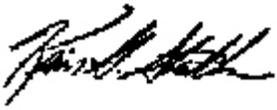


EFFECTIVE DATE: 04/30/2012

EXPIRATION DATE: 03/31/2014  
(Reissue of I10-V-12)

PROCEDURE INSTRUCTION LETTER NO. I12-V-12

FROM: KEVIN G. STRICKLIN   
Administrator for  
Coal Mine Safety and Health

SUBJECT: Reissue of I10-V-12 - Maintaining Methane Monitors in Proper  
Operating Condition for Mining Equipment

### **Scope**

This Procedure Instruction Letter (PIL) applies to Coal Mine Safety and Health (CMS&H) District Managers, Supervisors, Specialists, and Inspectors.

### **Purpose**

The purpose of this PIL is to provide instruction for district personnel regarding the inspection of methane monitors to ensure the monitors are permissible and that they are properly operating.

### **Procedure Instructions**

Under 30 C.F.R. § 75.342, methane monitors on mining equipment must be maintained in permissible and proper operating condition. To eliminate potential hazards associated with methane liberation in the working places, it is imperative that equipment with methane monitors be operated only when the methane monitor is functioning properly.

When inspectors encounter mining equipment that is equipped with methane monitors, they should conduct a visual examination and functional test to ensure that the monitors are operating properly, not "bridged out," and do not have material covering the sensor head. The functional test may consist of activating a test circuit on the monitor or application of calibration gas. Inspectors should test methane monitors with a known methane air test mixture when it is suspected that the monitor is defective or improperly calibrated. Inspectors should also check the examination records to ensure the required calibration tests are being performed at least once every 31 days.

**Background**

Methane monitors ensure that miners are provided with the earliest possible warning when excessive quantities of methane accumulate in the working places. Some mine operators are defeating the purpose of a methane monitor either by placing material over the sensor head of the monitor or "bridging out" the electrical safety components of the monitors. Placing material over the sensor head will prevent the monitor from detecting excessive and dangerous concentrations of methane in the mine. Similarly, "bridging out" the electrical components of the monitors will prevent the mining equipment from shutting down when methane reaches the two percent cut-off level. Methane ignitions and potential explosions could occur if these practices continue.

Methane monitors are critical safety devices designed to protect miners from methane explosions. These monitors provide the first warning of elevated levels of methane by giving a warning signal at one percent and automatically shutting down mining equipment when methane concentrations reach two percent. Mining equipment that continues to operate under such conditions could result in a face ignition or violent explosion.

**Authority**

The Federal Mine Safety and Health Act of 1977, as amended, 30 U.S.C. § 801 et seq.; 30 C.F.R. §§ 75.342 (a)(4) and 75.503.

**Internet Availability**

This PIL may be viewed on the Internet by accessing MSHA's home page at ([www.msha.gov](http://www.msha.gov)), choosing "Compliance Info" and "Procedure Instruction Letters."

**Filing Instructions**

This instruction letter should be filed behind the tab marked "Procedure Instruction Letters" in the binder for Program Policy Handbooks and Procedure Instruction Letters.

**Issuing Office and Contact Person**

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