



## **Waste Management Plan**

### **NPR P17-596 Pad**

#### **CUTTINGS MANAGEMENT**

Solids control equipment consisting of shale shakers, centrifuges, and flocculating unit will be utilized to separate drill cutting solids from liquid (water). Drill cuttings will be segregated between surface casing cuttings, intermediate zone, and production zone cuttings and stockpiled on location. Cuttings samples will be periodically collected and will be submitted for laboratory analysis of COGCC Table 910-1 analytes. If cuttings meet Table 910-1 standards, they will be treated as soil and beneficially re-used on location or at another location as approved by COGCC Sundry Form 4.

Any excess cuttings may potentially be transported to an authorized waste facility. The moisture content of any cuttings shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. In the event that a certain volume of drill cuttings analytically demonstrate constituents above Table 910-1 standards, the cuttings will be remediated. At the time of interim reclamation, if the remediated drill cuttings are to be beneficially reused onsite, they will be adequately remediated to be below all applicable standards of Table 910-1.

The anticipated volume of cuttings based on 25 wells is approximately 150,255 cubic feet or 6,010 cubic yards. Cuttings to be beneficially reused will be utilized as fill for pad reclamation, or as secondary containment, stormwater BMPS, etc.

#### **DRILLING FLUIDS MANAGEMENT**

Closed loop system will be used to separate solids from liquid. The majority of drilling fluids are anticipated to be clean and clean drilling fluids will be recycled and used in drilling operations at the next pad location. Any drilling fluids that are deemed to be unusable, will be transported to an approved off-site disposal facility.

#### **COMPLETIONS**

Flowback from completions will be treated at a COGCC approved facility to be recycled or re-used for additional stimulations at other pads. MSDS sheets will be maintained for any additives used in stimulation. Tanks will be labeled in accordance with COGCC regulations.

#### **PRODUCTION**

Flowback and stimulation fluids will be sent to tanks, separators, or other containment/filtering equipment before the fluids will be placed into any pipeline, storage vessel located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other

containment/filtering equipment will be placed on the well pad in an area with additional down gradient perimeter berming.