

E&P Waste Management Plan

Pursuant to compliance with COGCC Rule 907, the following describes Extraction Oil & Gas, LLC's general plan for handling and disposal of E&P waste, including produced water, drill mud, cuttings and tank bottoms.

Produced Water

Produced water is stored onsite in evaporation ponds and produced water tanks after separation from oil and gas at the production facilities. Said water is then allowed to naturally evaporate as permitted by the COGCC. No flowback water should be collected as frac stimulation operations are not necessary as a completion method for the D or J sand target formations.

Solid Waste and Tank Bottoms

Contaminated solids waste and tank bottoms from service rig or other well work operations will be disposed of at licensed third party area landfills. In the incidence of minor site spills resulting in moderately oil contaminated soils, onsite reclamation will be conducted in accordance with rule 907e.

Water-based Bentonitic Drilling Fluids and Associated Cuttings

Drilling wastes including bentonitic drilling fluids and associated drilling cuttings will be allowed to dry on site as permitted in the reserve pit and then covered over with native Samsil clays, Weld loams and sandy clays as represented by soil types on USDA soil maps. Excess drill cuttings may also be hauled off site by a licensed third party transporter to be re-used by spreading on COGCC approved land-farms per Rule 907.d and as previously submitted by plan (attached).

Extraction Oil & Gas, LLC

E&P Waste Management Plan Land Application of Water-Based Bentonitic Drilling Fluids & Associated Drill Cuttings

This document outlines the operational requirements to be used when applying water-based Bentonitic drilling fluids and associated drill cuttings to private land application sites to maintain compliance with COGCC Rule 907.d.(3). These materials are being applied as a beneficial soil amendment.

The land application site covered under this Waste Management Plan is detailed in Table 1. Only water-based Bentonitic drilling fluids and associated drill cuttings generated by Extraction Oil and Gas, LLC (Extraction) will be applied at this site. No other E&P waste shall be deposited at this site. Changes to Table 1 will be provided to the COGCC in a Form 4 Sundry Notice.

Mud Disposal: Offsite
Method: Land Application
Transporter: Select Energy Services
Lanny Ley
(720)641-2940

Land Application Site (Private)

1. Extraction shall obtain written authorization from the surface owner prior to land application of water-based Bentonitic drilling fluids and associated drill cuttings. The signed agreement shall state that only Extraction-generated materials will be accepted and that incorporation of the material will occur within 10 days of application
2. A 3-inch maximum lift of water-based Bentonitic drilling fluids and associated drill cuttings will be applied to this site. The volume of material transported to the land application site will be tracked to help ensure the 3-inch maximum lift is not exceeded.
3. Concentrations of contaminants of concern shall not exceed the levels in COGCC Table 910-1 after incorporation into native soil.
4. Daily tracking tickets will be used and will include the following information:
 - a. Name of well where material was generated.
 - b. Date of transfer of the material from the well to the spread Land Application Site.
 - c. Volume of material taken to the Land Application Site.
 - d. Name of transporter.
5. Extraction personnel will ensure the material will be incorporated into the soil within 10 days, site and weather conditions permitting.

**Extraction Oil & Gas, LLC
E&P Waste Management Plan**

**Table 1
Land Application Site Location(s)**

<u>Facility Name</u>	<u>Facility ID #</u>	<u>Legal Description</u>
Extraction Windsor Land Application	433752	SWSW Sec. 11 T8N R68W