1.0 PURPOSE

This policy establishes the requirements for emergency stop switches when used with microprocessor based control circuits on permissible electrical mining equipment.

2.0 SCOPE

This policy applies to all self-propelled, electric motor-driven mine equipment granted approval under Title 30 Code of Federal Regulations (30 CFR), Part 18.

3.0 REFERENCES

3.1. 30 CFR, Part 18, "Electric Motor-Driven Mine Equipment and Accessories"

3.2. 30 CFR, Part 75.523, "Electric Face Equipment; Deenergization"

4.0 DEFINITIONS

4.1. Emergency Stop Switch – A device that will quickly deenergize the tramming motors of the equipment in the event of an emergency.

4.2 Microprocessor - A microprocessor is a solid state electronic device, typically implemented in one or more integrated circuits (ICs). When the microprocessor is combined with (external) memory and input/output (I/O) devices, a microcomputer is formed. The execution of a computer program takes place in the microprocessor. It contains the Central Processing Unit (CPU) which consists of an Arithmetic Logic Unit (ALU), internal memory, appropriate registers, and control circuitry (Control Unit).

5.0 POLICY

All self-propelled electric motor driven mine equipment shall have an emergency stop switch at each operator station on the machine that operates independently of and overrides any microprocessor based system. This emergency stop switch is intended to provide the machine operator with ultimate override control in cases of microprocessor malfunction or programming error.