

**April 29, 2009**

**Questions and Answers  
On MSHA'S Program Policy Letter (PPL) (P09-V-01) on  
Compliance with Post-Accident Two-Way Communications and  
Electronic Tracking Requirements of the Mine Improvement and  
New Emergency Response Act (MINER Act)**

**Emergency Response Plans**

- 1. Are mine operators required to revise Emergency Response Plans (ERPs) to address guidance in the PPL related to post-accident communication and electronic tracking systems?**

Mine operators with ERPs approved prior to June 15, 2009, which do not address the provisions in the PPL, must revise and submit them by June 15, 2009. Operators of new mines must also submit their ERPs by June 15, 2009.

- 2. How long would it take MSHA to approve an ERP regarding communication and electronic tracking systems?**

Approximately four to six months.

- 3. Can a mine operator submit purchase orders for alternatives to wireless two-way communication systems and electronic tracking systems?**

Yes. MSHA will accept a copy of a valid, bona fide, written purchase order entered into by June 15, 2009, provided that the purchase order contains a confirmed delivery date.

- 4. Is the cost of a communication and tracking system or the mine operator's financial ability to purchase these systems taken into consideration by MSHA?**

Yes. MSHA will consider whether the systems are economically feasible on a case-by-case basis.

- 5. Can a mine operator change the specified system after the ERP has been approved?**

Yes, provided that a revised ERP with supporting rationale is submitted and approved.

- 6. Will MSHA issue citations for noncompliance with the PPL?**

No. However, the PPL provides guidance on how MSHA will implement the MINER Act requirements for post-accident communications and electronic tracking. MSHA will issue citations for noncompliance with the MINER Act.

- 7. What criteria does the District Manager use for approving the post-accident and electronic tracking provisions in ERPs?**

The PPL provides District Managers with guidance on approving these provisions in ERPs. The District Manager will take into consideration mine specific conditions.

**8. When are the communication and tracking systems that address provisions in the PPL required to be installed in the mine?**

By June 15, 2009, mine operators must submit a revised ERP that provides for post-accident communications and electronic tracking. Depending upon the availability, MSHA expects that mine operators would include reasonable timeframes for installing systems.

**9. Do the communication and tracking systems have to be approved by MSHA?**

Yes. Under MSHA's existing standards, all systems are required to be approved.

**10. Can a mine operator submit a revised ERP by June 15, 2009, which includes a communication and tracking system that is not MSHA approved?**

Yes, provided that the system is approved and installed within a reasonable time.

## **Two-Way Communication Systems**

**11. If a wireless two-way communication system becomes available, are mine operators required to install this type of system?**

If a wireless two-way system becomes available, MSHA will review the functional utility and safety protection provided by the alternative system on a mine-by-mine basis. As technical advances are made, MSHA will review advances in systems that enhance miners' ability to evacuate or otherwise survive in an emergency, and mine operators may need to upgrade their system.

**12. What will be acceptable for communication system coverage throughout each working section?**

Communication throughout the working section means that miners in the working section (inby the loading point) are able to communicate with the surface. Mine specific conditions such as low seams and undulations could result in loss of communication. This will be considered by the District Manager on a case-by-case basis. MSHA also recognizes that there may be a temporary loss of communication system coverage resulting from dead spots such as behind pillars and around equipment.

**13. Is the two-way communication system under 30 C.F.R. § 75.1600-3(a)(1) (MSHA's standard for a two-way communication facility for refuge alternatives) required to be wireless?**

No.

**14. Can a communication system that is included in the ERP be used to meet the requirements of 30 C.F.R. § 75.1600-3(a)(1) (MSHA's standard for a two-way communication facility for refuge alternatives)?**

Yes.

**15. What does "an additional communication system" mean under 30 C.F.R. § 75.1600-3(a)(2) (MSHA's standard for an additional communication system for refuge alternatives) ?**

The “additional communication system” is the post accident two-way communication system that is used to meet the requirements of the MINER Act as provided in the PPL. This system must be specified and approved in the ERP and will be evaluated according to the PPL.

**16. What does redundancy mean?**

Redundancy means that the system can maintain communications with the surface when a single pathway is disrupted. Redundancy can be achieved by two or more systems installed in two or more entries, or one system with two or more pathways to the surface; provided that a failure in one system or pathway does not affect the other system or pathway.

**17. Does a communication system need to be installed in two different entries to be considered redundant?**

No. One communication system can be installed in one entry as long as there is more than one pathway to the surface. Also, two or more systems installed in two or more entries would be considered redundant.

**18. What is an overland link and what kind would be acceptable?**

An overland link can serve as part of a redundant pathway for communication and tracking data. It allows communication between the surface and underground when one pathway fails. It can be wired or wireless.

**19. Can text messaging be used for two-way communication?**

Yes. Text messaging is acceptable for two-way communication including pre-programmed messages that provide enough information to convey status of miners, mine conditions, and appropriate emergency response information.

**20. Are all miners on a working section considered to be one group for purposes of an untethered device?**

Miners are not considered to be one group if they are not working or traveling together. For example, on a longwall section, miners working at the headgate and tailgate would be considered two groups and each group should have an untethered device.

**21. Can an untethered communications device work while it is inside a prefabricated steel refuge alternative?**

Yes, there are several methods available for getting communication signals inside a steel refuge alternative. For example, external antennas and a suitable coaxial cable can be connected to the handheld device, or external antennas with a suitable transceiver can be built into the refuge alternative. Any method that requires placing holes through the structure would require sealing the holes so that the interior of the refuge alternative remains airtight.

## **Electronic Tracking System**

**22. Would it be acceptable to install a reader at the loading point, inby the loading point in any entry, or at the load center for each entry, to track the location of miners?**

Yes, if the electronic tracking system determines a miner's location within 200 feet on the working section. Merely determining that a miner is in by the loading point is not acceptable.

**23. Would it be acceptable to install a reader on mobile equipment at the face, such as a continuous miner, or scoop, to allow tracking miners within 200 feet of the equipment?**

No. The location of a miner should be relative to a fixed point and the mobile equipment would be moving.

**24. Would it be acceptable to install the antenna cable of an approved leaky feeder system in the return entry as long as the components remain located in fresh air?**

Yes.

**25. Does the 200 feet tracking provision apply to the longwall face?**

Yes.

**26. Do some of the communication systems that would meet the provisions of the PPL have the capability to use radio frequency identification (RFID) technique for tracking?**

Yes.

**27. Should location data be stored for 2 weeks during non-emergencies?**

Yes, because an emergency may occur at any time and the stored data will be useful for evacuation and rescue of persons underground, as well as for accident investigations.

**28. How frequently should tracking data that is provided to the communication facility on the surface be updated?**

Tracking data provided to the communication facility should be updated at least every 60 seconds.

**29. Does a tracking system have to determine a miner's location or just what entry the miner is in?**

Merely identifying the entry where the miner is located is not acceptable. A tracking system should determine the location of a miner: in the primary and secondary escapeways at intervals not exceeding 2000 feet; within 200 feet of strategic areas; and within 200 feet on the working section.

**30. Is it safe for communication and tracking systems to remain energized during rescue and recovery?**

Yes. These systems are required to be approved and are therefore safe for use in a post-accident setting.

**31. Should communication and tracking systems be provided in both escapeways?**

Yes.

## **Maintenance**

- 32. If a communication or tracking system is designed to have self diagnostic capability, can this be used to perform the weekly examinations under the maintenance provision?**

Yes, diagnostic capabilities can be used to determine if the system is maintained in proper operating condition.

- 33. Are mine operators required to check for permissibility during the weekly examinations?**

Yes.

- 34. If one of the communication systems or the tracking system becomes inoperative, what should the mine operator do?**

The mine operator should include in the ERP a back up plan in the event one of the systems becomes inoperative. For example, a back up plan could include the use of a page phone system until the communication system is repaired. Use of the page phone system should consist of communication at specified intervals. Also, miner locations may be verified at prescribed intervals with a dispatcher until the electronic tracking system is repaired.

- 35. Do you have to stop production if one system fails?**

No, but repairs to the system must begin as soon as the failure is detected. The backup plan included in the ERP should be implemented until repairs to the system are completed.