



**Kerr-McGee Oil & Gas Onshore LP
Waste Management Plan
Temporary Fluid Recycling Facility**

This document outlines the operational requirements and guideline to be employed at the Kerr-McGee Oil & Gas Onshore, LP (Kerr-McGee) temporary fluids (drilling, flowback, completion, workover, stormwater, and hydrovac slurries) recycling facility. The purpose of this facility is to recycle and recondition used mud/fluids for reuse in workover, completions, and/or drilling operations. Additionally, the facility can be used for the production of fresh mud for workover and drilling operations if needed. This plan is submitted as a proposal for recycling of E&P Waste in accordance with Rule 907.a.(3).

Location

The initial facility will be located on the Aggregate State 37C-16HZ location (location ID 434766). The location drawing is attached. The facility footprint will be within the proposed footprint of the location outlined on the Form 2A. Because the facility is temporary in nature, it can be mobilized quickly to a new location if warranted. Prior to moving locations, Kerr-McGee will submit a Sundry Notice, Form 4 outlining the new location.

Operations Plan

The facility consists of a trailer mounted dewatering unit, upright tanks for storage of mud and fluids, and an active mud system with shakers, a centrifuge, pumps, and a catch tank for solids. A generalized schematic and flow diagram is attached. The location is currently within the Kerr-McGee stormwater inspection program. Additional stormwater BMPs will be added as necessary. All storage tanks will be kept within a lined containment area. All materials will be kept off of the ground surface and covered in accordance with Rule 1002.f.(2)A.

Muds/fluids will be brought to the facility by truck and ran though the active mud system and dewatering trailer initially to remove solids content. Depending upon the operational requirements in the field, the mud/fluids will then be conditioned to meet the desired specifications for reuse in oil and gas operations. Any resulting E&P solid waste will be taken to a licensed commercial disposal or to the Kerr-McGee landfarm for treatment.

The facility is designed to process and condition up to 3,000 bbls of fluid per day. Daily tracking tickets for the incoming and outgoing mud/fluids will be employed. The tickets will include the following.

- * generator name
- * date of transfer
- * volume of mud
- * name of transporter
- * origin (wellsite or recycling facility)
- * resulting destination (wellsite or recycling facility)

Recycled Fluid Uses

The recycled mud/fluids will be transported back to the location via truck. Recycled mud/fluids will be used for the following application.

- * Spacing fluid between cemented intervals below surface casing
- * Kill fluid/workover fluids below surface casing
- * Drilling fluids below surface casing
- * Completions fluids

Recycled mud/fluids will NOT be used for the following applications.

- * Drilling fluid for the surface casing interval
- * Fluid for cement
- * Workover fluids that have the potential for contact with fresh water aquifers.

Waste Management Plan

A list of wastes which are expected to be generated on site (this should include expected volumes and types of waste generated).

- ~7-8 truckloads of contaminated solids per week
- ~1-2 dumpster of trash/debris per week
- ~1-2 port-a-let per week

A list of the type and volume of chemicals expected to be stored on site.

- Bulk barite hopper, 20 tons
- Calcium Nitrate, 4000 lbs
- Polymer, 2000 lbs
- Gel, 5000 lbs
- Sugar, 2500 lbs
- Lime, 4000 lbs
- Desco, 2500 lbs
- Drill Pack, 2500 lbs
- Caustic Soda, 6250 lbs
- Drill Mud Thinner, 100 gallons
- Mineral Spirits, 50 gallons
- Biocide, 350 gallons

3. The waste handler and facility where the waste will be disposed (including the facility name, address, and phone number).

- Used filters- Waste Management, Buffalo Ridge Landfill, Keenesburg CO, 80643, 303-732-0218



- Trash/debris/contaminated solids- Waste Management, Buffalo Ridge Landfill, Keenesburg CO, 80643, 303-732-0218
- Port-a-let, Fuzion Field Services, McDonald Farms, 7440 I-25 Frontage Road, Frederick, CO 80530, 303-772-4577

Air Quality

This facility will be powered using electric line power rather than a diesel generator. Additionally, Kerr-McGee has evaluated potential emissions associated with the facility and determined that it would be below the threshold necessary for an APEN with the Colorado Department of Public Health and Environment (CDPHE) Air Quality Control Division. Kerr-McGee will continue to evaluate emissions and throughput and will submit an APEN if necessary as emissions approach the required threshold.

Weld County

Kerr-McGee obtained a temporary use permit with the Weld County Planning Department. Additionally, a pre-application meeting with Weld County occurred and the Use by Special Review permitting process was initiated.

Closure Plan

Upon closure of the recycling facility, all surface equipment will be removed that is not at the active oil and gas facility, and the recycling facility location will be graded and contoured. The location and access roads no longer within use will be reclaimed. As applicable, compaction alleviation, restoration, and re-vegetation will be performed within 12 months. Successful Final Reclamation of the location and access roads will be considered completed when reclamation of non-crop land has been performed and the total cover of live perennial vegetation, excluding noxious weeds, reflects 80% of pre-disturbance levels.