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To: U.S. Department of Labor
Mine Safety and Health Administration (MSHA)
From: Scott Health & Sfaety
Subject: RIN 1219-AB-44

In response to the call for public comment, Scott Health & Safety offers the following:

Topic A: Rapid Deployment Systems

A tracking system using a radio signal would be technology appropriate to assist in locating miners trapped by a mine emergency.

In essence, the miner would wear some sort of portable device that sends a radio signal. Rescuers would have a receiving device and "home" in on radio signal strength. However, in a mine rescue application the radio signal of the tracking system could have a distance and signal strength problem due to interference from the surrounding environment. Metal and mineral ore could have an effect on this system. This potential interference is an assumption and would need to be verified.

Topic B: Breathing Apparatus

The SCBA's used in mines as described are classified as closed circuit or rebreathers. Open circuit SCBA's are readily available and would have some applications to mine rescue. The most suitable use for open circuit SCBA's is for them to be used in conjunction with an extended duration airline or "Fast Fill" feature connected to "air banks" strategically located or on a rescue trolley. There are a variety of open circuit SCBA's that are NIOSH certified and meet NFPA regulations. Scott Health & Safety is the leading designer and manufacture of open circuit SCBA's.

The most critical issue with any SCBA to be used in mine rescue is the duration of air. Current technology of cylinder pressure and air volume are the hurdles to extend the duration. As the cylinder technology is not core to Scott Health & Safety, the time and cost to develop a longer lasting cylinder is unknown.

Topic G: Thermal Imagers and Infra-Red Imagers

Regarding the question should thermal and infra-red imagers be permissible equipment, Scott supports this effort. However, there are no thermal imaging cameras to date that carry intrinsic safety approval. Designing cameras specifically for the mine environment may be possible, but would certainly be costly. Current market price for thermal imaging cameras is \$8000 - \$12000 per unit. Unit prices would be increased and development money will be required.