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Ms. Patricia W. Silvey
MSHA, Office of Standards, Regulations, and Variances
1100 Wilson Boulevard, Room 2350
Arlington, VA 22209-3939

RE: Comments to Draft PPL on "Guidance for Compliance with Post-Accident Two-Way Communications and Electronic Tracking Requirements of the MINER Act", Dated 12/12/2008

Dear Ms Silvey:

While internal testing and discussions are not complete, Matrix Design Group, an approved tracking system manufacturer, has the below comments with regard to the draft PPL released on Friday, Dec. 12 at 5:48 PM, subject line "Guidance for Compliance with Post-Accident Two-Way Communications and Electronic Tracking Requirements of the Mine Improvement and New Emergency Response Act (MINER Act)".

Comment 1:

Section 2, a, i (Page 6) under the "Electronic Tracking System" heading of the PPL states, "a. While the required capabilities of a particular tracking system will depend on mine-specific circumstances, an effective electronic tracking system generally should be capable of: i. Determining the location of miners on a working section including all intersections to within 200 feet."

While this draft guidance is well-meaning, Matrix Design Group, with extensive production experience in underground US coal mine tracking, believes that production testing is needed to determine the reliability of a system configured to the above guidance, in particular "on a working section including all intersections to within 200 feet." While Matrix METS 2.1 gear in particular is technically capable of this resolution, the overall reliability of any tracking system may be affected by the frequent relocation necessary to comply with this guidance, especially in mines with eight entries or more. Further, Matrix knows of no production tracking system in the world currently operating at the level of this guidance.

COMM-23

Matrix recommends that the PPL be modified to advise tracking systems be configured to report all miners on a working section and those leaving the working section in the escapeways, but not mandate location of readers or nodes inby the feeder in high-traffic areas. This configuration would be more reliable than the 200 ft. mentioned in the PPL and would accomplish the goal of locating miners within a reasonable area for rescue.

Comment 2:

Section 2, a, iii (Page 6) under the "Electronic Tracking System" heading of the PPL states, "iii. Determining the location of miners within 200 feet of strategic locations such as belt drives and transfer points, power centers, loading points, refuge alternatives, SCSR caches, and other areas deemed appropriate by the District Manager (example: a reader is placed 200 feet or less from each strategic location).

From a technical perspective, conservation of tracking nodes or readers is important to overall system reliability. While tracking at 2000 ft. intervals and at strategic locations such as refuge alternatives and SCSR caches is logical and effective for rescue operations, Matrix does not understand the reasoning for other locations mentioned in the PPL, specifically "belt drives and transfer points, power centers". Matrix recommends these specific areas be removed from the PPL.

Comment 3:

Sections 4.a and b. (Page 6) under the "Electronic Tracking System" heading of the PPL state, "Standby Power for Underground Components, a. Stationary components (infrastructure) should be capable of tracking persons underground during evacuation and rescue efforts, even upon loss of mine power. In many circumstances, the capacity to provide a minimum of 24 hours of continuous tracking operation after a power loss generally should be sufficient. b. b. An individually-worn/carried tracking device (e.g., a tag) generally should provide a low power warning. To facilitate evacuation and rescue efforts, the individually-worn/carried tracking device generally should provide at least 4 hours of operation in addition to the normal shift duration (12-hour total minimum duration)."

The standby power requirements mentioned in these two sections are not consistent. There is zero benefit to having infrastructure components capable of 24 hours of continuous tracking operation if the individual tracking device is only capable of 12 hours of operation. As recent accidents support the idea of tracking systems remaining 'online' for greater than 12 hours, Matrix recommends that the individual tracking device provide a minimum of 24 hours of operation to match the infrastructure. Currently approved devices can meet this requirement.

In conclusion, Matrix appreciates the opportunity to comment and looks forward to your response. Should you have any questions, require clarification, or would like to visit one of our production tracking installations, please do not hesitate to contact us.

Kind Regards,

David Clardy
Sr. VP – Products
Matrix Design Group