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Date: 29 December, 2008

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MSHA, Office of Standards, Regulations, and Variances
1100 Wilson Boulevard, Room 2350
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Reference: 12/12/2008-Draft Program Policy Letter No. P08-
Attachments: InSeT Systems, LLC Attachment 1

We respectfully submit comments to the Mine Safety and Health Administration, with reference to "12/12/2008-Draft Program Policy Letter No. P08." Comments and recommendations are contained in the body of the MSHA referenced PPL and are italicized in blue.

Sincerely,

A handwritten signature in cursive script, reading "Russell Breeding".

Russell Breeding, CTO
InSeT Systems, LLC

COMM-1

EFFECTIVE DATE:
EXPIRATION DATE:

PROGRAM POLICY LETTER NO. P08-

FROM: KEVIN STRICKLIN
Administrator for Coal Mine Safety and Health

MARK SKILES
Director of Technical Support

SUBJECT: Guidance for Compliance with Post-Accident Two-Way Communications and Electronic Tracking Requirements of the Mine Improvement and New Emergency Response Act (MINER Act)

Scope

This program policy letter (PPL) is intended for Mine Safety and Health Administration (MSHA) personnel, equipment manufacturers, repair facilities, underground coal mine operators and independent contractors, miners' representatives, and other interested parties.

Purpose

This PPL is a general statement of policy that provides mine operators guidance in implementing: (1) alternatives to fully wireless post-accident two-way communication between underground and surface personnel and (2) electronic tracking systems, both of which are required by the MINER Act. The two-way communication alternatives (or "partially wireless" systems) include infrastructure underground to provide untethered communications with miners.

Policy

The following guidance is provided to assist mine operators in developing post-accident two-way communication between underground and surface personnel and electronic tracking for their Emergency Response Plans (ERPs), as required by the MINER Act. The MINER Act requires, by June 15, 2009, a plan be submitted that provides for a post-accident communication system between underground personnel and surface personnel via a wireless two-way medium and an electronic tracking system that permits surface personnel to determine the location of any persons trapped underground. If these provisions cannot be adopted, the MINER Act requires that ERPs must set forth an alternative means of compliance that approximates, "as closely as possible, the degree of functional utility and safety protection provided by the wireless two-way medium and tracking system" referenced.

With respect to tracking, because electronic systems currently are available and MSHA approved, new ERPs and revisions to existing ERPs should provide for electronic tracking of persons underground.

However, because fully wireless communications technology is not sufficiently developed at this time, nor is it likely to be technologically feasible by June 15, 2009, this guidance addresses acceptable alternatives to fully wireless communication systems. New ERPs and revisions to existing ERPs should provide for alternatives to fully wireless communication systems.

This guidance represents MSHA's current thinking with respect to two-way communication and electronic tracking for use in mine emergencies. It does not create or confer any rights for any person and it does not operate to bind mine operators or any other members of the public. Mine operators can use an alternative approach or system to provide two-way communication or electronic tracking, if the approach or system satisfies the requirements of applicable statutes and regulations. If you are a mine operator, miners' representative, or miner and want to discuss another approach or system, you may contact the MSHA District Manager for the area in which the mine is located. Other interested parties may contact the individuals identified in this PPL. References to the District Manager in this PPL refer to the Agency's existing consultative process for approving mine plans, as opposed to the process for enforcement decisions related to citations.

[Section of PPL applicable to "Tracking System"]

Electronic Tracking System

Approved electronic tracking systems are available. While operators and District Managers must consider mine-specific circumstances in determining an appropriate electronic tracking system, this guidance outlines features MSHA believes would provide the protection contemplated in the MINER Act in many underground coal mining environments. As noted, operators and others may propose alternative approaches or systems, and the District Manager will exercise his discretion in evaluating them.

1. By June 15, 2009, a plan must be submitted that provides for determining the location of persons underground using an electronic tracking system pursuant to 30 U.S.C. § 876(b)(2)(F)(ii).

2. Performance

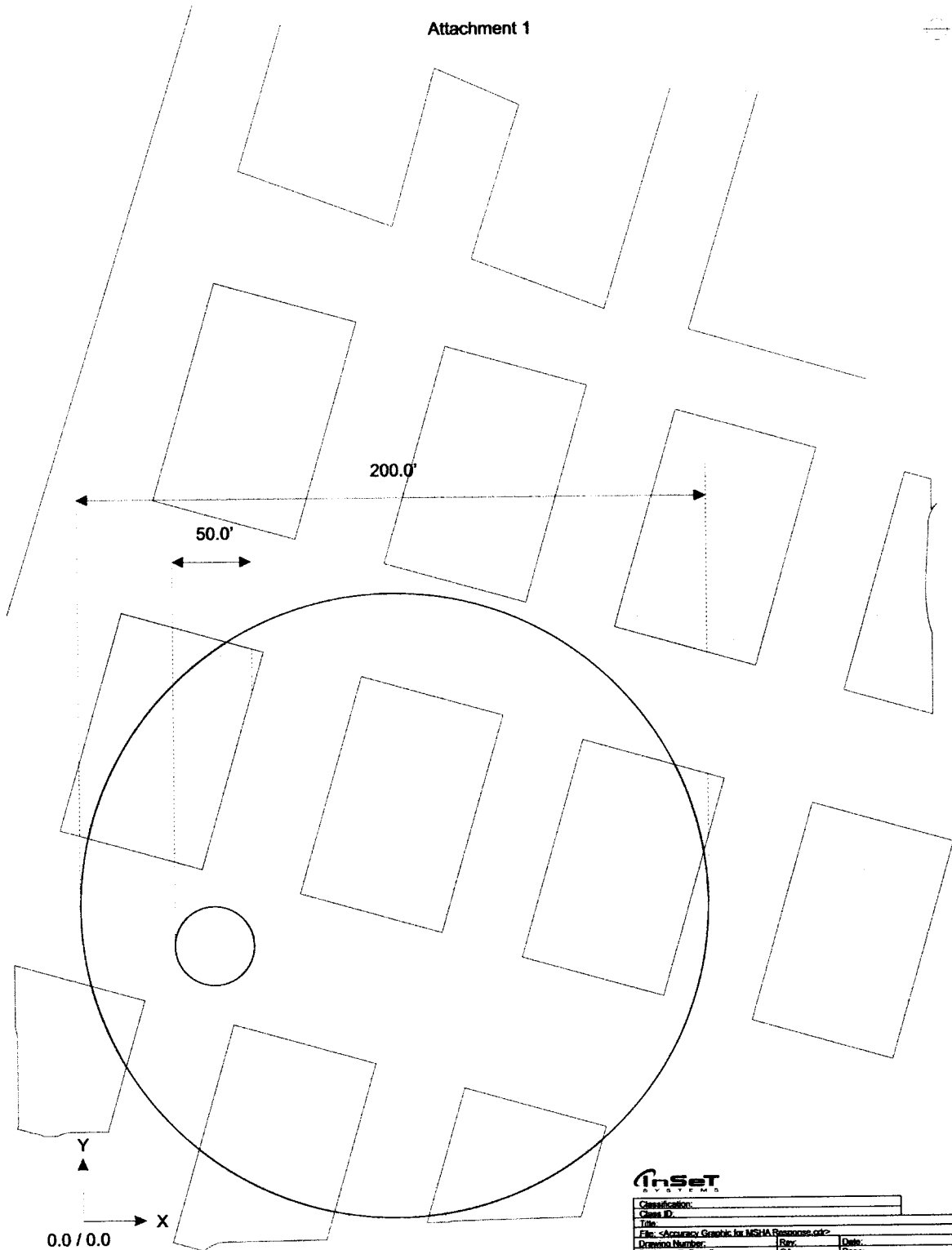
a. While the required capabilities of a particular tracking system will depend on mine-specific circumstances, an effective electronic tracking system generally should be capable of:

i. Determining the location of miners on a working section including all intersections to within 200 feet.

[We propose an accuracy specification of 25' as a maximum radial probability specification, at the conclusion of 24 hours of operation for each miner. Additionally, the tracking system should be capable of tracking vertical elevation of the tracking device on each miner to within 50' linear. This will assist with the accurate location of the tracking device attached to each miner.]

[Please refer to Attachment 1]

Attachment 1



InSeT
SYSTEMS

Classification:		
Class ID:		
Title:		
File: Accuracy Graphic for MSHA Response.cdr		
Drawing Number:	Rev:	Date:
Drawn: R. Brading	QA:	Page:
Software:	IS:	Scale: 1" = 40'

ii. Determining the location of miners in escapeways at intervals not exceeding 2000 feet.
[We propose an accuracy specification of 25' as a maximum radial probability specification, at the conclusion of 24 hours of operation for each miner.]

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).
[We propose an accuracy specification of 25' as a maximum radial probability specification, at the conclusion of 24 hours of operation for each miner.]

iv. Determining direction of travel at key junctions in escapeways.
[We propose the direction of travel also include any and all locations underground of the miner equipped with the tracking device at all times.]

b. Electronic tracking systems generally should be installed to prevent interference with blasting circuits and other electrical systems.

3. Permissibility – The tracking system must be approved by MSHA under 30 C.F.R. part 23 and applicable policies.

4. 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. 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).

5. Capacity - Tracking system components (readers) must be capable of tracking the maximum number of persons, including visitors, expected to be in a coverage area.

6. Scanning rate – In order to provide timely and relevant information, the tracking system generally should be capable of updating (refreshing) location data at least every 60 seconds.

7. Surface Considerations

a. The surface component of a tracking system should be located at the communication facility required under 30 C.F.R. § 75.1600-1 where a person is always on duty when miners are underground and should include a line-powered interface that can display the location of all miners underground. The person should be trained in the operation of the tracking system.

b. The surface tracking component should be equipped with standby power to ensure continuous operation in the event the line power is interrupted.

c. The tracking system interface should display the last known location of a miner when the tracking device is not communicating with the system.

d. Each miner should be uniquely identified.

e. Location data should be associated with a time stamp.

f. Location data should be stored for two weeks so that it will be available for evacuation and rescue of persons underground, as well as for accident investigations.

8. Survivability

- a. If system components must be installed in areas vulnerable to damage (such as in front of seals), protection against forces that could cause damage should be provided. For example, protection could be provided by installing enclosures in recessed areas, around corners, or other areas that reduce potential for damage, or routing and protecting cables such that potential for damage is minimized.
- b. Data storage should not be impacted by interruption of the data link between underground and surface components.

9. Maintenance

- a. The equipment manufacturer generally should provide a maintenance schedule and checklist to the mine operator.
- b. The mine operator generally should:
 - i. Establish and follow a procedure to provide tracking during system or component failures in the event that an accident occurs before the failure can be corrected.
 - ii. Check the standby power and functionality of the system and the devices worn by the miner on a weekly basis as required by 30 C.F.R. § 75.512-2.
 - iii. Follow the manufacturer's maintenance recommendations.