

Noble Energy, Inc.

Waste Management Plan Summary

The following describes Noble Energy, Inc.'s. (Noble) general plan for proper handling and disposal of Exploration and Production (E&P) waste, including produced water, drilling mud and cuttings, and tank bottoms.

- E&P waste will be stored onsite in compatible containers (e.g. frac tanks, three sided bins, bermed containment areas, etc.) Containers will be inspected on a regular basis to ensure they are in good condition and free of severe rust, bulging and/or structural defects.
- E&P wastes will be transported offsite by a licensed transporter via truck. Truck transport frequency will vary from site to site based on waste volumes.
- E&P petroleum impacted soils, drill cuttings, and drilling mud will be disposed of at a licensed third-party disposal facility (landfill). Tank bottoms will be disposed of at an E&P licensed third-party disposal facility (landfill). Liquid wastes, including flowback and produced water will be disposed of at licensed third-party injection facilities.
 - Third-Party disposal facilities used as part of this plan for solid waste disposal
 - Waste Management
 - Buffalo Ridge landfill
 - CSI landfill
 - North Weld County Landfill (Ault)
 - Denver Regional Landfill (DADS)
 - Republic Waste
 - Tower Landfill
 - Third-Party disposal facilities used as part of this plan for liquid waste disposal
 - NGL Water Solutions DJ, LLC
 - High Sierra Injection Facilities

Per Colorado Oil and Gas Conservation Commission (COGCC) Rule 907.a.(3), Reuse and Recycling of E&P waste, Noble with prior approval from the COGCC will potentially recycle and reuse produced water/flowback to be used in downhole frac operations.

Currently Noble Energy uses oil based drilling mud and does not participate in beneficial land reuse for drill cuttings.

Oil Based Mud Waste Management Plan Noble Energy, Inc.

Noble Energy, Inc. (Noble) will dispose of oil based mud (OBM) in accordance with the Colorado Oil and Gas Conservation Commission's (COGCC) Rule 907 Management of E&P Waste. Noble will transport OBM as E&P Waste to an offsite disposal facility in Colorado which is approved by the Colorado Department of Public Health and Environment.

Noble will transport OBM under proper waste manifest and will retain each manifest for not less than five years. The criteria on the manifest will include A) The date of transport B) The identity of the waste generator C) The identity of the waste transporter D) The location of the waste pick up site E) The type and volume of waste, and F) the name of the location of the disposal site.

Noble will follow COGCC Rule 907.d (2) Treatment and Disposal of Drilling Fluids. Noble will dispose of drilling fluids by Injection into a Class II well permitted in accordance with COGCC Rule 325 or disposal at a commercial solid waste disposal facility.