Two new standards concerning emergencies. This final rule establishes a final rule for underground coal mines in the Mine Act. The ETS must be replaced by final standards no later than 9 months after publication of the ETS. This final rule supercedes the ETS.

DATES: This final rule is effective September 9, 2003.

FOR FURTHER INFORMATION CONTACT: Marvin W. Nichols Jr., Director; Office of Standards, Regulations, and Variances, MSHA; phone: (202) 693–9440; facsimile: (202) 693–9441; E-mail: nichols-marvin@msha.gov.

SUPPLEMENTARY INFORMATION: This rule is issued in accordance with sections 101(b) and 115 (30 U.S.C. 811, 825), of the Federal Mine Safety and Health Act of 1977 (Mine Act). An Emergency Temporary Standard (ETS) was promulgated December 12, 2002 (67 FR 76658). The ETS was effective immediately upon publication. The ETS established two new standards in subpart P; § 75.1501, Emergency Evacuations, and § 75.1502, Mine Emergency Evacuation and Firefighting Program of Instruction. In addition, existing part 48, subpart A, § 48.8 is amended. On December 12, 2002, MSHA published an emergency temporary standard (ETS) which required operators of underground coal mines to designate for each shift that miners are underground, a responsible person to take charge during mine fire, explosion and gas or water inundation emergencies. In addition, the ETS required the responsible person to conduct an immediate mine evacuation when there is a mine emergency that presents an imminent danger to miners due to fire, explosion or gas or water inundation. The ETS also broadened the existing requirements for a program of instruction for firefighting and evacuation to address fire, explosion, and gas or water inundation emergencies. Finally, the ETS revised the part 48 training requirements to reflect that annual refresher training includes a review of the mine fire, explosion, and gas or water inundation emergency evacuation and firefighting plans in effect at the mine. In accordance with the Federal Mine Safety and Health Act of 1977 (Mine Act), the ETS must be replaced by final standards no later than 9 months after publication of the ETS. This final rule supercedes the ETS.

DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Parts 48 and 75

RIN 1219 AB33

Emergency Evacuations

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Final rule.

SUMMARY: The Mine Safety and Health Administration (MSHA) is issuing a final rule for underground coal mines in response to dangers to which miners are exposed during mine fire, explosion, and gas or water inundation emergencies. This final rule establishes two new standards concerning Emergency Evacuations and Mine
Section 75.1501 requires an operator to designate a responsible person to take charge when a mine emergency involving a fire, explosion, or gas or water inundation presents an imminent danger to miners. Section 75.1501 also requires that miners receive instruction on the identity of the responsible person designated by the operator for their workshift.

Section 75.1101–23 was redesignated as § 75.1502 and revised to include all mine emergencies resulting from a fire, an explosion, or a gas or water inundation (67 FR 76658, Dec. 12, 2002). This final rule §75.1502 requires that firefighting and evacuation plans address these emergencies; that miners be trained in all elements of the mine emergency evacuation and firefighting plan; and that mine operators instruct miners regarding any revisions to the plan after its submission to MSHA for approval.

Section 48.8, paragraph (b)(4), is amended to include in the annual refresher training of miners, a review of the emergency evacuation and firefighting plans in effect at the mine.

MSHA held four public hearings on the proposed rule in Lexington, Kentucky on February 4, 2003; Grand Junction, Colorado on February 6, 2003; Charleston, West Virginia on February 11, 2003; and Pittsburgh, Pennsylvania on February 13, 2003. The comment period closed on February 28, 2003. This final rule addresses all of the relevant comments received on the proposed rule.

Waiver of Delayed Effective Date

In accordance with the requirements of §553(d)(1) of the Administrative Procedure Act (5 U.S.C. 553), MSHA publishes a final rule in the Federal Register at least 30 days before its effective date. However, §553(d)(3) of the Administrative Procedure Act permits an agency to dispense with this requirement when the agency has found that there is good cause to do so, and it publishes its finding in the Federal Register with the final rule. As explained below, MSHA finds that good cause exists to make this final rule effective upon its publication today in the Federal Register.

One of the primary purposes of the delayed effective date requirement is to provide affected persons or industries with adequate time to prepare for compliance with the rule. MSHA’s final rule on Emergency Evacuations published in the Federal Register is very similar in all major respects to the ETS, which has been in effect since December 12, 2002, and underground coal mine operators have been complying with the ETS during those eight months. Therefore, MSHA finds that no additional time is necessary for underground coal mine operators to come into compliance with the requirements of this rule because the underground coal mine industry is already familiar with the major provisions of the final rule.

In addition, the agency’s ETS on Emergency Evacuations will expire on September 12, 2003. The expiration of the ETS would leave a critical void in miners’ safety if the final rule is not effective by that date. For these reasons, MSHA finds good cause to waive the requirement for a delayed effective date, thereby allowing the final rule to be effective today, upon publication in the Federal Register.

I. Discussion of the Final Rule

A. Background

During the past three years, at least 14 miners have died in two accidents as a result of faulty mine evacuations. Explosions at the Jim Walter Resources, Inc. No. 5 Mine in Alabama on September 23, 2001, resulted in 13 fatalities. An initial roof fall and explosion occurred at 5:20 p.m. and resulted in injuries to four miners. One of the four miners was severely injured and could not move. Miners from other parts of the mine responded in an ill-coordinated effort. The response was marked by confusion. For example, after the Carbon Monoxide (CO) Room operator (monitoring the CO monitoring system at the mine) was notified of the explosion, he attempted to locate the afternoon shift haulage foreman who he believed was working at the mine. This foreman was not working that shift. There was also some confusion about where the first explosion occurred.

By the time the second explosion occurred at 6:15 p.m., 12 additional miners traveled towards the initial explosion site and these miners entered the affected area without gas detection equipment. Seven additional miners were directed to travel to the emergency area, but the 6:15 p.m. explosion occurred before they arrived in the area of the initial explosion. It is uncertain whether the miner immobilized by the first explosion died as a result of the first or second explosion. It is certain, however, that 12 additional miners died from the second explosion as they were attempting to reach the injured miner.

MSHA’s accident investigation team determined that the final rule is appropriately proactive in developing a systematic procedure for responding to mine emergencies. MSHA has determined that had a responsible person knowledgeable about the mine safety systems taken charge of the evacuation and rescue effort, fewer miners would have been permitted to remain underground or re-enter the affected mine area during the mine emergency.

Under this rule, at the site of the Willows Creek accident to justify the ETS absence of training and the failure to conduct fire and emergency drills relative to proper evacuation procedures “affected the miners’ response” to the emergency situation of September 2001. While one commenter to the proposed rule stated that the Jim Walter accident was an “aberrational situation,” MSHA notes that every mine accident is unique and may present different facts and circumstances. MSHA has carefully reviewed this accident, and believes that the final rule is appropriately proactive in developing a systematic procedure for responding to mine emergencies. MSHA has determined that had a responsible person knowledgeable about the mine safety systems taken charge of the evacuation and rescue effort, fewer miners would have been permitted to remain underground or re-enter the affected mine area during the mine emergency.

On July 31, 2000, four explosions occurred at the Willow Creek mine in Utah. The initial explosion and subsequent fire occurred approximately seven minutes before the later explosions that killed two miners. One commenter to the proposed rule noted that it was inappropriate to use the Willow Creek accident to justify the ETS because the commenter believed the mine responded appropriately and evacuated expeditiously. After careful review of the accident, MSHA has concluded that the fatalities may have
been prevented. Although firefighting activities began almost immediately after the first explosion, section evacuation procedures did not begin immediately and conditions worsened before the fatal explosions occurred.

Had the decision to evacuate been made sooner, after it became evident that the fire was not controllable, and had the individuals present at the affected mine section been more aware of the urgent need for evacuation under emergency conditions, the fatalities might not have occurred. Some miners present at the mine were equipped with personal emergency devices (PEDs) which are capable of communicating text messages to underground personnel. Many miners had evacuated the mine and these devices alerted the remaining miners to evacuate the mine. The message to evacuate, however, was not transmitted until after the third of four explosions occurred. Had a responsible person been in attendance at the mine to take charge during the mine emergency, that person could have made a decision to initiate and conduct a mine evacuation sooner.

Mine emergencies that trigger the need to evacuate include inundations. There have been two water inundations and one gas inundation where miners have died. In 1968, Saxsewell No. 8 Mine in Hominy Falls, West Virginia, experienced an inundation of water when a continuous miner cut through into the workings of an abandoned mine. There were 26 men in the mine at the time of the occurrence. One man escaped from the mine unassisted, but the others were trapped in the mine. Fifteen miners were rescued five days later and six others were rescued 10 days after the inundation occurred. Four men were fatally injured. In 1977, in Tower City, Pennsylvania, at Porter Tunnel, an inundation of water entered the mine through a breach in the mine floor at the low side rib in the gangway. The water had accumulated in the unmapped abandoned workings and broke through the floor of the advancing gangway. The inundation caused the death of nine miners, injuries to three and one man who was eventually rescued. Six miners in the affected section escaped safely through the return air emergency escapeway leading to the surface. The miners in the other sections, 65 in all, traveled both the intake and return air escapeways leading to the surface.

In 1978 at Moss 3 Mine in Duty, Virginia, water inundated some abandoned sections in the mine soon after work began on a 265 foot single-entry drainway to connect an abandoned area of the mine to the surface. On April 4, 1978, four men were working to advance the drainway into an abandoned mined-out area. Although the air in the abandoned area was not tested after a test borehole penetrated the area, the continuous miner was used to penetrate into the abandoned area. Immediately after breaching into the abandoned area, the drainway was inundated with blackdamp (oxygen-deficient air). Two of the four miners who were advancing the drainway successfully retreated to the surface. The other two miners perished. The blackdamp also killed three other miners who went underground without protective equipment to search for the missing men. Similarly unequipped during rescue attempts, two other men were also overcome with blackdamp, but were successfully assisted to the surface.

A commenter asked that MSHA consider certain mine accidents that occurred during the last two years to determine whether there were deficiencies in the mine operator’s emergency response. The commenter specifically asked MSHA to consider: the July 24, 2002 water inundation at Quecreek No. 1 Mine in Pennsylvania; the April 17, 2002 fire at the Blue Diamond mine in Kentucky; the September 12, 2002 fire at the Fairfax mine in West Virginia; the January 6, 2003 fire at the Mine 84 in Pennsylvania; the January 22, 2003 explosion at the McElroy mine shaft involving Central Cambria Drilling in West Virginia; and the February 13, 2003 fire at the Loveridge mine in West Virginia. Because there is no final MSHA accident report for Blue Diamond mine, McElroy mine, and Loveridge mine, MSHA has not drawn a conclusion as to the mine operator’s emergency response in relation to this final rule. MSHA addresses the Quecreek accident in the section-by-section discussion of § 75.1501(d).

The Fairfax mine fire occurred on September 16, 2002, before promulgation of the ETS. In its August 20, 2003 accident investigation report of the Fairfax mine fire, MSHA concluded in part that, “Discovery of the fire, firefighting, and evacuation procedures were delayed because the Fire Detection System was disabled by an electrical short circuit problem, which prevented the system from sounding an audible fire alarm. The fire continued to intensify before it was discovered because the short circuit problem in the Fire Detection System was not rapidly evaluated and because the automatic Fire Suppression System was not properly installed.”

MSHA issued a final accident investigation report for the fire at Mine 84 on April 9, 2003. The accident occurred after the ETS was promulgated and the requirements of the ETS were in effect. The following gives a brief description of the Mine 84 accident. On January 6, 2003, a fire occurred in the longwall section conveyor belt entry. At about 8:27 a.m., the carbon monoxide monitoring system gave a warning indicating elevated concentrations of carbon monoxide along the beltline. The warning was investigated and dense smoke was encountered in the belt entry. Underground personnel were eventually evacuated from the mine except for those needed to conduct firefighting activities. Eventually mine rescue teams took over fire-fighting activities and then worked continuously until they were able to contain and extinguish the fire by January 27, 2003. MSHA issued a 104(d)(1) order for a violation of 30 CFR 75.1502(a). MSHA determined that the operator’s approved program of instruction for firefighting equipment and evacuation procedures was not followed due to management’s failure to immediately withdraw the 1-B longwall crew to a safe location outby the sensor activating the alarm.

Several commenters objected to the ETS. They questioned the foundation of the emergency temporary standard, objected that the comment period spanned a traditional holiday, perhaps discouraging commenters from commenting, and recommended that the standard be revoked. The rationale for issuing the ETS was thoroughly discussed in the December 12, 2002 Federal Register notice (67 FR 76658). The Agency continues to believe that the ETS was urgently needed and properly promulgated in accordance with the Mine Act. The fact that mine emergencies are somewhat infrequent does not preclude the need to address the serious underlying issue of how to respond to the dangers to which miners are exposed during mine fire, explosion, and gas or water inundation emergencies. It should be noted that the post-hearing comment period was open until February 28, 2003, which MSHA believes was adequate time to submit comments, even considering that the comment period included a holiday. Although the ETS was in effect, it operated by law as a proposed rule, and allowed for comments by all interested parties. No party asked for a stay of the ETS, and the ETS has remained in effect since its publication on December 12, 2002.

One commenter asked that MSHA determine the goal of the rule. The commenter asked whether it was to
ensure the fastest and safest means of evacuation, or rescue of personnel. The goal of the rule is to initiate an appropriate response to a mine emergency, and to cause an immediate evacuation of miners when necessary. Various comments were received recommending additional standards and requirements that are outside the scope of this rulemaking. These recommendations included the following: redesign self-contained self-rescuers; require new or separate secondary communication systems; require communications on all vehicles; redesign equipment batteries; improve roof control; require additional gas detectors; expand annual retraining to exceed eight hours; deploy atmospheric monitoring systems mine-wide; limit shift length; require dedicated transportation equipment; and provide continuous communications for anyone who might respond to an emergency. These recommendations are not incorporated into the final rule because they are outside the scope of this rulemaking.

One commenter also urged that the rulemaking be expanded to include underground metal and non-metal mines. Because this rulemaking deals with underground coal mine standards, the issue is beyond the scope of the rulemaking.

As a part of the ETS and proposed rule discussion, MSHA solicited comments on whether the rule should be broadened to address outbursts, massive roof falls, or other occurrences. Both affirmative and negative comments were received. Some comments indicated that coverage was already overly broad while others envisioned a wider scope of conditions that should result in evacuation. On balance, based on the rulemaking record, the Agency concludes that the conditions incorporated by the ETS and proposed rule were appropriate and should not be broadened at this time. Comments were considered, as well as the mine accident histories available to MSHA.

B. Section-by-Section Discussion

Subpart P—Mine Emergencies

Section 75.1501 Emergency Evacuations

Section 75.1501 addresses mine emergency evacuations. Like the ETS and the proposed rule, paragraph (a) of the final rule requires that for each shift that miners work underground, there shall be in attendance a responsible person designated by the mine operator to take charge during mine emergencies involving a fire, explosion, or gas or water inundation.

Under the ETS and proposed rule, the responsible person was required to be in attendance at the mine but was not limited to an underground or surface location. The final rule adopts the proposed rule language. A number of commenters suggested that the responsible person should be required to remain on the surface. Another commenter suggested that the responsible person should be located underground. Some commenters suggested that the responsible person should receive continuous output information or data from any mine monitoring system. Another commenter maintained that two responsible persons should be required with one located on the surface and one underground.

Although it is possible that a number of persons at a mine could be qualified for designation as the responsible person, many mines have elected to designate the mine foreman as the responsible person. This is an appropriate designation because the mine foreman is often the person most knowledgeable about the mine and the one who determines where people will be traveling. In such cases, prohibiting the foreman from traveling underground could have a detrimental effect on mine safety, as noted by one commenter. Conversely, requiring the mine foreman to remain underground for the entire shift would prevent performance of essential functions that may be required on the surface. MSHA concludes that it is appropriate to allow the responsible person to be either on the surface or underground.

A number of commenters requested clarification on whether the phrase “for each shift that miners work underground” applies to shifts other than production shifts. The proposed rule required that a responsible person be designated by the mine operator, and be in attendance at the mine. This standard applies whenever there is at least one miner working underground. The final rule adopts this language from the proposed rule. As with the proposed rule, there is no exemption for idle, partially-staffed, maintenance, construction, or other non-producing shifts.

Paragraph (a) of final § 75.1501, like the proposed rule, also requires that the responsible person shall have current knowledge of the assigned location and expected movements of miners underground, the operation of the mine ventilation system, the location of the mine escapeways, the mine communications system, any mine monitoring system if used, and the mine emergency evacuation and firefighting program of instruction. This requirement in paragraph (a) is unchanged from the proposed rule. The purpose of this requirement is to ensure that during mine emergencies one responsible person responds by making informed decisions, and that mine evacuations are conducted rapidly, efficiently, and safely. The accidents of the recent past demonstrate the need for a responsible person to take charge during mine emergencies.

In taking charge during an emergency, the responsible person directs resources that may be required during the emergency and assures that all nonessential miners are evacuated safely. In addition, requiring that the responsible person be at the mine site during all shifts when miners are working underground assures that no delays result from off-site telephone calls.

A comment concerned the accessibility of the responsible person and the maximum length of time that the responsible person could be away from communication points. Several commenters believed that continuous communication is needed, while another commenter stated that any short delay in communication is unacceptable. The final rule requires that the responsible person be able to initiate and conduct an immediate mine evacuation when necessary. This requirement would be met when the responsible person travels in working sections or within active areas of the mine because communication systems are readily available and could be used by the responsible person to carry out his or her duties. However, the need to travel in remote bleeder systems or worked-out areas where there is no communication could create a problem because the responsible person would be out of contact, unable to take charge during a mine emergency, and unable to initiate and conduct an immediate mine evacuation. In order to meet the requirements of this rule, the mine operator may need to assign another person to travel these areas, or re-designate another person who also meets the requirements of § 75.1501 as the responsible person. Miners must be informed of any such change in the identity of the responsible person.

The final rule, like the proposed rule, requires that the responsible person have current knowledge of the assigned location and expected movements of miners underground, the operation of the mine ventilation system, the location of the mine escapeways, the mine communications systems, any mine monitoring systems if used, and the mine emergency evacuation and firefighting program of instruction. A
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 establishing new air splits, 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
appropriate. Once the miners have been evacuated, the standard has no further application during rescue/recovery operations, mine rescue team activities, or emergency operations being orchestrated by upper mine management. The rule would next apply when miners resume work underground, whether that be when the mine returns to normal operation, or when miners are performing underground construction or rehabilitation after the immediate mine emergency has ended.

Paragraph (b) of §75.1501 of the final rule requires that the responsible person initiate and conduct an immediate mine evacuation when there is a mine emergency that presents an imminent danger to miners due to fire, explosion, or gas or water inundation. The rule also requires that only properly trained and equipped persons essential to respond to the mine emergency may remain underground. This paragraph is unchanged from the proposed rule and ETS.

Several comments were received questioning whether a mine-wide evacuation is always required due to any occurrence of fire, explosion, or water or gas inundation. MSHA’s final rule concludes that evacuation is required for mine emergencies that present an imminent danger to miners during mine emergencies that present an imminent danger to miners due to fire, explosion, or gas or water inundation. MSHA has concluded that miners can be exposed to serious danger when they remain underground or improperly re-enter affected mine areas. Such mine emergencies that present an imminent danger to miners due to fire, explosion, or gas or water inundation. However, not every imminent danger results in a mine-wide evacuation under this rule. Some commenters urged that the rule be reworded, believing that any underground incident, whether that be when the mine is in a working place or a conveyor belt haulage, is not a gas inundation. In general, an accumulation of methane in a working place, such as the face, or the conveyor belt haulage, is not a gas inundation. MSHA does not agree.

An imminent danger that affects a limited area, such as a section, may result in withdrawal from the affected area, but would not necessarily be a mine emergency requiring mine-wide evacuation. Several commenters suggested that a definition of imminent danger should be included in the rule. Section 3(j) of the Mine Act already defines an imminent danger, making further definitions unnecessary. The concept of imminent danger has existed since 1969 and is well understood by mine operators, miners, and others in the mining community. The term “imminent danger” is defined in the Mine Act, section 3(j), as “the existence of any condition or practice in a coal or other mine which could reasonably be expected to cause death or serious physical harm before such condition or practice can be abated.” This definition is well known and provides readily understandable criteria.

MSHA agrees with the commenters who stated that not every mine fire, explosion, or gas or water inundation hazard may result in a mine emergency requiring a mine-wide evacuation. For example, unplanned mine fires not extinguished within 30 minutes of discovery are reportable to MSHA under 30 CFR part 50. Such fires may not present an imminent danger to miners and, therefore, may not constitute a mine emergency under this final rule. It is when fire, explosion, or gas or water inundations present an imminent danger to miners that MSHA expects that an immediate mine evacuation be initiated. For example, a gas or water inundation of unknown potential, or an explosion that raises the question of unknown damage to critical ventilation controls or interrupted ventilation, should result in a mine-wide evacuation. However, a small-scale fire at an electrical connection, while it may be local, may not be immediately a mine emergency that presents an imminent danger to all miners underground.

One commenter questioned whether accumulations of methane at elevated concentrations would be considered a gas inundation such that a mine-wide evacuation would be required. An accumulation of methane in a working place, such as the face, or the conveyor belt haulage, is not a gas inundation. In general, an accumulation of methane results from inadequate ventilation or airflow. A gas inundation can occur even when there is adequate ventilation or airflow and is not limited to only methane gas. Current standards, specified in §75.323, *Actions for excessive methane,* specify actions to be taken when methane above certain levels is found in a working place or return aircourses. Similarly, a commenter questioned whether a small amount of water entering a mine mine might be considered an inundation. Typically, it would not. In most cases, a broken water pipe spilling into the mine, or normal mine water accumulations, would not be considered an inundation requiring an emergency evacuation. However, if water inflows blocked main aircourses or bleeder systems, a mine emergency requiring evacuation could result.

One commenter questioned whether an evacuation could ever be interrupted once started. In the case where an evacuation has commenced due to a false alarm, or the emergency comes under control very quickly, the responsible person could interrupt the evacuation.

Several commenters believed that the ETS fosters an atmosphere of “every man for himself” and that chaotic unorganized evacuations will result. Other commenters believed that the rule encourages evacuation as the first reaction to a problem. To the contrary, the rule promotes organized evacuations and controlled responses. By requiring a responsible person to take charge and by improving plans and training, MSHA believes that timely and orderly evacuations will result.

Several commenters suggested that the word “conduct” found in proposed §75.1501(b) should be deleted from the phrase “the responsible person shall initiate and conduct an immediate mine evacuation.” These commenters suggested that the responsible person should only be required to initiate the evacuation. Some commenters believed that the responsible person was required to make all communication contacts and perform all other duties without any assistance. The responsible person can, of course, obtain whatever assistance is needed to contact and evacuate miners safely and quickly. The final rule retains the phrase “initiate and conduct.”

“Conduct” is used to assure that the responsible person remains in control during the evacuation and remains responsible for assuring that the evacuation actually occurs. “Conduct” is not used to mean or imply that the responsible person is prohibited from performing any of the duties required in the rule. The responsible person should utilize any resources needed for evacuation and should obtain assistance as appropriate.

Other commenters believed that the rule prohibits any involvement of upper mine management and prohibits contact with off-site management. The final rule, like the proposed rule, is constructed to assure that an evacuation order by the responsible person would not be usurped and to clarify that concurrence or approval by off-site management is not necessary, as it could result in a needless delay. This does not, however, prohibit communication with upper management located on or off-site. Neither does the rule prohibit upper management from organizing or deploying a mine rescue team for recovery efforts. As discussed elsewhere in this preamble, the final rule is intended to address evacuation of miners where a mine emergency exists that presents an imminent danger, and an initial response—if a response is warranted. However, the rule does not
address mine rescue team deployment and mine rescue and recovery efforts in the aftermath of an emergency evacuation, as these activities could be more appropriately controlled by other mine officials, and other provisions in the Mine Act. These issues are beyond the scope of this rulemaking.

Numerous comments were received regarding the phrase contained in proposed §75.1501(b), “properly trained and equipped.” This phrase is retained in the final rule. Stated in full, the final paragraph requires that “[o]nly properly trained and equipped persons essential to respond to the mine emergency may remain underground.” Some commenters thought the phrase would limit any response to mine rescue teams. Other commenters stated that waiting for mine rescue teams would allow even small fires to propagate, creating larger, unnecessary hazards. The reason for this requirement is derived from the circumstances surrounding the Jim Walter Resources No. 5 mine accident where a party of miners was believed to have entered 4 Section, where the air quality was undermined, without gas detectors. The requirement is intended to prevent similar occurrences.

The final rule does not limit responses to mine rescue teams and does not prohibit mine emergency responses. The final rule does, however, require that persons responding to mine emergencies be equipped with appropriate equipment and trained in its use. Several commenters requested that a definition for “properly trained and equipped” be included in the rule. MSHA believes that a definition is not necessary, and could hamper flexibility on the part of mine operators to respond to rapidly changing or different emergency situations. While it is impractical to list every possible emergency scenario, the equipment required should be apparent to those directing or engaged in any response, dependent on the nature of the emergency and the particular conditions. For example, where miners are entering an area where ventilation controls have been destroyed or the air quality is unknown, responders should be equipped with gas detectors and should know how to operate the detectors. Miners responding to fight a fire should have gas detectors as well as firefighting equipment—and should know how to use the equipment. Otherwise, the responders could be unnecessarily exposed to hazards and the equipment could have limited effect.

One commenter suggested that each miner participating in a response should be provided with equipment—such as a gas detector. Other commenters suggested a clarification that only one person in a response party, probably the leader, should be required to have the needed equipment. The Agency concludes that, in the gas detector example, sufficient gas detectors should be provided so that the group can adequately monitor the atmosphere to which they are exposed. The size of the group and the extent to which they are close together or dispersed will affect the number of gas detectors needed. In general, the quantity of equipment must be at least sufficient to protect miners from the reasonably anticipated hazards.

Section 75.1501(c) of the final rule requires that the mine operator instruct all miners about the identity of the responsible person designated by the operator for their workshift. The mine operator shall inform miners before the start of their workshift if the identity of the responsible person changes. The ETS also included an implementation date that has been deleted from this final rule. Paragraph (c) of final §75.1501 provides that nothing in this section shall be construed to restrict the ability of other miners in the mine, in addition to the responsible person, to warn of an imminent danger that warrants evacuation. This paragraph is unchanged from the ETS and the proposed rule. This provision recognizes that there will be mine emergencies which present an imminent danger to miners due to fire, explosion, or gas or water inundation warranting a warning by someone other than the responsible person under § 75.1501(a).

For example, at the Quecreek Mine inundation accident that occurred July 24, 2002, miners from the affected section rapidly warned miners in the other working section of a water inundation, enabling the miners in the other working section to quickly escape the mine unharmed. These actions are consistent with the approach of final paragraph (d) of §75.1501 that recognizes that any person may warn others of an imminent danger which warrants evacuation. Had any delays occurred at Quecreek in warning the miners, tragic results might have ensued. This paragraph clarifies that obtaining approval or concurrence from the responsible person is not required when circumstances warrant.

A commenter suggested MSHA incorporate the Occupational Safety and Health Administration’s (OSHA’s) 29 CFR 1920.120 titled Hazardous waste operations and emergency response into MSHA’s final rule. OSHA’s rule provides for defining an Incident Command System, a chain of command,
Section 75.1502 Mine Emergency Evacuation and Firefighting Program of Instruction

Final § 75.1502. Mine emergency evacuation and firefighting program of instruction, was derived from § 75.1101–23, Program of instruction; location and use of fire fighting equipment; location of escapeways, exits and routes of travel; evacuation procedures; fire drills. The program of instruction is also referred to as the emergency evacuation plan.

Under the ETS and proposed rule, operators were to immediately revise existing firefighting and evacuation plans, retrain miners, and submit the revised plan to MSHA for review and approval. This process was a departure from the normal plan approval process whereby MSHA approval is required prior to implementation. The ETS implementation dates have passed, and the dates listed in the ETS are deleted from the final rule. Plans previously revised to comply with the ETS should need no further revision to comply with the final rule.

Final paragraph § 75.1502(a) explicitly requires underground coal mine operators to “adopt and follow” an approved mine emergency evacuation and firefighting program of instruction. The addition of the phrase “and follow” is a change from the ETS and the proposed rule, which stated that underground coal mine operators must “adopt” a program of instruction. Despite the lack of the phrase “and follow” in the ETS and the proposed rule, it has been MSHA’s intent that mine operators follow their approved plans in the event of a mine emergency. The concurrent promulgation of § 75.1501 and § 75.1502 at the proposed rule stage demonstrates MSHA’s intent that the standards function in unison. For example, under § 75.1501, the responsible person is required to initiate and conduct an immediate mine evacuation in the event that a mine emergency due to fire, explosion, or gas or water inundation presents an imminent danger to miners. The mine emergency evacuation and firefighting program of instruction would serve little purpose if the responsible person did not initiate and conduct the mine evacuation in accordance with the program of instruction. There would be little, if any, benefit to miners’ safety if the responsible person were to initiate and conduct an uncoordinated, disorganized evacuation. In fact, no program of instruction would be necessary for such an evacuation. Although § 75.1501 and § 75.1502 were always intended to operate in an integrated manner, the agency is aware that the intent is better expressed by use of the phrase “adopt and follow.” The explicit requirement that an operator “follow” the approved program of instruction once it is adopted is reflected in final § 75.1502(a). This requirement is consistent with MSHA’s practice under existing § 75.370, Mine ventilation plan; submission and approval, which requires mine operators to follow their approved ventilation plan once developed.

As with other mine plans, subsequent changes or revisions may not be implemented at the mine until approved by the District Manager of the Coal Mine Safety and Health District in which the mine is located and the affected miners have been instructed in the revised provisions.

Paragraph (a) of § 75.1502 of the final rule adopts the language of the ETS and proposed rule with only minor changes that clarify the rule’s intent. Under paragraph (a), MSHA retains the requirement of the ETS and the proposed rule that the program of instruction include the proper evacuation procedures in the event of a mine emergency. In addition, final paragraph (a) of § 75.1502 retains the requirements of former § 75.1101–23(a), the ETS, and the proposed rule, that the program of instruction include procedures to be followed regarding the location and use of firefighting equipment, location of escapeways, exits, and routes of travel to the surface. MSHA expects that the plan must, at a minimum, cover the types of mine emergencies presenting an imminent danger to miners due to fire, explosion, or gas or water inundation. Mine operators may choose to cover in their plan other types of mine emergencies when evacuations would be appropriate as well.

A few commenters stated their belief that the purpose of the rule was to ensure that MSHA could second-guess decisions made during emergencies and issue citations. Typically, these commenters discussed the 2000 Willow Creek explosions (previously discussed in this preamble) and the January 21, 1986 fire at Jim Walter Resources No. 3 mine. At the Jim Walter Resources No. 3 mine, a fire occurred along the No. 1 longwall section face. The fire was apparently started by a cutting torch being used to dismantle the longwall conveyor. Two miners were injured as a result of the fire. Efforts to control the fire were unsuccessful and all miners were withdrawn from the mine. On January 22, 1986, it was decided to partially seal the mine. The seals were completed on February 16, 1986. In both cases, miners remained underground in hazardous conditions in an effort to control mine fires, despite the hazard of a major explosion. MSHA concluded that the § 75.1101–23 plan was not violated at either Willow Creek or Jim Walter No. 3. Similarly, under the final rule, MSHA will assess the overall evacuation response and actions taken to protect the safety of the miners, recognizing that an undesirable outcome is not necessarily a violation of the provisions of the mine emergency and firefighting program of instruction.

MSHA continues to believe that increased awareness of responsibility for mine evacuations, improved plans and training will help eliminate fatal and non-fatal injuries during mine emergencies.

Final paragraphs (1) through (4) of paragraph (a), specify general topics to be developed and included in the program of instruction or plan. These include: (1) Mine emergency evacuation for mine emergencies presenting an imminent danger to miners due to fire, explosion, or gas or water inundation; (2) Evacuation of all miners not required for a mine emergency response; (3) Rapid assembly and transportation of necessary miners, fire suppression equipment, and rescue apparatus to the scene of the mine emergency; and, (4) Operation of the fire suppression equipment available in the mine. These paragraphs are unchanged from the existing ETS and proposed rule. MSHA will publish, and make available at its Web site, a model plan as an example. Mine operators should develop plans that are suitable to the conditions existing at their mine. For example, a mine not employing an atmospheric monitoring system would not discuss how an AMS would be integrated into the plan. Similarly, a mine that has deployed a Personal Emergency Device (PED) system should include a discussion of how the system is integrated into its procedures for notification and evacuation.

As required under final paragraph (a)(1), the plan requires that all miners on all shifts be acquainted with procedures for mine emergency
evacuation for mine emergencies that present an imminent danger to miners due to fire, explosion, or gas or water inundation. The plan should indicate that other occurrences might also have the potential to result in a mine emergency causing the plan to be implemented. An example would be a massive roof fall near a primary ventilation shaft that short-circuits and interrupts mine ventilation. The plan should emphasize that miners exposed to an imminent danger be safely evacuated while ensuring that only appropriate responses are undertaken.

One commenter recommended that the word “endanger” in proposed paragraph (a)(1) of § 75.1502 be replaced with wording consistent with § 75.1501. MSHA agrees that ambiguity would be reduced by the use of consistent wording, and has replaced the word with the phrase “present an imminent danger to miners” in the final rule.

Paragraph (a)(2) requires that the plan explicitly instruct all miners not to require emergency response to evacuate promptly. This paragraph is unchanged from the ETS and proposed rule. The plan should discuss the specific processes to be used at the mine to notify all miners that an evacuation is necessary. If a single communication system is used, the plan should detail procedures to be followed in the event of a communication system failure.

Alternatively, if a secondary communication system is used, the plan should identify the system and state how the system would be used in an emergency evacuation. If the mine has deployed a PED system to all or certain miners, the plan should discuss how information would be distributed to ensure that all miners are notified of the need to evacuate. The plan should specify and discuss assembly areas on sections and other work locations along with preparations and assignments to be performed. For example, the plan could discuss how local firefighting efforts integrate into the plan.

Several commenters noted that a timely evacuation would not be possible or practicable at a large mine unless transportation equipment was continuously maintained at working sections while miners were working. The approved mine emergency and firefighting plan should specify how transportation equipment is to be deployed and distributed within the mine. Plans should specify that transportation equipment be maintained on working sections when miners are working, and the conditions under which sufficient transportation equipment will not be maintained at working sections. One commenter stated that requiring transportation to be maintained at the working section could prevent evacuation of a single injured miner in need of medical attention, since the mantrip would be required to remain at the section. The Agency agrees that there could be instances when the transportation vehicle would not be available. If transportation is not available at the working section, contingencies should be described in the mine emergency and firefighting plan. The final rule allows mine operators sufficient flexibility to develop these aspects of the plan according to the needs of each individual mine.

Final paragraph (a)(3) is unchanged from the ETS and proposed rule. It requires that the plan address the rapid assembly and transportation of the necessary miners, fire suppression equipment, and rescue apparatus to the scene of the mine emergency. The plan should discuss how persons responding to an emergency will be transported. It should also discuss the availability and location of fire suppression equipment and rescue apparatus that will be needed at the scene of the emergency.

MSHA received a comment stating that retreating miners, especially in a track mine, could hinder the responsible person’s efforts to direct emergency supplies or transportation to the site of the mine emergency. Also a commenter stated that the rule does not address having some means of transportation to respond to a mine emergency always at hand. These issues must be considered during development of a plan to assure that miners can be efficiently evacuated, even while a response is implemented, if a response is appropriate.

Another commenter wanted clarification on whether equipment assembly must be included during drills and, considering that most mines are covered by off-site mine rescue teams, whether these teams would need to be activated as a part of a training drill. MSHA responds by stating that existing MSHA-approved plans already discussed, in detail, the requirements for use and location of firefighting equipment. MSHA has not issued a detailed policy on the inclusion of equipment assembly or contacting off-site rescue teams in mine emergency evacuation drills. However, during the drills it would be appropriate for mine employees to review procedures for contacting off-site rescue teams and for emergency response personnel to make sure phone numbers are in working order. Locating and simulating equipment assembly would also be appropriate.

Paragraph (a)(4) of the final rule requires a specific plan designed to acquaint miners on all shifts with procedures for operating the fire suppression equipment available in the mine. The plan should indicate how storage areas will be marked and how equipment will be maintained in operational condition. This requirement assumes that outby miners would also be fully acquainted with emergency procedures to be followed and equipment to be used. This paragraph was adopted from previous § 75.1101–23 and remains unchanged from the ETS and proposed rule. It retains the same requirements for procedures for the operation of fire suppression equipment. No comments were received on this paragraph.

Final paragraph § 75.1502(b), including paragraphs (b)(1) through (b)(3), sets forth requirements for each operator of an underground coal mine to ensure that certain specified miners are proficient in the use of, and know the location of, fire suppression equipment. Each of these paragraphs was derived from, and retain the same requirements as, previous § 75.1101–23(b), the ETS, and the proposed rule.

Final paragraph (b)(4) requires the mine operator to ensure that at least two miners in each working section on each production shift are proficient in the use of all fire suppression equipment available on such working section, and know the location of such fire suppression equipment. One commenter requested that paragraph (b)(1) require every miner to be proficient in the use of fire suppression equipment and know the location of firefighting equipment. MSHA believes that final (b)(1) is appropriate because a working section is a relatively limited area and therefore two miners knowing where to locate the equipment, and being proficient in the use of the equipment, would be sufficient. In addition, the mine emergency evacuation program of instruction will require other miners to be assigned to duties such as de-energizing electrical power to the section, ensuring transportation is available should evacuation be necessary, locating water hoses, gathering fire extinguishers and rock dust, and maintaining telephone contact with surface personnel. This requirement recognizes that there will be a coordinated response among miners performing tasks including the two miners proficient in using the fire suppression equipment.
This requirement is unchanged from the proposed rule and ETS.

Final paragraph (b)(2) requires the mine operator to ensure that each operator of attended equipment specified in § 75.1107–1(c)(1), and each miner assigned to perform job duties at the job site in the direct line of sight of attended equipment as described in § 75.1107–1(c)(2), is proficient in the use of fire suppression devices installed on such attended equipment. This requirement recognizes that the class of equipment referenced in this paragraph has been determined to warrant fire suppression devices and attendance. As reflected in final (b)(2), if attended equipment catches fire, all miners operating such equipment and performing job duties in the direct line of sight of such equipment will have the requisite knowledge to suppress or extinguish the fire. This requirement is unchanged from the proposed rule and ETS.

Final paragraph (b)(3) requires that the shift foreman and at least one miner for every five miners working underground on a maintenance shift are proficient in the use of fire suppression equipment available in the mine, and know the location of such fire suppression equipment. The requirement found in paragraph (b)(3) recognizes that a mine emergency due to fire may also occur on a maintenance shift where the locations of the miners may be more dispersed. This situation would differ from a production shift where there is generally a set number of miners in a specific area. Therefore, rather than requiring the miners to be proficient within a geographical area of the mine, this provision focuses on ensuring that an adequate number of miners know the location of firefighting equipment and are proficient in using the fire suppression equipment.

One commenter requested that paragraph (b)(3) require every miner to be proficient in the use of fire suppression equipment and know the location of firefighting equipment. MSHA has determined that miners will be adequately protected by the requirement that the shift foreman and at least one miner for every five miners working underground on a maintenance shift be proficient in the use of fire suppression equipment. While the shift foreman will move throughout the mine, requiring at least one miner for every five to be proficient in the use of fire suppression equipment, will approximate the requirement in (b)(1). As in final paragraph (b)(1), MSHA recognizes that underground evacuation programs of instruction will require other miners to be assigned to various other duties necessary to extinguish the fire. This requirement recognizes that there will be a coordinated response among miners performing various tasks, including the shift foreman and one miner for every five proficient in using the fire suppression equipment. This requirement is unchanged from the proposed rule and ETS.

Paragraph (c) requires each operator of an underground coal mine to require all miners to participate in mine emergency evacuation drills, which shall be held at periods of time so as to ensure that all miners participate in such drills at intervals of not more than 90 days. This paragraph was derived from previous § 75.1101–23, and the final rule is unchanged from the ETS and the proposed rule. The final rule differs from previous § 75.1101–23 to the extent that drills conducted in accordance with the final rule will simulate actions required in mine emergency evacuations, whereas previous § 75.1101–23 only required a simulation of actions required in the event of emergencies due to fire. One commenter suggested that a grace period be provided to accommodate for any miners who may have been absent on the day of the drill. This comment was not adopted in the final rule because MSHA believes that the performance of drills every 90 days is essential to maintain miners’ readiness to act, and familiarity with measures to be taken in the event of a mine emergency. Mine operators may exercise flexibility in meeting the requirement of this provision. For example, a mine operator may wish to conduct a drill only when he or she is certain that there is 100 percent attendance on a given shift, so long as all miners participate at intervals not exceeding 90 days.

Final paragraph (c)(1) requires that the mine operator certify by signature and date that the mine emergency evacuation drills were held in accordance with the requirements of this section. This paragraph is derived from former § 75.1101–23. Certifications shall be kept at the mine for one year and made available on request to an authorized representative of the Secretary and to the representative of the miners. One comment noted that, unlike most other recordkeeping requirements, this paragraph did not expressly provide the miners and the representatives of miners an opportunity to inspect the record. MSHA agrees that the record should be made available to the representatives of the miners. Accordingly, the final rule is revised to include a provision that requires the records be available on request to the representatives of miners. The final rule adds a new requirement to keep the evacuation drill certifications at the mine for one year. This language is consistent with other recordkeeping requirements in the standards and ensures that records are retained for a sufficient amount of time to verify that the mine emergency evacuation drills were properly conducted in accordance with § 75.1501(c).

Paragraph (c)(2) requires that for purposes of paragraph (c), a mine emergency evacuation drill must consist of a simulation of the actions required by the approved mine emergency evacuation and firefighting plan described in paragraph (a)(1) through (4) of this section. The proposed rule contained a printing error that was corrected by the Federal Register on December 26, 2002 (67 FR 78713).

However, the preamble to the proposed rule correctly noted that paragraph (c) of § 75.1502 “essentially retains the same requirements as existing § 75.1101–23(c), * * *.” (67 FR 76662.) The final paragraph (c) of § 75.1502 is unchanged from the ETS and proposed rule.

Several comments were received on proposed paragraph (c)(2). Commenters requested guidance on the content of mine emergency evacuation drills. Requirements for mine emergency evacuation drills defined in § 75.1502(a)(1), as well as paragraphs (a)(2), (a)(3), and (a)(4), are explicitly referenced in this section.

Several commenters asked for clarification of what would constitute a “simulation.” A “simulation” means a mock fire or emergency that results in firefighting actions and mine evacuation. Some mine operators currently conduct simulations using artificial smoke to imitate a fire at various locations. Other operators believe that a discussion during safety meetings is sufficient to meet this requirement, noting that the contents of the MSHA Program Policy Manual lists “group discussions” as one type of training for a fire drill. Although group discussions are listed in the manual as one possible element of a drill, discussions during safety meetings alone do not satisfy the requirement to conduct a drill consisting of a simulation of the actions required by the mine emergency evacuation plan.

Demonstrations, discussions, and task-oriented training may be included as part of a comprehensive drill.

Several commenters suggested that guidance was needed on the contents of mine emergency evacuation drills. There are two aspects to the drills: firefighting and evacuation. Both should...
be simulated at working sections and regular working stations. Operators should simulate fires and other emergencies at various locations and incorporate communication and notification as a part of the drill. The purpose of the drill is to prepare miners for fires, explosions, or gas or water inundations in their work locations or possible emergency responses, and to prepare them for evacuation due to emergencies in other parts of the mine. As suggested by some commenters, to the extent practicable, drills should be unannounced and the responsible person should be involved in the drills. Firefighting simulations should result in miners executing their assignments by retrieving material and equipment, assigned miners should retrieve fire extinguishers, hoses, and rock dust—although fire extinguishers and foam generators need not be expended. Miners assigned to remove section power should execute those assignments. Miners assigned to prepare mantrip vehicles and self-contained self-rescuers should make those preparations. The responsible person should conduct and coordinate mine emergency evacuation drills. Any deficiencies identified in locating or notifying all underground miners should be used to improve the system. Operators may concurrently conduct escapeway drills required under existing §75.383 with these mine emergency evacuation and firefighting drills.

MSHA agrees with a comment submitted that the outcomes of mine emergency evacuation drills should be reviewed by mine personnel in order to improve the emergency evacuation plan. This is a common sense approach that MSHA believes mine operators will follow and consequently, MSHA has not included it in the rule. Several commenters believed that drills required by paragraph (c)(2) did not apply to all miners, or to all shifts. This is not the case. All miners on all shifts are to participate in the required drills at not more than 90-day intervals. There is no exemption for Idle, partially-staffed, maintenance, construction, or other non-producing shifts. A similar comment questioned whether the evacuation plan and drills applied to contractors. There is no exemption for contractors.

Another commenter believed that an evacuation resulting from a false alarm could not be considered a required drill. Drills can be conducted at any time provided drills occur at intervals of not more than 90 days. Accordingly, an unplanned drill (for example, due to a false alarm) meeting the elements discussed in §75.1502(a)(1) through (a)(4) above can be accepted as a required drill. One commenter suggested that a drill should be acceptable if performed anytime during established 90-day cycle periods. This approach has not been adopted because under this approach six months could elapse between drills, and this length of time would undermine the goal of maintaining appropriate familiarity with firefighting and evacuation procedures. The final rule requires drills at intervals of not more than 90 days, as did the ETS and the proposed rule.

Some commenters stated that §75.383, Escapeway maps and drills, should be moved from its current location and assimilated into final §75.1502(c). Sections 75.380 through 75.383 pertain to escapeway requirements, escapeway maps, mechanical escape facilities, and drills. After considering this comment, MSHA has decided not to relocate escapeway drill requirements to this section. Although related, retaining the requirements for escapeway maps and drills in the current location will allow miners and mine operators to easily find and review all requirements related to escapeways in a common place.

Another commenter requested that MSHA reference ANSI Z490.1 Criteria for Accepted Practices in Safety, Health, and Environmental Training. MSHA has not included this reference in the final rule. Training issues are appropriately addressed in the rule in existing part 48 training requirements. Part 48 is the appropriate and clearly understood mechanism for training miners in response to mine emergencies.

**Revisions to Part 48 Training and Retraining of Miners**

MSHA is revising its existing training regulation in 30 CFR part 48.8, Annual refresher training of miners; minimum courses of instruction; hours of instruction to specifically include annual refresher training of miners for mine emergency evacuation and firefighting plans. In doing so, the language in the proposed rule is adopted without change. The training of new and experienced miners under part 48, however, does not need to be revised. Existing §48.5(b)(5) provides for training new miners regarding emergency evacuation and firefighting plans and existing §48.6(b)(5) provides for training experienced miners regarding emergency evacuation and firefighting plans.

Subpart A of 30 CFR part 48 prescribes requirements for submitting and obtaining MSHA approval of operator-administered programs for training and retraining underground miners. Each mine must have an approved training program for training new miners and newly-employed experienced miners, as well as training miners for new tasks and providing annual refresher training.

The existing training requirements under §48.5, Training of new miners; minimum courses of instruction; hours of instruction, and under §48.6, Experienced miner training, do not need to be revised because emergency evacuation and firefighting training are provided under those existing sections. Annual refresher training under existing §48.8, however, does not cover emergency evacuation or firefighting training. Therefore, §48.8 is revised by this final rule to include a requirement that the annual refresher training include the mine emergency evacuation and firefighting plan. This training will acquaint all underground coal miners with a review of the emergency evacuation and firefighting plans in effect at the mine.

As with the proposed rule, all training required by the final rule will be delivered by an MSHA-approved instructor as required by part 48. The required training covering emergency evacuations falls under part 48. Also, documentation that training has taken place shall be kept at the mine and made available on request to an authorized representative of the Secretary and to the representative of the miners.

This final rule does not reduce the safety protection afforded miners under former §75.1101–23. In fact, miner safety is enhanced because the final rule provides for training all miners in mine emergencies which present an imminent danger to miners from explosions and gas or water inundations, not just mine fires, and requires miners to receive annual refresher training. This provision eliminates duplicate provisions and consolidates the training requirements under part 48. This modification of the training requirements under former §75.1101–23 does not represent a reduction in safety to miners because the training requirements of §75.1101–23 are incorporated in new §7.1502 and the revised and existing sections of part 48.

**C. Feasibility**

We have determined that the requirements of the final rule are both technologically and economically feasible.
1. Technological Feasibility

MSHA believes that the rule would be technologically feasible for the mining industry. An agency must show that modern technology has at least conceived some industrial strategies or devices that are likely to be capable of meeting the standard, and which industry is generally capable of adopting. American Iron and Steel Institute v. OSHA, (AISI-II) 939 F.2d 975, 980 (D.C. Cir. 1991); American Iron and Steel Institute v. OSHA, (AISI-I) 577 F.2d 825 (3d Cir. 1978) at 832–835; and Industrial Union Dept., AFL–CIO v. Hodgson, 499 F.2d 467, 478 (D.C. Cir. 1974).

This rule addresses revisions of mine emergency evacuation plans and associated training. This rule neither requires underground coal mines to procure any additional equipment nor use any new technology. This is not a technology-forcing standard and does not involve activities on the frontiers of science. We conclude, therefore, that this rule is technologically feasible.

2. Economic Feasibility

Underground coal mines will incur costs of approximately $0.23 million yearly to comply with this rule. That these compliance costs represent well under 1 percent (about 0.003 percent) of annual underground coal mine revenue is sufficient evidence, MSHA believes, to conclude that this rule is economically feasible for underground coal mines.

II. Executive Order 12291 and the Regulatory Flexibility Act

Based on its analysis, MSHA has determined that this rule would not have a significant economic impact on a substantial number of small entities. MSHA has so certified this finding to the Small Business Administration. The factual basis for this certification is discussed in chapter V of the Regulatory Economic Analysis (REA).

III. Paperwork Reduction Act

This final rule has no new or revised collections of information as defined by the Paperwork Reduction Act of 1995 (P.L. 104–13). Section 75.1101–23 was redesignated as §75.1502. Section 75.1101–23 was approved under OMB control number 1219–0054, with an expiration date of September 30, 2003. The existing paperwork requirements including §75.1502 are approved under OMB control number 1219–0137, with an expiration date of June 30, 2006.

During the first year the final rule is in effect, and every year thereafter, the rule will impose 354 burden hours, and related burden hour costs of $19,456.

Comments were solicited in the proposed rule for the following issues:
1. Evaluate whether the collection of information is necessary for the proper performance of the functions of MSHA, including whether the information would have practical utility;
2. Evaluate the accuracy of our estimate of the burden of the collection of information, including the validity of the methodology and assumptions used;
3. Enhance the quality, utility, and clarity of the information to be collected; and
4. Minimize the burden of the collection of information on respondents, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submissions of responses.

In response to the solicitation, several commenters requested that documents be made available to the miner’s representatives. This issue is addressed in the section by section discussion.

Our paperwork submission summarized above is explained in detail in the REA that accompanies the rule. The REA includes the estimated costs and assumptions for the paperwork requirement related to the rule. A copy of the REA is available on our Web site at http://www.msha.gov/regsinfo.htm and can also be obtained in hardcopy from us. This paperwork requirement has been submitted to the Office of Management and Budget for review under section 3504(h) of the Paperwork Reduction Act of 1995. Respondents are not required to respond to any collection of information unless it displays a current valid OMB control number. The OMB control number for this rule is 1219–0137.

IV. Executive Order 12866

The final rule contains all costs from the effective date. These economic statistics have been revised, as compared with the ETS and proposed rules, to reflect this change. This change excludes costs during the period between the effective date of the ETS and the effective date of this final rule. Also these statistics have been revised to reflect 2001 data and any new assumptions.

Executive Order 12866 requires that regulatory agencies assess both the costs and benefits of intended standards and regulations. We have fulfilled this requirement for this rule and determined that it would not have an annual effect of $100 million or more on the economy. Therefore, we do not consider this rule to be economically significant under section 3(f)(1) of Executive Order 12866.

In the REA, MSHA has developed estimates of the safety benefits of this rule, which ensures that operators and miners have a clear understanding of actions and procedures to be followed in the event of a mine emergency. MSHA has concluded that the two fatalities at the Willow Creek Mine and nine of the 13 fatalities at the Jim Walter No. 5 Mine might have been prevented had this rule been in place. The Agency has reviewed its coal accident investigation database and has not identified any other fatalities during the past 10 years that might have been prevented by this rule. In summary, based on its experience over the past ten years, MSHA believes it is reasonable to estimate that this rule could prevent 11 miners’ lives from being lost every ten years, or an average benefit of the rule of 1.1 miners’ lives saved every year. The actual number of mine fatalities prevented could be much larger.

V. The Unfunded Mandates Reform Act of 1995 and Other Regulatory Considerations

A. Unfunded Mandates Reform Act

MSHA has determined that, for purposes of section 202 of the Unfunded Mandates Reform Act of 1995, this rule does not include any Federal mandate that may result in increased expenditures by State, local, or tribal governments in the aggregate of more than $100 million, or increased expenditures by the private sector of more than $100 million. Moreover, the Agency has determined that for purposes of section 203 of that Act, this rule would not significantly or uniquely affect small governments.

Background

The Unfunded Mandates Reform Act was enacted in 1995. While much of the Act is designed to assist the Congress in determining whether its actions will impose costly new mandates on State, local, and tribal governments, the Act also includes requirements to assist Federal Agencies to make this same determination with respect to regulatory actions.

Analysis

Based on the analysis in this REA, compliance with this rule by coal mine operators and contractors covered within this rulemaking would result in a compliance cost of approximately $0.23 million per year. Accordingly, there is no need for further analysis under section 202 of the Unfunded Mandates Reform Act.
We have concluded that small governmental entities would not be significantly or uniquely impacted by this rule. This rule would cover 664 underground coal mining operations.

B. Executive Order 13132: Federalism

We have reviewed this rule in accordance with Executive Order 13132 regarding federalism and have determined that it does not have “federalism implications.” This rule does not “have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

C. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

In accordance with Executive Order 13045, we have evaluated the environmental health and safety effects of this rule on children. The Agency has determined that this rule would have no adverse effect on children.

D. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

We certify that this rule would not impose substantial direct compliance cost on Indian tribal governments.

E. Executive Order 12630: Government Actions and Interference With Constitutionally Protected Property Rights

This rule is not subject to Executive Order 12630, Governmental Actions and Interference With Constitutionally Protected Property Rights, because it does not involve implementation of a policy with takings implications.

F. Executive Order 12988: Civil Justice Reform

We have reviewed Executive Order 12988 and determined that this rule would not unduly burden the Federal court system. We drafted the rule to provide a clear legal standard for affected conduct.

G. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

In accordance with Executive Order 13211, we have reviewed the rule for its energy impacts. The rule would have no effect on the distribution or use of energy. The only impacts of the rule on the supply of energy would be through its effect on the price of coal.

The estimated yearly cost of the rule for the coal mining industry would be about $0.23 million.\(^1\) The annual revenues of the coal mining industry in 2001 were approximately $17.1 billion.\(^2\) The cost of the rule for the coal mining industry would therefore be 0.001% of revenues. Even if we were to suppose that the increased cost caused by the rule would be fully reflected in coal prices, the impact would be negligible.

Accordingly, we have determined that the rule would have no significant adverse effect on the supply, distribution, or use of energy.

H. Executive Order 13272: Proper Consideration of Small Entities in Agency Rulemaking

In accordance with Executive Order 13272, MSHA has thoroughly reviewed the rule to assess and take appropriate account of its potential impact on small businesses, small governmental jurisdictions, and small organizations. As discussed in chapter V of the REA, MSHA has determined that the rule would not have a significant economic impact on a substantial number of small entities.

List of Subjects

30 CFR Part 48
Education, Mine safety and health, Reporting and recordkeeping requirements.

30 CFR Part 75
Coal mines, Underground coal mining, Mine safety and health, Emergency medical services, Fire prevention, and recordkeeping requirements.


Dave D. Lauriski,
Assistant Secretary of Labor for Mine Safety and Health.

Chapter I of title 30, parts 48 and 75, of the Code of Federal Regulations is amended as follows:

PART 48—[AMENDED]

1. The authority citation for part 48 continues to read as follows:


2. Section 48.8 is amended by revising paragraph (b)(4) to read as follows:

§48.8 Annual refresher training of miners; minimum courses of instruction; hours of instruction.

\(\text{\textbullet\textbullet\textbullet\textbullet\textbullet}\)

\(\text{\textbullet\textbullet\textbullet\textbullet\textbullet}\)
§ 75.1107 Attended equipment.

(a) Each operator of an underground coal mine shall adopt and follow a mine emergency evacuation and firefighting program that instructs all miners in the proper evacuation procedures they must follow if a mine emergency occurs, location and use of firefighting equipment, and location of location of escapeaways, exits, and routes of travel to the surface. Such program of instruction shall be approved by the District Manager of the Coal Mine Safety and Health district in which the mine is located. Before implementing any approved revision to the program of instruction, the operator shall inform persons affected by the revision in any new provisions. The approved program of instruction shall include a specific plan designed to acquaint miners on all shifts with procedures for:

(1) Mine emergency evacuation for mine emergencies that present an imminent danger to miners due to fire, explosion, or gas or water inundation;

(2) Evacuation of all miners not required for a mine emergency response;

(3) Rapid assembly and transportation of necessary miners, fire suppression equipment, and rescue apparatus to the scene of the mine emergency; and,

(4) Operation of the fire suppression equipment available in the mine.

(b) In addition to the approved program of instruction required by paragraph (a) of this section, each operator of an underground coal mine shall ensure that:

(1) At least two miners in each working section on each production shift are proficient in the use of all fire suppression equipment available on such working section, and know the location of such fire suppression equipment;

(2) Each operator of attended equipment specified in § 75.1107–1(c)(1), and each miner assigned to perform job duties at the job site in the direct line of sight of attended equipment as described in § 75.1107–1(c)(2), is proficient in the use of fire suppression devices installed on such attended equipment; and,

(3) The shift foreman and at least one miner for every five miners working underground on a maintenance shift are proficient in the use of fire suppression equipment available in the mine, and know the location of such fire suppression equipment.

(c) Each operator of an underground coal mine shall require all miners to participate in mine emergency evacuation drills, which shall be held at periods of time so as to ensure that all miners participate in such evacuations at intervals of not more than 90 days. (1) The operator shall certify by signature and date that the mine emergency evacuation drills were held in accordance with the requirements of this section. Certifications shall be kept at the mine for one year and made available on request to an authorized representative of the Secretary, and to the representative of the miners.

(2) For purposes of this paragraph (c), a mine emergency evacuation drill shall consist of a simulation of the actions required by the approved mine emergency evacuation and firefighting plan described in paragraph (a)(1) through (4) of this section.

[FR Doc. 03–22748 Filed 9–8–03; 8:45 am]

BILLING CODE 4510–43–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[CGD13–02–012]

RIN 1625–AA09

Drawbridge Operation Regulations; Lake Washington Ship Canal, WA

AGENCY: Coast Guard, DOT.

ACTION: Final rule.

SUMMARY: The Coast Guard is amending the regulations governing the drawspan of the Montlake Bridge across the east end of the Lake Washington Ship Canal by lengthening the hours that the draw need not open for the passage of vessels during the part of the year when vessel traffic is low. The change will relieve vehicular congestion during the peak congested period for road traffic.

DATES: This rule is effective October 9, 2003.

ADDRESSES: Comments and related material received from the public, as well as documents indicated in this preamble as being available in the docket, are part of docket CGD13–02–012 and are available for inspection or copying at Commander (can), Thirteenth Coast Guard District, 915 Second Avenue, Seattle, Washington 98174–1067 between 7:45 a.m. and 4:15 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Austin Pratt, Chief, Bridge Section, Aids to Navigation and Waterways Management Branch, telephone (206) 220–7282.

SUPPLEMENTARY INFORMATION:

Regulatory History

On September 30, 2002, we published a notice of proposed rulemaking (NPRM) entitled Drawbridge Operation Regulations; Lake Washington Ship Canal, WA, in the Federal Register (67 FR 189). We received no letters commenting on the proposed rule. No public meeting was requested, and none was held.

Background and Purpose

The Washington State Department of Transportation (WSDOT) requested this change in the drawbridge operations schedule to alleviate traffic congestion in the Montlake area by increasing the periods for part of the year in which the drawbridge need not open for the passage of vessels.

The draw of the Montlake Bridge, mile 5.2, Lake Washington Ship Canal at Seattle, Washington, opens on signal except that the draw need not open for the passage of vessels from 7 a.m. to 9 a.m. and from 3:30 p.m. to 6:30 p.m., Monday through Friday, except federal holidays, for any vessel of less than 1000 gross ton, unless the vessel has in tow a vessel of 1000 gross tons or over. The draw need only open on the hour and half-hour from 12:30 p.m. to 3:30 p.m. and from 6 p.m. to 6:30 p.m. Between the hours of 11 p.m. and 5 a.m. the draw opens if one hour notice is provided. This notice requirement has been voluntarily suspended by WSDOT. The bridge is staffed by operators 24 hours a day. This change removes this nighttime notice provision.

The Montlake Bridge provides 48 feet of vertical clearance above the mean regulated lake level of Lake Washington for the central 100 feet of the bascule span. Navigation on the waterway includes tugs, gravel barges, construction barges, sailboats, motor yachts, kayaks, rowing shells, and government vessels.

The Lake Washington Ship Canal bisects Seattle from east to west and is currently crossed by two fixed highway bridges and four vehicular bascules, of which the Montlake is the easternmost. At the western extremity seaward of the Hiram Chittenden Locks at Ballard is a single-leaf railroad bascule.

The Montlake Bridge is critical to north-south road traffic in its area. The closest alternative crossing is about 0.8 mile to the west and cannot be traveled easily without traveling other congested streets during peak traffic hours.

This change would alleviate vehicular congestion by lengthening the periods...