied, as discribed in Excavation Report (January 2011).

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.:

During excavation activities, a groundwater amendment was applied to the base of the excavation to aid in groundwater remediation. Some soils were left in place due to the presence of a DCP Midstream pipeline. DCP Midstream was notified on 1/27/11 of the release location and the possibility of the accumulation of volatile organic constituents in the utility corridor. Passive Soil Vapor Extraction wells will be installed to treat the remaining soil impact per the attached Figure 1. A groundwater amendment will be injected to treat groundwater impacts in the SS08 location (Figure 2). Post-remediation well installation will be conducted to assess the performance of the remedial methods.



Tracking Number: Rem # 5465
Name of Operator: Noble Energy
OGCC Operator No: 10120
Received Date: 2/2/11
Well Name & No: Lorenz F22 2
Facility Name & No: Lorenz F22-1,2 Tank Battery

REMEDIATION WORKPLAN (Cont.)

Page 2

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):
Groundwater will be monitored until four consecutive quarters of results in compliance with COGCC standards are achieved.
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.
After excavating impacted soil, clean fill dirt was brought in after groundwater amendment was applied. The fill dirt was contoured to match existing topography.
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? [X] Y [] N If yes, describe:
Groundwater monitoring wells will be installed to assess the potential for residual groundwater impacts.
Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):
Impacted groundwater (107 bbls.) was removed via vacuum truck and transported to Conquest Disposal, Weld County, CO. Impacted soils will be removed and transported to Buffalo Ridge Landfill, Weld County, CO.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 11/19/2010 Date Site Investigation Completed: 11/29/2010 Date Remediation Plan Submitted: 2/1/2011
Remediation Start Date: 2/1/2011 Anticipated Completion Date: 4/1/2011 Actual Completion Date: TBD

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.
Print Name: Marty Faraguna Signed:
Title: Environmental Specialist Date: 2/1/11

OGCC Approved: [Signature] Title: EPS Date: 2/3/11



