

**TITLE: Explosion Testing of Enclosure Assemblies Specifying Alternate Materials**

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**1.0 PURPOSE**

The purpose of this document is to provide guidance to the investigator in evaluating the testing requirements for explosion-proof enclosures.

**2.0 SCOPE**

This Policy (POL) encompasses enclosures submitted to MSHA for evaluation under 30 CFR, Part 18.

**3.0 REFERENCES**

This POL does not affect or make change to any other document.

**4.0 DEFINITIONS**

This POL contains no terms that need defined

**5.0 POLICY**

30 CFR, Part 18 requires testing of an enclosure in order to verify the explosion-proof integrity of the design.

When alternate materials are specified, (i.e. steel, aluminum, brass) for the major component parts of the enclosure (i.e. housing or cover), the following guidelines shall be followed:

- 5.1. An evaluation shall be made to determine which of the materials listed has the minimum physical properties, and the material for that component part shall be explosion tested. The Electrical Test Lab shall be notified in writing, as to which material is to be tested.
- 5.2. Design and construction of the component parts being evaluated shall also be considered when making this determination (i.e. thickness of material, cast or fabricated parts, ribbed construction, etc.).
- 5.3. The basis for testing or waiving of testing of a particular material or component part should be included in the final report.