



## Noble Energy, Inc. Waste Management Plans 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, drill mud, and cuttings and tank bottoms.

- E&P waste will be stored onsite in compatible containers, e.g. frac tanks, three sided tanks, bermed 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 drill mud will be disposed of at licensed third party disposal facilities (landfills). Tank bottoms will be disposed of at E&P licensed third party disposal facilities (landfills). Liquid wastes, including flowback and produced water will be disposed of at licensed third party injection facilities.
  - Third Party Disposal Facilities
    - Waste Management
      - Buffalo Ridge Landfill
      - North Weld County Landfill
      - Denver Regional Landfill
    - Allied Waste
      - Tower Landfill
  - Third Party Injection Facilities
    - 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.

- Noble may use the first one hundred feet of drill cuttings for spill prevention and/or stormwater management best management practices per approved beneficial reuse waste management plan: COGCC document number 400764671.
- 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 drill cuttings and bentonitic fluids by utilizing HydroLoc (a composting agent).
- E&P drilling wastes, including bentonitic drilling fluids will be re-used by land spreading on Noble spread fields per COGCC Rule 907.d.(3). No other E&P waste will be deposited at these locations.
  - Noble Spread Fields

<b>Site Name</b>	<b>Legal Description</b>	<b>Latitude/ Longitude</b>	<b>Driving Directions</b>
Sandau # 1	Sec. 24, T4N, R66W	40.278634, -104.729513	NE of CR35 and CR 40
Moser III	Sec 28 T3N R65W	40.199951, -104.664102	SW of the corner of WCR 30 and WCR 43
Grover/Konig	Sec 10 T10N R62W	40.850461, -104.312578	1 mile South of WCR 120 and WCR 79
Miller I North	Sec 11 T6N R62W	40.497715, -104.293745	NE WCR 70 and WCR 81