

1.0 PURPOSE

This policy provides the minimum requirements necessary for hose conduit attachment to a potted solenoid valve.

2.0 SCOPE

This policy is used by investigators to determine if an applicant must use hose conduit on a potted solenoid valve.

3.0 REFERENCES

30 CFR, Part 18.31(b)

4.0 DEFINITIONS

4.1 Potted Enclosure - an enclosure that houses a component that is entirely embedded within a solidified insulating material .

4.2 Hose Conduit - a flame resistant covering material with a minimum wall thickness of 5/16" used to protect cables

5.0 POLICY

5.1. 30 CFR, Part 18.31(b) requires that potted enclosures must have a means for attaching hose conduit, unless the energy carried by the cable is intrinsically safe. However, based on the location of solenoid valves - underneath the machine where it is protected from the mining environment - and because of the short length of the solenoid cable and restrictive space concerns, potted solenoid valves may be accepted without means for attaching hose conduit, provided the manufacturer meets the following requirements:

5.1.1 The cable is a MSHA accepted flame-resistant cable.

5.1.2 The cable is protected by location of the solenoid valve on the machine. A note to that effect shall be documented on the assembly drawing.