



# **Drill Cuttings Waste Management Plan**

## **Best Management Practices for Effective Remediation of Drill Cuttings**



### **1 Mixing**

- All cuttings shall be mixed on location to ensure contact between the cuttings and the moisture control additives.
- Cuttings are combined with an appropriate mixture of amendments to ensure they will pass a paint filter test.

### **2 Stockpile Management**

- Mixed cuttings shall be stored on location in stockpiles.
- Stockpiles shall be constructed as tall as practical in order to aid in the retention of warmth within the stockpile, thereby increasing microbial activity, if warranted.
- Leachate and storm water runoff shall be managed through the properties of the moisture content reducing amendment, which allows the stockpiles to be stacked on location.
- A small earthen berm shall be constructed around the stockpiles as a further countermeasure against storm water runoff. The well pad's storm water berm is also a viable option for containment.
- The stackable consistency and absorbent properties of the cuttings material will aid in protecting the native landscape from windborne contaminated particulate. Stockpile disturbance shall be minimized until soil sampling technicians visit the site.

### **3 Sampling and Testing**

- The stockpile of treated cuttings will be sampled and tested according to standard protocol and COGCC Table 910-1. The frequency of sampling will be per every 100 cubic yards of cuttings.
- A permanent record of the laboratory analyses shall be maintained by the Operator.

### **4 Treatment or Disposal**

- Treatment of the cuttings will be based on laboratory analytical results and may consist of oxidation, mechanical shredding, bioremediation, and/or aeration.
- If deemed necessary, cuttings may be transported and disposed of under an appropriate waste manifest at an approved landfill facility.
- Once the cuttings have achieved the threshold limits of COGCC Table 910-1 or below background concentrations, the treated material may be reused on site (earthen berms, pad stabilization/reclamation, sub-soil stockpile stabilization/reclamation, thin spread)