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Noble Energy, Inc.

## Waste Management Plan Summary

The plan for management of Exploration & Production Waste in the Noble Energy, Inc. (Noble) Mustang CDP (CDP # 11984) specifies the use of oil-based mud. Noble also uses water-based mud in the upper, non-producing zone. The following describes Noble Energy Inc.'s (Noble) plan for the proper handling and disposal of E&P Waste, including produced water, water-based drilling fluids, oil-based drilling fluid, drill 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.
- An alternative base fluid will be used for the oil based mud in a designated setback location. This base fluid has lower BTEX levels, is considered Non-Flammable and Combustible by OSHA/WHMIS criteria and is classified as a non-regulated material by the US DOT. More importantly, this alternative base fluid has a higher flash point than normal diesel base fluid, which limits the odor causing vapor associated with OBM.
- 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

Currently Noble does not participate in beneficial land reuse for drill cuttings.