Comments:

A. Review of Proximity Detection Technology and Proximity Detection Systems

The three types of electromagnetic field based systems on an RCCM approved by MSHA were all tested in and applicable to coal mines and not metal/non-metal.

B. Review of Proximity Detection Systems and RCCMs in Underground Coal and Metal/Nonmetal Mines

95 percent is cited for continuous mining machines used in coal mines but what percentage of testing was done on metal/non-metal underground equipment? The test protocol that included design consideration, implementation plans and field testing criteria was not implemented in July 2009 because of problems with the proximity detection systems. Manufacturer improvements are necessary as well as additional testing. MSHA is preparing to impose regulation on something that is not currently working properly and not necessarily applicable to metal/non-metal mines.

C. Review of Accidents

Fatalities Involving RCCMs in Underground Coal and Metal/Nonmetal Mines

The fatalities that occurred involving RCCMs were in primarily in coal mines and not metal/non-metal mines; 30 coal vs. 1 m/nm. This is a coal mine issue and not a metal/nonmetal issue.

The field testing that was conducted by MSHA on testing of proximity detection systems, accident investigations, communications with manufactures and NIOSH promoting a safety program including proximity detections systems is directed at coal mining. The other engineering controls that address hazards at the source are directed at coal and metal/non-metal mines. There is not enough information,
statistics or testing presented to make regulation on a
proximity detection system that might prevent accidents
involving RCCM’s.

Review of Accidents Involving Underground Mobile Equipment Other Than RCCMs

MSHA refers to conversations regarding other equipment
involved in fatalities but fails to give facts, statistics,
technology or proven techniques related to metal/non-
metal underground mobile equipment.

Proximity Detection Systems

Question number 25 is asking what factors have impeded the
mining industry from voluntarily installing proximity detection systems
on mining equipment.

First, this is more specific to coal mining vs. underground
metal/non-metal mining equipment.

Second, the field testing protocol, which included design
considerations, implementation plans and field testing criteria (tested
coal mining, not metal/non-metal equipment) was not able to be
implemented because of problems with the proximity detection systems.

Why would an industry invest in a system that has documented
problems and might be applicable in reducing the risk of accidents
involving other types of underground equipment and possibly create
new or additional hazards because it is not a proven system? The
proximity detection systems are undergoing manufacturer
improvements and refinements to equipment and will need to be re-
tested before the mining industry voluntarily installs proximity
detection systems on mining equipment.

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