



## **How Our Equipment Operates**

**Our equipment is normally set-up on location and used to mix the Bentonite Slurry solution used to float the cuttings out of the tunnel and cool the drilling surface while cutting.**

**The fluid is collected at a central point from the tunnel and transferred to the mud system for processing. The mud system will process the fluid in stages.**

**The returned fluid is pumped over the "Scalping Shaker" removing all the large and mid-sized particles from the system.**

**Next (depending of the size of the recycler) the fluid is collected by a centrifugal pump and processed thru either a DeSander cone bank (large units) or a straight to a DeSilter cone bank (small to mid-size).**

**Note: on the larger systems the fluid is processed thru a DeSander cone bank first due to the sheer amount of volume then is sent to a DeSilter cone bank. On the "mid-sized to small" units the DeSander cone bank is eliminated and the DeSilter cone banks are increased in capacity to compensate.**

**We normally use 10" DeSander cones and 5" DeSilter cones on our units. Other sizes are available for different applications.**

**The size of the cones will dictate the "cut-point" (size) of the solid that the cone will remove along with the volume the cone will process. The cones can be mounted over a shaker to further "dry" the cuttings prior to depositing for removal.**

**The "Cleaned" fluid is collected in the final tank where it can be thickened or thinned as necessary to meet the contractors' requirements. This is accomplished by using a venturi style mud hopper and submersible jet stirring guns to "Shear the fluid".**

**Finally a centrifugal pump can be used to pressure feed the cleaned and processed fluid back to the tunneling operation for reuse.**

**I hope this helps to explain some of the workings of our units.**