

## **CUTTINGS WASTE MANAGEMENT PLAN**

Cuttings generated will be classified into two categories: non-hydrocarbon producing zones and hydrocarbon producing zones (e.g., Niobrara).

**Non-hydrocarbon producing zone cuttings** will be mixed with sawdust to decrease moisture content and stockpiled in a designated location onsite. Samples will be collected per the procedure outlined below and will be analyzed by a lab to ensure compliance with the concentration levels found in COGCC Table 910-1. Pending approval of the COGCC, cuttings will be vaulted into the cut slope during interim reclamation.

### **Sampling Procedure:**

One five-point composite sample will be collected per approximately every 200 cubic yards of mixed and stockpiled cuttings. Aliquots for each composite sample will be collected from a depth of at least one foot into the cuttings pile using a decontaminated hand-auger or shovel.

The composite sample that appears to be the most impacted based on visual observation and field screening techniques will be submitted for laboratory analysis of the full list of constituents identified in COGCC Table 910-1. The remaining samples will be submitted for laboratory analysis of the full list of constituents identified in COGCC Table 910-1 with the exception of metals.

**Hydrocarbon producing zone cuttings** will be separated from all other cuttings and mixed with fly ash and/or sawdust to decrease moisture content. Cuttings will then be transported to an approved offsite facility for disposal. Manifest documents will be kept on file. Any required documentation will be submitted to the COGCC.