

number of comments were received regarding these requirements.

Requiring that the responsible person have current knowledge of the aforementioned elements assures that informed decisions are made during a mine emergency. For example, having knowledge of the work areas and the assigned locations of miners, and their expected movement during the work shift, allows miners working in remote locations (where electronic communication may not be readily available) to be notified of an evacuation as soon as possible. The responsible person will know the mine emergency evacuation and firefighting program procedures specific to the mine so that all miners working underground can be quickly located, warned of imminent danger, and evacuated efficiently and safely. Mine operators should adopt procedures specific to the mine to assure that the responsible person can quickly locate all underground miners by knowing the assigned locations and expected movements of miners underground.

Several commenters noted that it is impossible to track each miner in a large mine where examiners, material haulage persons, maintenance personnel, and belt attendants are moving continually. Other comments indicated that the location of every miner should be known at all times. The final rule maintains the proposed language that recognized it would be virtually impossible to track every miner during the shift. By using the phrase "expected movements of miners," it is recognized that comprehensive tracking is impractical. Requiring miners to call-out their every movement would be a continuous tracking task and would unnecessarily occupy the telephone system that might be needed for safety or emergency purposes. It is reasonable, however, for the responsible person to know the assigned work locations and expected movements of miners. As maintenance personnel and material haulage personnel travel within the mine, they ordinarily will do so along main haulageways where others traveling the same haulageways can readily locate them. Similarly, although the responsible person may not know the precise location of examiners or belt attendants, knowing their assigned locations and expected movements will permit these persons to be located quickly.

Several comments were received recommending that the personal emergency device (PED) become a requirement of the final rule. A PED is a paging device that is part of a communication system that miners can

wear. The system generally consists of a transmitter capable of sending communications through the rock strata that can be received by individual miners through their PEDs. This system is currently used at a number of U.S. underground coal mines and has also been deployed at mines in other countries. The PED system was used successfully in the mine evacuation process at the Willow Creek mine during the July 2000 explosion accident and during an accident in November 1998, also at Willow Creek. MSHA has not made the PED system a requirement of the final rule. MSHA believes that the PED system is generally effective and encourages its use. However, since technology is constantly changing, newer systems that may be as, or more, effective than the PED may be developed. One commenter noted that it should not be necessary to track miners equipped with a PED unit since they could be contacted regardless of their location. The Agency agrees that there is less of a burden to locate miners equipped with a PED, recognizing that they can generally be contacted. However, the responsible person must be aware of their assigned work locations and expected movements during the shift as well to assure all miners can be evacuated in an emergency.

In addition, the requirement in the proposed rule that the responsible person must have "current knowledge" about various mining systems in use at the mine resulted in a number of comments. Several commenters indicated that it would be impossible for any miner to have comprehensive knowledge of each ventilation control, precise telephone locations, and other precise details. A few commenters recommended substituting the term "general knowledge" for "current knowledge."

The final rule retains the requirement for "current knowledge." "Current knowledge" is intended to mean that the responsible person have up-to-date information regarding revisions to the escapeway routes, significant ventilation changes such as reversing air directions, adding shafts, and other significant changes that would be important during an emergency. An extraordinary level of knowledge is not intended. A typical mine would have a number of miners able to meet the requirement perhaps including the mine foreman, assistant mine foremen, some examiners, and some section foremen. Others, such as safety department personnel, atmospheric monitoring system operators, or miners who

regularly travel throughout the mine and are familiar with the approved plans, may also meet this requirement. However, clerical personnel or property guards ordinarily will not meet the requirement.

One commenter suggested that the responsible person should be required to travel underground on a regular basis in order to have "current knowledge." MSHA has not included a minimal time for required underground travel. However, MSHA expects that some underground travel will normally occur for those miners meeting the requirements for a responsible person. An exception might include an experienced mine foreman who is temporarily working on the surface due to a recent injury and also has requisite knowledge of the current underground mine environment and operations defined under § 75.1501.

Some commenters believed there was an inherent conflict between the responsible person required by proposed § 75.1501 and the responsible persons required by existing standards § 75.310, *Installation of main mine fans*, § 75.311, *Main mine fan operation*, and § 75.1600, *Communications*. The knowledge required by the responsible person to comply with § 75.1501(a) is not analogous to that required by § 75.1600 for a responsible person on the surface to answer telephone calls. Similarly, §§ 75.310 and 75.311 require a responsible person on the surface, with underground communication, to always be within sight or sound of the main mine fan alarm when miners are underground. The responsibility and level of knowledge required of these persons is less than the requirement under final § 75.1501(a). The fact that several distinct functions require responsible persons does not indicate a conflict. The responsible person defined by final paragraph (a) could meet the requirements to be the responsible person under §§ 75.310, 75.311, or 75.1600, if on the surface. However, the reverse is not necessarily true. These functions are separate and the requirements are distinct. There is no conflict.

Some commenters were unsure whether the standard would apply to mine rescue teams and mine rescue and recovery efforts, and how the standard would affect decisions of upper mine management during emergency operations. The standard is intended to facilitate the immediate evacuation of the miners at the onset of fire, explosion, and gas or water inundation mine emergencies which present an imminent danger to miners, and to initiate a response when a response is