proposed regulations covering construction standards for heating, lighting, and cooling in home-living (dormitory) situations.

The following items will be on the agenda:

- Review all suggestions and feedback from five tribal consultation sessions and comment period;
- Discuss and reach consensus on all final recommendations in the reports;
- Finalize language and appearance of final report;
- Discuss implementation proposals for all committee recommendations;
- Meet with and share recommendations with Department of the Interior, Bureau of Indian Affairs, Bureau of Indian Education, and Congressional Officials; and
- Public comments.

Written comments may be sent to the Designated Federal Official listed in the **FOR FURTHER INFORMATION CONTACT** section above. All meetings are open to the public; however, transportation, lodging, and meals are the responsibility of the participating public.

Dated: August 24, 2011.

Donald E. Laverdure,

Principal Deputy Assistant Secretary—Indian Affairs.

[FR Doc. 2011–22302 Filed 8–30–11; 8:45 am]

BILLING CODE 4310–W7–P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Part 75

RIN 1219–AB65

Proximity Detection Systems for Continuous Mining Machines in Underground Coal Mines

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Proposed rule; notice of public hearings.

SUMMARY: The Mine Safety and Health Administration (MSHA) is proposing to require underground coal mine operators to equip continuous mining machines (except full-face continuous mining machines) with proximity detection systems. Miners working near continuous mining machines face pinning, crushing, and striking hazards that have resulted, and continue to result, in accidents involving life threatening injuries and death. The proposal would strengthen the protections for miners by reducing the potential for pinning, crushing, or striking accidents in underground coal mines.

DATES: *Comment date:* All comments must be received or postmarked by midnight Eastern Standard Time on November 14, 2011.

Compliance dates: See proposed compliance dates under the **SUPPLEMENTARY INFORMATION** section.

Hearing dates: Hearings will be held on October 18, 2011, October 20, 2011, and October 25, 2011, at the locations listed in the **SUPPLEMENTARY INFORMATION** section of this document.

ADDRESSES: Comments, requests to speak, and informational materials for the rulemaking record may be sent to MSHA by any of the following methods. Clearly identify all submissions in the subject line of the message with ''RIN 1219–AB65''.

- *Federal E-Rulemaking Portal: http://www.regulations.gov.* Follow the on-line instructions for submitting comments.
- *Facsimile:* 202–693–9441.
- *Mail or Hand Delivery:* MSHA, Office of Standards, Regulations, and Variances, 1100 Wilson Blvd., Room 2350, Arlington, VA 22209–3939. For hand delivery, sign in at the receptionist's desk on the 21st floor.

Information Collection Requirements

Comments concerning the information collection requirements of this proposed rule must be clearly identified with ''RIN 1219–AB65'' and sent to both the Office of Management and Budget (OMB) and MSHA. Comments to OMB may be sent by mail addressed to the Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, 725 17th Street, NW., Washington, DC 20503, Attn: Desk Officer for MSHA. Comments to MSHA may be transmitted by any of the methods listed above in this section.

FOR FURTHER INFORMATION CONTACT: Roslyn B. Fontaine, Acting Director, Office of Standards, Regulations, and Variances, MSHA, at *fontaine.roslyn@dol.gov* (e-mail), 202–693–9440 (voice), or 202–693–9441 (facsimile).

SUPPLEMENTARY INFORMATION:

I. Introduction

A. Availability of Information

Public Comments: MSHA posts all comments without change, including any personal information provided. Access comments electronically on *http://www.regulations.gov* and on *http://www.msha.gov/currentcomments.asp.* Review comments in person at the Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2350, Arlington, Virginia. Sign in at the receptionist's desk on the 21st floor.

E-mail notification: MSHA maintains a list that enables subscribers to receive e-mail notification when the Agency publishes rulemaking documents in the **Federal Register.** To subscribe, go to *http://www.msha.gov/subscriptions/subscribe.aspx.*

B. Public Hearings

MSHA will hold three public hearings on the proposed rule to provide the public with an opportunity to present their views on this rulemaking. The public hearings will begin at 9 a.m. MSHA is holding the hearings on the following dates at the locations indicated:

Date	Location	Contact No.
October 18, 2011	Embassy Suites, Denver, Downtown/Convention Center, 1420 Stout Street, Denver, Colorado 80202.	303–592–1000.
October 20, 2011	Embassy Suites, Charleston, 300 Court St., Charleston, WV 25301	304–347–8700.
October 25, 2011	Courtyard Washington, Meadow Lands, 1800 Tanger Boulevard, Washington, Pennsylvania 15301.	724–222–5620.

The hearings will begin with an opening statement from MSHA, followed by an opportunity for members of the public to make oral presentations. Persons do not have to make a written request to speak; however, persons and organizations wishing to speak are encouraged to notify MSHA in advance for scheduling purposes. MSHA requests that parties making presentations at the hearings submit them no later than five days prior to the hearing. Presentations and accompanying documentation will be included in the rulemaking record.

The hearings will be conducted in an informal manner. Formal rules of evidence and cross examination will not apply. The hearing panel may ask questions of speakers and speakers may ask questions of the hearing panel. Verbatim transcripts of the proceedings will be prepared and made a part of the rulemaking record. Copies of the transcripts will be available to the public. The transcripts may be viewed at *http://www.regulations.gov* or *http://www.msha.gov/tscripts.htm*.

C. Information Collection Supporting Statement

MSHA posts Information Collection Supporting Statements on *http://www.regulations.gov* and on MSHA's Web site at *http://www.msha.gov/regspwork.htm*. A copy of the information collection package is also available from the Department of Labor by request to Michel Smyth at *smyth.michel@dol.gov* (e-mail) or 202 693 4129 (voice); or from MSHA by request to Roslyn Fontaine at *fontaine.roslyn@dol.gov* (e mail) or 202–693–9440 (voice) or 202–693–9441 (facsimile).

D. Proposed Compliance Dates

Under the proposed rule, each underground coal mine operator would be required to install proximity detection systems on continuous mining machines based on the date of manufacture of the machine according to the following schedule. MSHA considers the date of manufacture as the date identified on the machine or otherwise provided by the manufacturer.

1. By [Date 3 months after the publication date of the final rule] for continuous mining machines (except full-face continuous mining machines) manufactured after [date of publication of the final rule].

2. By February 28, 2013 for continuous mining machines (except full-face continuous mining machines) manufactured on or before August 31, 2011.

TABLE 1—PROPOSED RULE COMPLIANCE DATES

Compliance date	Machine type	Date of manufacture
3 months after the publication date of final rule.	Continuous Mining Machines (except full-face continuous mining machines).	After the publication date of final rule.
18 months after the publication date of final rule.	Continuous Mining Machines (except full-face continuous mining machines).	On or before the publication date of final rule.

II. Discussion of Proposed Rule

A. Background

This proposed rule is issued under section 101 of the Federal Mine Safety and Health Act of 1977 (Mine Act), as amended. The proposed rule would require mine operators to install proximity detection systems on continuous mining machines in underground coal mines according to a phased-in schedule for newly manufactured and existing equipment. It would also establish performance and maintenance requirements for proximity detection systems and require training for installation and maintenance. The proposed requirements would strengthen protections for miners by reducing the potential for pinning, crushing, or striking fatalities and injuries to miners who work near continuous mining machines.

Miners are exposed to hazards that are a result of working near continuous mining machines in the confined space of an underground coal mine. Working conditions in underground mines that contribute to these hazards may include limited visibility, limited space around mobile machines, and uneven and slippery ground conditions which may contain debris.

MSHA has conducted a review of fatal and nonfatal pinning, crushing, and striking accidents in underground coal mines involving continuous mining machines to identify those that could have been prevented by using a proximity detection system. Of the deaths in underground coal mines from 1984 through 2010, MSHA estimates that 30 could have been prevented by installing proximity detection systems on continuous mining machines. During this same time period, of all the injuries due to pinning, crushing, and striking accidents in underground coal mines, approximately 220 could have been prevented with proximity detection systems installed on continuous mining machines.

MSHA's analysis of fatalities and nonfatal accidents during the 1984 through 2010 period indicates that many of these accidents occurred in confined areas in underground coal mines where a proximity detection system could have warned the miners and stopped the machines before the accident. Proximity detection systems are needed because training and outreach initiatives alone have not prevented these accidents and the systems can provide necessary protections for miners. In 2004, MSHA introduced a special initiative to inform underground coal mine operators and miners about the dangers of pinning, crushing, or striking hazards. MSHA's outreach efforts included webcasts, special alerts, videos, bulletins, and inspector-to-miner instruction. Despite these efforts, pinning, crushing, and striking accidents still occur. There were two fatalities and four injuries in

2010 where a continuous mining machine pinned, crushed, or struck a miner. In 2011, a continuous mining machine operator was fatally injured. The preliminary report of the accident states the operator was pinned by the machine.

Proximity detection is a technology that uses electronic sensors to detect motion or the location of one object relative to another. Proximity detection systems can provide a warning and stop mobile machines before a pinning, crushing, or striking accident occurs that could result in injury or death to miners.

In 1998, MSHA evaluated accidents involving remote controlled mining machines and determined that proximity detection systems have the potential to prevent accidents that occur when the machine operator or another miner gets too close to the machine (Dransite, 1998). MSHA noted that if changes in work practices or machine design do not prevent miners from being placed in unsafe locations, the Agency should consider a requirement for proximity detection by means of signal detectors with automatic machine shutdown. No MSHA-approved proximity detection systems were commercially available for underground mines at that time.

In 2002, following a series of fatal pinning, crushing, and striking accidents, MSHA decided to work with the coal mining industry to develop a proximity detection system. MSHA evaluated: (1) The Bureau of Mines' Hazardous Area Signaling and Ranging Device (HASARD) system; (2) the Nautilus, International ''Buddy System''; and (3) the International Mining Technologies ''Mine Mate'' system. MSHA selected the Nautilus, International ''Buddy System'' for testing because it could be adapted to remote controlled continuous mining machines in the least amount of time. MSHA first tested the system in July 2003. MSHA, a mine operator, a machine manufacturer, and Nautilus, International developed performance criteria for field testing the system (MSHA Proximity Protection System Specification, October 4, 2004). MSHA evaluated the system for permissibility under 30 CFR 18.82 and issued an experimental permit on May 30, 2003. After several revisions, the Agency field tested the system in March 2006 and determined that it met the established performance criteria. While MSHA was testing the Nautilus system, another manufacturer developed a similar system, the Geosteering Tramguard™ System, which MSHA tested in June 2005 under an experimental permit on a remote controlled continuous mining machine. In November 2005, MSHA field tested the Geosteering Tramguard™ System in accordance with MSHA established criteria and it performed successfully.

MSHA approved the Nautilus, International ''Buddy System'' and the Geosteering Tramguard™ System in 2006 and a third system, the Matrix Design Group M3–1000 Proximity Monitoring System, in 2009, under existing regulations for permissibility in 30 CFR part 18. These approvals are intended to ensure that the systems will not introduce an ignition hazard when operated in potentially explosive atmospheres. MSHA's approval regulations under 30 CFR part 18 do not address how systems will perform in reducing pinning, crushing, or striking hazards.

The three MSHA-approved proximity detection systems operate using electromagnetic technology. The Nautilus, International ''Buddy System'' and the Strata Mining Products HazardAvert™ System (formerly the Geosteering Tramguard™ System) require a miner to wear a component that measures the strength of an electromagnetic field generated by antennas strategically located on the machine. A microprocessor onboard the machine is interconnected with the machine control circuitry and communicates with the miner-wearable component. The microprocessor sends a signal to activate a warning or stop machine movement when the miner wearing the component is within a prescribed distance of the machine.

The Matrix Design Group (now partnered with Joy Mining Machinery to commercialize the system for continuous mining machines) M3–1000 Proximity Monitoring System operates in a similar manner but generates the magnetic field around the miner-wearable component. In this case, the machine is equipped with sensors that detect the magnetic field around the miner. The sensors are connected to a microprocessor which interprets the signals and communicates warning and stop commands to the machine. MSHA did not participate in the development of Matrix Design Group's proximity detection system for remote controlled continuous mining machines because Matrix did not request assistance.

At least 35 remote controlled continuous mining machines in underground coal mines in the United States are equipped with proximity detection systems. MSHA monitors the installation and development of these systems to maintain up-to-date information on the number of proximity detection systems being used and the capabilities of the various systems.

MSHA also evaluated the use of proximity detection systems in underground mines in the Republic of South Africa (South Africa). MSHA staff traveled to South Africa in April 2010 to observe the performance of several proximity detection systems, including the Strata Safety Products HazardAvert™ System that was developed in the United States. One of the mines visited began testing the Strata system in 2008 and, at the time of the MSHA visit, had equipped all mobile machines on three complete underground coal mine sections with the system. The mine is using the proximity detection system on remote controlled continuous mining machines, shuttle cars, roof bolting machines, feeder breakers, and load-haul-dump machines (scoops). In addition to the Strata system, MSHA also observed the Booyco Collision Warning System (CWS) being used on continuous mining machines. The mining operations, conditions, and machines in underground coal mines in South Africa are similar to those in underground coal mines in the United States. The South African mines that MSHA visited are room and pillar operations with approximately 10-foot high and 22-foot wide entries.

The Strata Safety Products HazardAvert™ System used in South Africa is similar to the HazardAvert™ System used in underground coal mines in the United States. The HazardAvert™ System for continuous mining machines provides two zones. When a miner is within the outer zone, an audible and visual signal is activated. When a miner is within the inner zone, machine movement is stopped. The miner-wearable component is incorporated into the cap lamp battery and includes a warning buzzer and flashing LED that clips to the hardhat.

The Booyco system, observed in South Africa, provides warning signals to miners and machine operators. It does not stop machine movement. There are two zones associated with the Booyco system. When a miner enters the outer zone, an audible and visual warning signal is provided to the miner working near the machine. When a miner enters the inner zone, an audible and visual warning signal is provided to both the miner and the machine operator. This system could be modified to stop machine movement. The Booyco system is not MSHA-approved and is not being used in the United States.

In 2004, MSHA initiated a safety campaign to raise the mining industry's awareness of pinning, crushing, and

striking hazards associated with remote controlled continuous mining machines. This safety campaign was targeted to the underground coal mining industry and included webcasts, special alerts, videos, bulletins, and inspector-to-miner instruction. There were no fatalities associated with continuous mining machines between 2005 and 2007 indicating the safety campaign may have had a positive impact on fatal accidents. However, pinning, crushing, and striking accidents continue to occur. Two fatalities in 2010 related to pinning, crushing, or striking accidents involving a continuous mining machine could have been prevented by using proximity detection systems.

The Agency published a Request for Information (RFI) on proximity detection systems in the **Federal Register** on February 1, 2010 (75 FR 5009). The comment period closed on April 2, 2010. MSHA received comments from: Mining associations; mining companies; manufacturers; and state, Federal, and an international government entity.

Comments addressed specific questions regarding function, application, training, costs, and benefits of proximity detection systems to reduce the risk of accidents. Some commenters stated that proximity detection systems are beneficial and can prevent pinning, crushing, and striking accidents. Commenters stated that conditions in the mining environment, including blocked visibility and limited space, or simply the lack of sight due to limited light, can cause an accident and that the only way to address these hazards is to equip mining vehicles with a proximity detection system. A commenter stated that, when it comes to safety, engineering barriers are required when the behavior of everyone, whether due to the lack of training or taking shortcuts, cannot be relied on. Several commenters stated that the technology needs further development and testing.

RFI comments related to specific provisions of the proposed rule are addressed in the section-by-section analysis.

B. Section-by-Section Analysis

The proposed rule would require underground coal mine operators to equip continuous mining machines (except full-face continuous mining machines) with proximity detection systems over an 18-month phase-in period.

1. Section 75.1732(a) Machines Covered

Proposed § 75.1732(a) would require operators to equip continuous mining machines (except full-face continuous mining machines) with a proximity detection system in accordance with the following dates: 3 months after August 31, 2011 for machines manufactured after August 31, 2011; and 18 months after August 31, 2011 for machines manufactured on or before August 31, 2011.

A commenter, in response to the RFI, stated that MSHA's approval process does not include an evaluation of the system's functional readiness to perform in the underground mine environment. This commenter indicated that only a handful of mines have operational experience with approved systems and that a thorough examination of the operational readiness of these systems must be undertaken to address safety issues before they are required. Several other commenters stated that proximity detection systems have not proven reliable and that more testing is needed. One of these commenters stated that establishing a set distance from a miner at which a machine would shut down needs further analysis due to its potential to force machine operators out of previously safe areas into potentially less safe areas in order to avoid shutdown.

In response to the RFI, a proximity detection system manufacturer stated that it has experience with proximity detection systems on remote controlled continuous mining machines in five coal mines in the United States and on machines in mines within South Africa and Australia. A representative of a South African mining company that uses this system on continuous mining machines stated in its comments that the system is very reliable. This South African mining company reported that it did not have a single reliability problem over a period of 18 months. A second proximity detection system manufacturer stated that its proximity detection system is installed on many types of underground mobile machines in Canada and Australia and that there has not been a serious injury or fatality reported on any machine using its proximity detection system. A coal mine operator and a third manufacturer commented jointly and stated that development of a proximity detection system for remote controlled continuous mining machines is still in the early stages and it is premature to consider rulemaking for other types of mobile underground equipment. However, this commenter also stated that applying proximity detection systems to all mobile machines should be a ''long-term goal'' that could provide safety benefits and that the coal mine operator plans to voluntarily equip its entire fleet of remote controlled continuous mining machines with proximity detection systems.

The proposed rule would require underground coal mine operators to equip continuous mining machines (except full-face continuous mining machines) with proximity detection systems. MSHA has determined that continuous mining machines expose miners to dangers when working in underground coal mines and that these machines have resulted in injuries and fatalities to miners. Of the 70 fatalities resulting from pinning, crushing, and striking accidents from 1984 through 2010 in underground coal mines, 30 were associated with a continuous mining machine. Use of proximity detection systems could have prevented these accidents and the fatalities by stopping continuous mining machine movement before miners were pinned, crushed, or struck by the machine.

Proposed § 75.1732(a) would not require underground coal mine operators to equip full-face continuous mining machines with a proximity detection system. A full-face continuous mining machine includes integral roof bolting equipment and develops the full width of the mine entry in a single cut, generally without having to change its location. Full-face continuous mining machines can be operated remotely or by an operator positioned in a compartment on the machine (on-board operator). Continuous mining machines that are not full-face machines are place-changing continuous mining machines because they must change places to cut the full width of an entry.

A commenter on the RFI stated that current proximity detection system designs should only apply to remote controlled continuous mining machines that are considered place-changing machines and not full-face continuous mining machines. This same commenter indicated that a proximity detection system for full-face continuous mining machines would require a significantly more complicated design to accommodate the miners who operate the roof and rib bolting equipment. Another commenter on the RFI stated that an MSHA standard could address all continuous mining machines except those with integral/satellite bolters (full-face continuous mining machines.)

After a review of comments, accident data, and Agency experience, MSHA is not proposing that proximity detection systems be required for full-face continuous mining machines since they present fewer hazards to miners. Full-face continuous mining machines involve less frequent place-changing and repositioning, resulting in fewer pinning, crushing, or striking hazards to

miners. MSHA is not aware of any fatal or nonfatal accidents involving either remote controlled or on-board operated full-face continuous mining machines that a proximity detection system could have prevented. Also, MSHA does not have experience with proximity detection systems on remote controlled or on-board operated full-face continuous mining machines.

Except for full-face continuous mining machines, the proposed rule would require proximity detection systems to be installed on both on-board operated and remote controlled continuous mining machines. Remote controlled continuous mining machines account for the greater number of fatalities. Operators not in an operator's compartment and miners working near the continuous mining machine are at risk from pinning, crushing, and striking hazards. More accidents are associated with remote controlled continuous mining machines because approximately 97% of continuous mining machines are remote controlled and because the machine operator is not protected from pinning, crushing, and striking accidents by an on-board operator's compartment. However, on-board operated continuous mining machines also present a pinning, crushing, and striking hazard to miners other than the operator and would be required to be equipped with proximity detection systems. On-board operated continuous mining machines were involved in 2 of the 30 fatalities that could have been prevented by use of a proximity detection system.

MSHA solicits comments on how full-face continuous mining machines should be addressed. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

The proposed rule would phase in the use of proximity detection systems on newly manufactured continuous mining machines and continuous mining machines in service on the publication date of the final rule over an 18-month period. The phase-in period is based on the availability of systems, the time necessary to process approvals for proximity detection systems, projected time needed to install systems, and MSHA and industry experience.

The Agency recognizes that it will take time for proximity detection system manufacturers, machine manufacturers, and mine operators to obtain approval under 30 CFR part 18. It will also take time for manufacturers and mine operators to produce and install proximity detection systems.

Several commenters on the RFI recommended that MSHA consider a phase-in approach with separate compliance dates addressing new equipment, rebuilt equipment, and equipment in service in underground mines. One commenter encouraged MSHA to proceed cautiously and to provide the time required to assure the development of reliable and effective systems. Another commenter stated that most machines will be retrofitted with proximity detection systems in a shop or during rebuild. A proximity detection system manufacturer stated that a proximity detection system can be installed and calibrated on a remote controlled continuous mining machine in one midnight shift.

MSHA has determined that three months would be an appropriate amount of time for operators to install proximity detection systems on continuous mining machines (except full-face continuous mining machines) that are manufactured after [the publication date of the final rule].

In selecting this three-month time frame, MSHA took into consideration the time period for the rulemaking, availability of three existing MSHA-approved proximity detection systems for continuous mining machines, the estimated number of continuous mining machines that would be replaced by newly manufactured machines during this period, and manufacturers' capacity to produce and install systems for these machines. The three-month time period allows mine operators some time to inform and train their workforce on proximity detection systems.

The proposed rule would provide an additional 15 months for operators to retrofit continuous mining machines, except full-face continuous mining machines, that are manufactured on or before the publication date of the final rule with proximity detection systems. MSHA estimates that there are 1,150 place-changing continuous mining machines in underground coal mines. These machines would need to be replaced by a new machine with a proximity detection system or retrofitted with a proximity detection system. MSHA has determined that 18 months would provide both operators and manufacturers with enough time to retrofit place-changing continuous mining machines manufactured on or before the publication date of the final rule with proximity detection systems. MSHA recognizes that these machines, which are in service when the final rule goes into effect, will need to be taken out of service for a period of time. The additional 15 months would allow mine operators to schedule the installation during planned rebuilds or scheduled maintenance and would allow mine operators some time to inform and train their workforce on proximity detection systems.

Continuous mining machines addressed in this proposal must be approved by MSHA as permissible equipment under existing regulations in 30 CFR part 18 before they can be used in underground coal mines. The machine manufacturer or the mine operator can obtain MSHA approval. Machine manufacturers with MSHA approvals may submit an application to MSHA's Approval and Certification Center (A&CC) to add a proximity detection system to their approval. MSHA projects that machine manufacturers would submit applications to allow all of their new and many of their older models to be equipped with proximity detection systems. In instances where the equipment manufacturer is no longer in business or chooses not to seek approval, the mine operator has the option to apply for a field modification or a district field change to equip the machines with a proximity detection system. A mine operator can either request a field modification through the A&CC or a field change through MSHA's District Offices.

MSHA permissibility approvals include both evaluation of the proximity detection systems and the addition of the systems to MSHA-approved continuous mining machines. MSHA offers an optional Proximity Detection Acceptance (PDA) program which allows a proximity detection system manufacturer to obtain MSHA acceptance for a proximity detection system (PDA Acceptance Number). This acceptance states that the proximity detection system has been evaluated under 30 CFR part 18 and is suitable for incorporation on an MSHA-approved machine. It permits the manufacturer or owner of a machine to add the proximity detection system to a machine by requesting MSHA to add the acceptance number to the machine approval. However, a proximity detection system manufacturer is not required to obtain a proximity detection system acceptance. MSHA could also approve a machine modification submitted by a continuous mining machine manufacturer or a field modification submitted by a mine operator that includes a complete evaluation of a proximity detection system that has not been evaluated under a PDA acceptance.

Based on conversations with manufacturers of the three MSHA-approved proximity detection systems,

MSHA estimates that together they can produce approximately 350 units per month. MSHA estimates that the manufacturers can increase production to about 400 to 600 units per month, if necessary, within approximately three to six months. MSHA determined that it would take approximately eight months to provide a sufficient number of units to equip approximately 1,150 place-changing continuous mining machines with proximity detection systems. However, the two phase-in periods are based on the time needed for: Providing sufficient numbers of systems; installing the systems on newly manufactured and existing machines; obtaining necessary MSHA approvals and test systems; and informing and training the workforce.

MSHA solicits comments on the proposed compliance dates. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

As the proximity detection systems are phased in, mine operators would be required to provide miners with new task training under existing part 48. MSHA intends that mine operators would address safety issues that might arise during the phase-in period, such as some machines being equipped with proximity detection systems while others are not, through existing new task training requirements. In addition, MSHA recently introduced a new initiative titled ''Safety Practices Around Shuttle Cars and Scoops in Underground Coal Mines.'' This outreach program includes training programs and best practices to encourage mine operators to train underground coal miners to exercise caution when working around mobile machines. Information regarding this initiative is available at: *http://www.msha.gov/focuson/watchout/watchout.asp.*

In response to the RFI, some commenters stated that miners will need task training when machines are equipped with a proximity detection system. Miners working near proximity detection systems would probably need to engage in different and unfamiliar machine operating procedures resulting from new work positions, machine movements, and new visual or auditory signals. Existing § 48.7(a) requires that miners assigned to new work tasks as mobile equipment operators shall not perform new work tasks until training has been completed. In addition, § 48.7(c) requires miners assigned a new task not covered in § 48.7(a) be instructed in the safety and health aspects and safe work procedures of the task prior to performing such task.

Miners must receive new task and equipment training on the proper functioning of a proximity detection system before operating or working near a machine equipped with a proximity detection system. New task training (which is separate from new miner training under existing § 48.5 and annual refresher training under existing § 48.8) must occur before miners operate machines equipped with a proximity detection system. New task training helps assure that miners have the necessary skills to perform new tasks prior to assuming responsibility for the tasks. Mine operators should assure that this training include hands-on training during supervised non-production activities. The hands-on training allows miners to experience how the systems work and to locate the appropriate work positions around machines. Based on Agency experience, the hands-on training is most effective when provided in miners' work locations. As required by existing § 48.7(a)(3) for new or modified machines and equipment, equipment and machine operators shall be instructed in safe operating procedures applicable to new or modified machines or equipment to be installed or put into operation in the mine, which require new or different operating procedures.

MSHA requests comments on the training of miners who use proximity detection systems or work near machines equipped with these systems. Comments should address the type of training, frequency of training, content of training, and which miners should be trained. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

2. Section 75.1732(b) Requirements for Proximity Detection Systems

Proposed § 75.1732(b) would address requirements for proximity detection systems.

Proposed paragraph (b)(1) would require that a proximity detection system cause a machine to stop no closer than three feet from a miner. This proposed requirement would prevent pinning, crushing, and striking accidents.

In the RFI, MSHA asked for comments on the size and shape of the area around machines that a proximity detection system monitors and how systems can be programmed and installed to provide different zones of protection depending on machine function. Some commenters stated that an effective proximity detection system should cause the machine to stop before a miner enters the hazardous area around the machine and a warning should be provided before the proximity detection system causes the machine to stop.

Some commenters stated that zone size should be determined using a risk assessment considering the speed at which the proximity detection system can alert the operator, the reaction time of the operator, and the number of people in the working area. Another commenter stated that work practices vary among mines so that one specified zone may not work for all mines. Another commenter stated that fixed zone sizes are used in the commenter's operations because using different zones of protection based on equipment function could confuse miners and zone sizes should be kept small to avoid nuisance alarms but not so small so as to allow a dangerous condition. One commenter stated that establishing a set distance from a miner at which a machine would shut down needs further analysis due to its potential to force machine operators out of previously safe areas into potentially less safe areas in order to avoid shutdown.

NIOSH has performed research on proximity detection systems. NIOSH has an Internet Web Page (*http://www.cdc.gov/niosh/mining/topics/topicpage58.htm*) that provides publications on proximity detection systems and technology. The publications address measurement and analysis issues related to the work positions of continuous mining machine operators, needs and practices of machine operators while controlling the machine, and the reasons for needing particular operational cues, machine-related injuries in and priorities for safety research, and operating speed assessments of underground mining equipment. Several other publications on this Web page discuss the application of proximity detection systems as engineering controls to prevent mining accidents.

In their comments on the RFI, NIOSH stated that the goal of a proximity detection system should be to prevent machine actions or situations that injure workers while not placing restrictions on how the workers do their jobs. NIOSH also stated that the total time required for performing proximity detection system functions, plus a safety factor, should be used to define the size of detection zones around machines. NIOSH stated that the total time required includes these components: (1) Detection of a potential victim; (2)

decision processing to determine if a collision-avoidance function is needed; (3) an initiation of the collision-avoidance function; and (4) implementation of the collision-avoidance function. NIOSH stated that any rulemaking should be performance-based.

MSHA's experience with testing and observing proximity detection systems indicates that causing a machine to stop no closer than three feet from a miner would provide an appropriate distance, or margin of safety, between a machine and a miner to prevent pinning, crushing, or striking hazards. In addition, MSHA consulted relevant published studies. A team of NIOSH researchers evaluated operator interactions with continuous mining machines and roof bolting machines. The researchers concluded that by maintaining a minimum 910 mm (3 ft) distance from the machine, continuous mining machine operators can substantially reduce their risk of being struck (Bartels, 2009). MSHA believes that this distance includes a margin of safety and is necessary to account for varying mining conditions, differences in the operating condition of machines, and variations in the positioning of miner-wearable components of the proximity detection system in relation to machines.

The proposed three-foot stopping requirement is consistent with MSHA's observations of operating proximity detection systems in an underground coal mine in South Africa. During MSHA's visit, staff observed that the proximity detection systems installed on continuous mining machines caused the machine to stop before getting closer than three feet from a miner. Prior to the introduction of proximity detection systems at their mines, the company's policy was that miners must maintain a minimum distance of three feet from all operating mobile machines.

Each of the three proximity detection systems approved for underground coal mines in the United States has a miner-wearable component. Because the location of the miner-wearable component is the point at which the systems measure distance, a part of the miner's body may be further from or closer to the machine when the miner-wearable component is exactly three feet from a machine. For these systems, MSHA intends that the three-foot distance be measured from the surface of the machine closest to the miner-wearable component. MSHA intends that the machine remain stopped (or will not move) while any miner is three feet or closer to the nearest surface of the machine.

One method a mine operator could use to determine that a proximity detection system will cause the machine to stop no closer than three feet from a miner is to suspend a miner-wearable component from the mine roof, move the machine towards the suspended component, and after the machine stops movement, measure the distance between the machine and the suspended component to check whether the three-foot distance has been met. MSHA recognizes that many factors would be considered when determining whether the proximity detection system will cause the machine to stop no closer than three feet from a miner. These factors, among others, include machine speed, slope of entries, and wet roadways.

MSHA considered proposing a performance-oriented requirement that would not specify a specific distance a machine must stop from a miner, *e.g.,* ''before contacting a miner.'' MSHA also considered proposing other specific stopping distances, *e.g.,* six feet from a miner but concluded that longer stopping distances may increase the frequency of machine shutdowns while offering little additional benefit to miners. MSHA solicits comments on the proposed three-foot stopping distance requirement and on other alternatives to this proposed provision. Comments should be specific and address how the requirement impacts miner safety. Comments should include safety benefits to miners, technological and economic feasibility considerations, and supporting data.

MSHA recognizes that there are different points that could be used to measure the proposed three-foot distance from a machine to a miner when the proximity detection system requires the miner to wear a component and solicits comments on the point at which the three-foot stopping distance should be measured. Comments should be specific and include suggested alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

The proposed rule would require that all machine movement be stopped when a miner gets closer than three feet except for the continuous mining machine operator when cutting coal or rock. It is important to note that the proposed exception would only apply when the machine operator is actually cutting coal or rock. Some current proximity detection systems on continuous mining machines are installed to stop machine tram movement and the conveyor swing function when the system is activated while permitting other machine movement, such as rotation of the cutter head and movement of the gathering arms. MSHA solicits comments on whether all movement should be stopped. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

The three MSHA-approved proximity detection systems have a miner-wearable component. These systems cannot detect a miner who is not wearing the component. The cost estimates for the miner-wearable components included in the Preliminary Regulatory Economic Analysis (PREA) are based on miners on the working section being equipped with these components. MSHA solicits comments on which miners working around continuous mining machines should be required to have a miner-wearable component. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

Proposed paragraph (b)(1)(i) would provide an exception for a miner who is in an on-board operator's compartment. Machines with an on-board operator will not function if the proximity detection system prevents machine movement when the operator is within three feet of the machine. One proximity detection system is currently designed to allow a miner to be in an on-board operator's compartment while assuring that miners outside the operator's compartment are protected. Proposed paragraph (b)(1)(i) would allow machines equipped with a proximity detection system to move if a miner occupies the operator's compartment. The proposed rule would require that continuous mining machines be stopped if any miner not in the operator's compartment is closer than three feet.

Commenters generally stated that machines with an on-board operator's compartment should have a proximity detection system that allows machines to function when the operator is in the operator's compartment. One commenter stated that a proximity detection system can include exclusion zones to allow mobile machines to move while a miner is in the exclusion zone but still protect other miners.

Proposed paragraph (b)(1)(ii) would provide an exception for a miner who is remotely operating a continuous mining machine while cutting coal or rock. In this case, the proximity detection system would be required to cause the

machine to stop before contacting the machine operator. The use of the term ''cutting coal or rock'' would not include situations where the cutter head is rotating but not removing coal or rock from the face.

In response to the RFI, one commenter stated that a remote controlled continuous mining machine that is tramming presents different hazards than one that is cutting coal. This commenter stated that the size and shape of the detection zone should be changed based on the function of the machine. Some commenters stated that zone sizes could depend on machine function (cutting or tramming). Several commenters suggested that protection zones should be largest when tramming machines and reduced protection zones are needed for certain mining operations such as cutting. Another commenter stated that the proximity detection system for a remote controlled continuous mining machine should keep all personnel at a safe distance from the periphery of the machine except for the operator who should be allowed to approach the machine at designated locations to perform cutting operations, such that if the operator fails to stay in the designated locations, the machine will immediately stop.

MSHA is not aware of a continuous mining machine fatal accident that occurred while the machine was cutting coal or rock. In all the 30 continuous mining machine fatal accidents from 1984 to 2010 which could have been prevented by proximity detection systems, the continuous mining machine was in the process of being moved (trammed) when the accident occurred. In addition, there are certain mining operations where the continuous mining machine operators get closer than within three feet of the machine in order to properly perform the required tasks (*e.g.,* turning crosscuts). In MSHA's experience, when a continuous mining machine is cutting coal or rock, the machine moves in a slower manner, which reduces the hazard. For these reasons, MSHA proposes to allow a continuous mining machine operator to be closer than three feet from the machine while cutting coal or rock; however, the proximity detection system would be required to stop machine movement before contacting the operator. The proximity detection system would be required to stop machine movement if a miner who is not remotely operating the continuous mining machine gets closer than three feet from the machine while the machine is cutting coal or rock. The proximity detection systems that MHSA observed in South Africa do not allow miners within three feet of a continuous mining machine while cutting coal or rock. However, these mines have larger entry dimensions than underground coal mines in the United States, which provides more room for machine operator positioning.

Proposed paragraph (b)(2) would require the proximity detection system to provide an audible or visual warning signal distinguishable from other signals, when the machine is five feet and closer to a miner.

In the RFI, MSHA asked for information on the most effective protection that proximity detection systems could provide. In response, some commenters stated that a proximity detection system should include a warning prior to causing the machine to stop movement. One commenter stated that proximity detection systems should include a range of escalating alerts depending on the proximity to a hazard.

Most proximity detection systems alert miners who get within a certain distance of a machine, before causing machine movement to stop. This provides an added margin of safety and is consistent with most standard safety practices. The Agency recognizes that the use of a proximity detection system that causes frequent machine stops can result in: frustration to miners; miners ignoring warnings; and can possibly lead to unsafe work practices. MSHA believes that an appropriate warning signal is necessary to optimize miner safety when using a proximity detection system.

Based on MSHA's experience, proximity detection systems in the United States provide an audible or visual warning signal when a miner is five feet and closer to a machine. The systems on continuous mining machines in South Africa provide an audible warning signal when a miner is closer than six feet to a machine. However, entries in the United States are typically narrower than those observed in South Africa, making a five-foot distance more appropriate and minimizing unnecessary warning signals. In MSHA's experience, an audible or visual warning signal provided when the machine is five feet and closer to a miner includes a necessary margin of safety and allows the miner an opportunity to be proactive and move away from the machine to avoid danger.

Consistent with proposed paragraph (b)(1)(i), proposed paragraph (b)(2)(i) would provide an exception to the warning signal for the miner who is in an on-board operator's compartment.

Consistent with proposed paragraph (b)(1)(ii), proposed paragraph (b)(2)(ii) would provide an exception to the warning signal for a miner who is remotely operating a continuous mining machine while cutting coal or rock. A five-foot warning signal would not improve safety in this case because the operator may be closer than five feet to the machine for the duration of the activity of cutting coal or rock. Under the proposed rule, the proximity detection system would be required to provide a warning signal when the machine is closer than five feet from miners who are not remotely operating a continuous mining machine while the machine is cutting coal or rock.

Proposed paragraph (b)(3) would require that a proximity detection system provide a visual signal on the machine that indicates the system is functioning properly.

Commenters in response to the RFI generally stated that a proximity detection system should include system diagnostics and indicate that the system is functioning properly. In its comments on the RFI, NIOSH stated that each proximity detection system should perform self-diagnostics to identify software or hardware problems.

The proposed visual signal would allow miners to readily determine that a proximity detection system is functioning properly. MSHA believes that a visual signal is preferable to provide feedback to the miner because, unlike an audible signal, it could not be obscured by surrounding noise. A light-emitting diode (LED) would be an acceptable visual signal.

Proposed paragraph (b)(4) would require that a proximity detection system prevent movement of the machine if the system is not functioning properly. However, as proposed, a system may allow machine movement so that if the system is not functioning properly, the machine can be moved if an audible or visual warning signal, distinguishable from other signals, is provided during movement. Such movement would be permitted only for purposes of relocating the machine from an unsafe location for repair.

Commenters in response to the RFI had different opinions on whether a proximity detection system should be permitted to override the shutdown feature to allow machine movement in a particular circumstance. One commenter stated that a proximity detection system must provide a continuous self-check capability so that if the system is not functioning properly, the machine cannot be operated; this same commenter stated that only an appointed person should

have the authority to override a proximity detection system. Several commenters stated that a proximity detection system should allow for temporary deactivation, such as an emergency override, in case a system is not functioning properly while a machine is under unsupported roof. Another commenter, however, stated that a proximity detection system should not have an override feature.

Proposed paragraph (b)(4) would allow machine movement so that if the proximity detection system is not functioning properly and is in an unsafe location, the machine can be moved if an audible or visual warning signal, distinguishable from other signals, is provided during movement. The proposed provision would allow a machine to be moved if it is not functioning properly and is in an unsafe location, such as under unsupported roof, to protect miners from hazards that could arise if the proximity detection system is not functioning properly and is in an unsafe location. Overriding the proximity detection system should only occur for the time necessary to move the machine to a safe location—for example, the time needed to move a continuous mining machine from under unsupported roof to an appropriate repair location. This movement would be allowed only to relocate the machine for safety reasons. The proposed provision to allow the machine to be moved would require an audible or visual warning signal, distinguishable from other signals, to caution miners when the machine is being moved from an unsafe location.

Proposed paragraph (b)(5) would require that a proximity detection system be installed to prevent interference with or from other electrical systems.

Some commenters in response to the RFI stated that interference of proximity detection systems with other mine electrical systems is a concern. However, manufacturers of the three approved proximity detection systems all stated that their systems do not have significant interference issues. A commenter stated that electromagnetic interference may prevent these systems from providing complete protection to miners. Several commenters stated that systems must be designed and tested for possible and known sources of interference before a requirement for proximity detection is issued. A commenter expressed concern that a proximity detection system may detonate explosives due to electromagnetic field interference.

Electrical systems, including proximity detection systems, used in the mine can adversely affect the function of other electrical systems. The interference results from electromagnetic interference (EMI). There have been instances of adverse performance of remote controlled systems, atmospheric monitoring systems, and cap lamps when a hand-held radio was operated nearby. Electromagnetic output of approved proximity detection systems is substantially lower than other mine electrical systems such as communication and atmospheric monitoring systems, and therefore, the likelihood of encountering interference issues is less.

The mine operator would be required to evaluate the proximity detection system and other electrical systems in the mine and take adequate steps to prevent adverse interference. Steps could include design considerations such as the addition of filters or providing adequate separation between electrical systems. The mine operator would also be required to take steps to prevent interference with any blasting circuits used in the mine.

Proposed paragraph (b)(6) would require that a proximity detection system be installed and maintained by a person trained in the installation and maintenance of the system. The proximity detection systems use advanced technology that often must be coordinated with machine electronics to ensure the system functions properly. MSHA believes this work should be performed by miners who are properly trained to understand the operation of the system and the proper installation techniques.

A commenter in response to the RFI stated that maintenance personnel and machine operators will need training to assure they understand proximity detection system functionality and any maintenance requirements. This commenter also stated that proper installation of a proximity detection system is critical for reliable performance. Another commenter said that a few hours of classroom instruction and approximately one hour of underground training for machine operators has proven adequate and that maintenance training requires about four hours.

Based on MSHA experience with testing of proximity detection systems, proper functioning of a proximity detection system is directly related to the quality of the installation and maintenance of the systems. Training helps assure that the person performing installation and maintenance of a proximity detection system understands the system well enough to perform tasks such as replacing and adjusting system components, adjusting software, and troubleshooting electrical connections.

Based on MSHA's limited experience with proximity detection systems on continuous mining machines in underground coal mines, MSHA anticipates that operators would assign miners to perform most maintenance activities, but representatives of the manufacturer may perform some maintenance. Also, based on Agency experience, operators would generally arrange for proximity detection system manufacturers to provide appropriate training to miners for installation and maintenance. Miners receiving training from manufacturers' representatives would, in most cases, provide training for other miners who become responsible for installation and maintenance duties at the mine. In MSHA's experience, many mines use the train-the-trainer concept for installation and maintenance activities related to certain mining equipment.

MSHA solicits comments on this proposed provision. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

3. Section 75.1732(c) Examination and Checking

Proposed § 75.1732(c) would address examination and checking of proximity detection systems.

Proposed paragraph (c)(1) would require that operators designate a person who must perform a visual check of machine-mounted components of the proximity detection system to verify that components are intact, that the system is functioning properly, and take action to correct defects: (i) At the beginning of each shift when the machine is to be used; (ii) immediately prior to the time the machine is to be operated if not in use at the beginning of a shift; or (iii) within one hour of a shift change if the shift change occurs without an interruption in production.

Several commenters stated that a proximity detection system should be checked at the beginning of each shift to verify it is functioning properly. NIOSH commented that the machine operator should have a set of procedures to assess the system at the start of each shift.

A visual check of machine-mounted components of the proximity detection system to verify that components are intact would help assure that proximity detection systems are functioning properly before machines are operated. Some components of a proximity

detection system may be mounted on the outer surfaces of a machine and could be damaged when the machine contacts a rib or heavy material falls against the machine. An appropriate check would include a visual inspection to identify if machine-mounted components are damaged and observing that the system provides a visual signal and that the system is functioning properly so that action can be taken to correct defects.

The proposed visual check would supplement the proposed system design requirement in proposed paragraph (b)(4) that would require that the proximity detection system prevent movement of the machine if the system is not functioning properly. The system may not be able to detect all types of damage such as detached field generators which could affect proper function. Surface-mounted components can be exposed to harsh conditions such as contact with ribs and other machines. The proposed visual check would help assure that proximity detection system components are oriented correctly and mounted properly on the machine.

In most cases, MSHA anticipates that the person making the on-shift dust control parameter check required under existing § 75.362(a)(2) would also make the proposed visual check of the proximity detection system on the continuous mining machine. The person making the on-shift dust control parameter check inspects the water sprays, bits, and lugs on the continuous mining machine and would likely be the designated person making the proposed visual check of the machine-mounted components of the proximity detection system. MSHA also anticipates that both checks would be performed at the same time.

Proposed paragraph (c)(2) would require that miner-wearable components be checked for proper operation at the beginning of each shift that the component is to be used and that defects would be required to be corrected before the component is used.

Several commenters on the RFI stated that the miner-wearable component should be checked at the beginning of each shift and that minimal training is necessary for miners to learn this task.

The proposed requirement that miner-wearable components be checked for proper operation at the beginning of each shift that the component is to be used would help assure that the miner is protected before getting near a machine. MSHA anticipates that under the proposed rule, a miner would visually check the miner-wearable component to see that it is not damaged and has sufficient power to work for the duration of the shift. MSHA intends that this check would be similar to the check that a miner performs of a cap lamp prior to the beginning of a shift. Mine operators are required to provide new task training, under part 48 of 30 CFR, for miners who would be checking the components. If any defect is found, the proposal would require it to be corrected before using the component. Correcting defects before the component is used is intended to assure the system functions properly and helps prevent miners' exposure to pinning, crushing, and striking hazards.

Proposed paragraph (c)(3) would require that the operator designate a qualified person under existing § 75.153 Electrical work; qualified person, to examine proximity detection systems at least every seven days for the requirements in proposed paragraphs (b)(1)–(b)(5) of this section. Defects in the proximity detection system would be required to be corrected before the machine is returned to service.

Several commenters stated that a trained (qualified maintenance) person should examine the basic functionality of the proximity detection system weekly by checking zone sizes, system communication, and warning signals. A commenter stated that the proximity detection system must be examined at regular maintenance intervals and each time there has been a modification to the machines or working environment. Another commenter stated that the person evaluating a proximity detection system should fully understand what the system is intended to do and how electromagnetic field technology operates. This same commenter stated that a properly designed proximity detection system should not require periodic testing.

Proximity detection systems are comprised of complex electrical components. The requirement under proposed paragraph (c)(3) would help assure that the person examining the proximity detection system at least every seven days has the knowledge and skills to understand the purpose of every component, and the hazards associated with failure of the system. The examination in proposed paragraph (c)(3) would be more comprehensive than the checks under proposed paragraphs (c)(1) and (c)(2) of this section. MSHA anticipates that the proposed examination would occur while the machine is not in service. MSHA anticipates the examination of machines with a proximity detection system would be performed in conjunction with the examination requirements under existing § 75.512 Electric equipment; examination, testing and maintenance. The examination in proposed paragraph (c)(3), like the examination required under existing § 75.512, would assure that the electric equipment has not deteriorated into an unsafe condition and the equipment operates properly. The designated qualified person would examine the proximity detection system for the requirements in proposed paragraphs (b)(1) through (b)(5).

Under the proposal, defects in the proximity detection system would be required to be corrected before the machine is returned to service. Correcting defects before the machine is returned to service assures the system is functioning properly and helps prevent miners' exposures to pinning, crushing, and striking hazards.

MSHA solicits comments on the requirements in proposed paragraph (c) of this section. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

4. Section 75.1732(d) Certification and Records

Proposed § 75.1732(d) would address certification and records requirements for proximity detection systems.

Proposed paragraph (d)(1) would require that: (1) The operator make a certification at the completion of the check required under proposed paragraph (c)(1) of this section; (2) a certified person specified under existing § 75.100 certify by initials, date, and time that the check was conducted; and (3) defects found as a result of the check in (c)(1) of this section, including corrective actions and date of corrective action, be recorded. Making records of defects and corrective actions provides a history of the defects documented at the mine to alert miners, representatives of miners, mine management and MSHA of recurring problems. The certification in proposed paragraph (c)(1) would assure compliance and miners on the section could confirm that the required check was made. In most cases, MSHA anticipates that the person making the certification required under existing § 75.362(g)(2) would also make this certification. MSHA also anticipates that the certifications would be performed at the same time.

Consistent with proposed paragraph (d)(1), proposed paragraph (d)(2) would require that defects found as a result of the check in (c)(2) of this section, including corrective actions and date of corrective action, be recorded. A certification of the check for proper operation of miner-wearable

components that would be required under proposed paragraph (c)(2) is not necessary because miners can readily check to confirm that the component is working.

MSHA solicits comments on whether the defects and corrective actions in proposed paragraphs (d)(1) and (d)(2) should be recorded. Comments are requested on whether the check for the miner-wearable component that would be required in proposed paragraph (c)(2) should be certified. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

Proposed paragraph (d)(3) would require that: (1) The operator make and retain records at the completion of the examination under proposed paragraph (c)(3) of this section; (2) the qualified person conducting the examination would record and certify by signature and date that the examination was conducted; and a description of any defects and corrective actions and the date of corrective actions would be recorded. Making records of defects and corrective actions would provide a history of the defects documented at the mine to alert miners, representatives of miners, mine management and MSHA of recurring problems. MSHA believes that this proposed certification is necessary to assure compliance.

Proposed paragraph (d)(4) would require that the operator make and retain records of the persons trained in the installation and maintenance of proximity detection systems under proposed paragraph (b)(6) of this section. MSHA believes that this proposed record is necessary to assure that there is evidence that persons assigned to install and perform maintenance on proximity detection systems have been trained. MSHA does not anticipate that mine operators would need to make and retain records of training for proximity detection system manufacturers' employees who install or perform maintenance on their systems.

Proposed paragraph (d)(5) would require the operator to maintain records in a secure book or electronically in a secure computer system not susceptible to alteration. The records of checks, examinations, repairs, and training required under proposed paragraphs (d)(1)–(d)(4) of this section would be required to be in a book designed to prevent the insertion of additional pages or the alteration of previously entered information in the record. Based on MSHA's experience with other safety and health records, the Agency believes that records should be maintained so that they cannot be altered. In addition, electronic storage of information and access through computers is increasingly a common business practice in the mining industry. This proposed provision would permit the use of electronically stored records provided they are secure, not susceptible to alteration, able to capture the information and signatures required, and are accessible to the representative of miners and MSHA. MSHA believes that electronic records meeting these criteria are practical and as reliable as paper records. MSHA also believes that once records are properly completed and reviewed, mine management can use them to evaluate whether the same conditions or problems, if any, are recurring, and whether corrective measures are effective. Care must be taken in the use of electronic records to assure that the secure computer system will not allow information to be overwritten after being entered.

Proposed paragraph (d)(6) would require that the operator retain records for at least one year and make them available for inspection by authorized representatives of the Secretary and representatives of miners. This would apply to the records required under proposed paragraphs (d)(1)–(d)(4) of this section. MSHA believes that keeping records for one year provides a history of the conditions documented at the mine to alert miners, representatives of miners, mine management, and MSHA of recurring problems.

MSHA solicits comments on the requirements in proposed paragraph (d) of this section. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

5. Section 75.1732(e) New Technology

Proposed § 75.1732(e) would provide that mine operators or manufacturers may apply to MSHA for acceptance of a proximity detection system that incorporates new technology. It would provide that MSHA may accept a proximity detection system if it is as safe as those which meet the requirements of this proposed rule.

NIOSH indicated in its comments on the RFI that it is in the process of developing a prototype system that pinpoints the location of the operator, or other workers, in the proximity of a remote controlled continuous mining machine. By doing so, the system is permitted to make decisions, such as disabling specific movements of the machine, while allowing the machine to continue to operate.

Consistent with MSHA's approach to new technology under existing 30 CFR part 7 Testing by applicant or third party, and existing 30 CFR 18.20(b), this proposed provision would allow for proximity detection systems that include improved technological capability.

This proposed provision would permit MSHA to consider proximity detection technology that may not meet the provisions in this proposal but that does meet the Agency's intent for reducing pinning, crushing, and striking accidents. For example, if a manufacturer develops a technology that can assure at least the same degree of protection as would be provided by this proposal, MSHA could consider such a system under this proposed provision.

In order to install a proximity detection system that does not conform to the requirements in this proposed rule, a mine operator or manufacturer would have to apply to the Chief of the A&CC, 765 Technology Drive, Triadelphia, West Virginia 26059. The mine operator or manufacturer would have to provide the rationale for requesting acceptance of a system. The A&CC would evaluate the proximity detection system to determine if it is as safe as a system meeting the requirements of this proposed rule. The evaluation might include an assessment of the technology used; the reliability of the system; the ability to stop movement of the machine before pinning, crushing, or striking a miner; the capability of providing early warning notification before stopping movement; the ability of the system to work while protecting multiple miners; and an assessment of the system's compatibility with other electrical systems in the mine.

At the conclusion of the A&CC evaluation, the Center Chief would issue a letter to the mine operator or manufacturer stating that the system is as safe as a system meeting the requirements of this proposed rule or explain why the system was found not acceptable. This letter would include any conditions of use that must be maintained to assure appropriate safety. Proposed § 75.1732(e) would apply when a mine operator wants to use a new technology proximity detection system.

MSHA solicits comments on this proposed provision. Comments should be specific and include alternatives, rationale for suggested alternatives, safety benefits to miners, technological and economic feasibility considerations, and supporting data.

III. Preliminary Regulatory Economic Analysis

A. Executive Orders (E.O.) 12866 and 13563

Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. To comply with these Executive Orders, MSHA has prepared a Preliminary Regulatory Economic Analysis (PREA) for the proposed rule. The PREA contains supporting data and explanation for the summary materials presented in this preamble, including the covered mining industry, costs and benefits, feasibility, small business impacts, and paperwork. The PREA can be accessed electronically at *http://www.msha.gov/REGSINF5.HTM* or *http://www.regulations.gov.* A copy of the PREA can be obtained from MSHA's Office of Standards, Regulations and Variances at the address in the **ADDRESSES** section of this preamble. MSHA requests comments on all estimates of costs and benefits presented in this preamble and in the PREA, and on the data and assumptions the Agency used to develop estimates.

Under E.O. 12866, a significant regulatory action is one meeting any of a number of specified conditions, including the following: Having an annual effect on the economy of $100 million or more, creating a serious inconsistency or interfering with an action of another agency, materially altering the budgetary impact of entitlements or the rights of entitlement recipients, or raising novel legal or policy issues. MSHA has determined that this proposed rule would be a significant regulatory action because it raises novel legal and policy issues.

B. Population at Risk

The proposed rule would apply to all underground coal mines in the United States. For the 12 months ending January 2010, there were 424 underground coal mines employing approximately 47,000 miners and contractors (excluding office workers). MSHA estimates that total 2009 underground coal revenue was $18.5 billion.

C. Benefits

The proposed rule would significantly improve safety protections for underground coal miners by reducing their risk of being crushed, pinned, or struck by continuous mining machines.

MSHA reviewed the Agency's investigation reports for all powered haulage and machinery accidents that occurred during the 1984 through 2010 (27 years) period and determined that the use of proximity detection systems could have prevented 30 fatalities (1 per year) and 220 non-fatal injuries (8 per year) involving pinning, crushing, or striking accidents with mobile machines. This count of fatalities and injuries from pinning, crushing, or striking accidents excludes fatalities and injuries that could not have been prevented by proximity detection systems on continuous mining machines such as when a roof or rib fall pins a miner against a mobile machine or a mobile machine strikes and pushes another machine into a miner. Based on MSHA's historical data, MSHA also estimates that approximately two percent of the non-fatal injuries would be permanent partial or total disability injuries.

To estimate the monetary values of the reductions in fatalities and non-fatal injuries, MSHA performed an analysis of the imputed value of injuries and fatalities prevented based on a willingness-to-pay approach. This approach relies on the theory of compensating wage differentials (*e.g.,* the wage premium paid to workers to accept the risk associated with various jobs) in the labor market. A number of studies have shown a correlation between higher job risk and higher wages, suggesting that employees demand monetary compensation in return for incurring a greater risk of injury or fatality.

Viscusi & Aldy (2003) conducted an analysis of several studies (*i.e.*, meta-analysis) that use a willingness-to-pay methodology to estimate the imputed value of life-saving programs. This meta-analysis found that each fatality prevented was valued at approximately $7 million and each non-fatal injury was valued at approximately $50,000 in 2000 dollars. Using the GDP Deflator (U.S. Bureau of Economic Analysis, 2010), this yields an estimate in 2009 dollars of $8.7 million for each fatality prevented and $62,000 for each non-fatal injury prevented. MSHA is using the $8.7 million estimate for the value of a fatality prevented and $62,000 for each case of a non-fatal injury prevented (other than permanent disability). This value of a statistical life (VSL) estimate is within the range of the substantial majority of such estimates in the literature ($1 million to $10 million per statistical life), as discussed in OMB Circular A–4 (OMB, 2003).

Some of the pinning, crushing, or striking accidents caused permanent disability. Given the significant life-changing consequences of a permanent partial or total disability, MSHA does not believe that using the value estimated for a typical non-fatal injury is appropriate. Instead, MSHA based the value of a permanent partial or total disability prevented on the work of Magat, Viscusi, and Huber (1996), which estimated values for both a non-fatal lymph cancer prevented and a non-fatal nerve disease prevented. The Occupational Safety and Health Administration (OSHA) used this approach in the Final Economic Analysis (FEA) supporting its hexavalent chromium final rule, and the Environmental Protection Agency (EPA) used this approach in its Stage 2 Disinfectants and Disinfection Byproducts water rule (EPA, 2003).

Although permanent partial or total disabilities are neither non-fatal cancers nor nerve diseases, MSHA believes that they have a similar impact on the quality of life and would thus result in similar valuations. The Magat, Viscusi & Huber (1996) study estimates the value of preventing a non-fatal lymph cancer at 58.3 percent of the value of preventing a fatality. Similarly, they estimate the value of preventing a non-fatal nerve disease at 40.0 percent of the value of preventing a fatality. Of the two diseases valued in this study, MSHA believes that a disability resulting from injury more closely resembles the consequences of a nerve disease than the consequences of a non-fatal cancer. For example, loss of strength, inability to move easily, and constant pain are three main consequences of nerve disease that are similar to major consequences caused by a disability from a pinning, crushing, or striking injury. Accordingly, MSHA estimates the value of preventing a permanent disability as approximately equal to the value of preventing a nerve disease. MSHA estimates the value of a permanent partial or total disability prevented to be $3.5 million ($3.5 million = 40 percent of $8.7 million). MSHA solicits comments on its monetized value for permanent disability injuries.

Although MSHA is using the willingness-to-pay approach as the basis for monetizing the expected benefits of the proposed rule, the Agency does so with several reservations, given the methodological difficulties involved in

estimating the compensating wage differentials (Hintermann, Alberini, and Markandya, 2008). Furthermore, these estimates pooled across different industries may not capture the unique circumstances faced by coal miners. For example, some have suggested that VSL models be disaggregated to account for different levels of risk, as might occur in coal mining (Sunstein, 2004). In addition, coal miners may have few employment options and in some cases only one local employer. These near-monopsony or monopsony labor market conditions may depress wages below those in a more competitive labor market.

MSHA recognizes that monetizing the value of a statistical life is difficult and involves uncertainty and imprecision. In the future, MSHA plans to work with other agencies to refine the approach taken in this proposed rule.

MSHA estimates that the annual benefits from the proposed rule would be $1.6 million in the first year, increase to $10.7 million by the third year, and remain at $10.7 million every year thereafter (see Table 4).

MSHA developed the estimates in Table 4 by multiplying the number of fatalities and non-fatal injuries that would be prevented by the proposed rule by the monetized value of each adverse effect [$124,208 for a non-fatal injury ($0.9818 \times \$62{,}000 + 0.0182 \times \$3{,}480{,}000$) and $8.7 million for a fatality].

TABLE 4—MONETIZED ANNUAL VALUE OF FATALITIES AND NON-FATAL INJURIES PREVENTED BY THE PROPOSED RULE

[2009 Dollars]

Year	Benefit from preventing non-fatal injuries	Benefit from preventing fatalities	Total benefit
Year 1	$151,810	$1,450,000	$1,601,810
Year 2	809,652	7,733,333	8,542,985
Years 3+	1,012,065	9,666,667	10,678,732

More detailed information about how MSHA estimated benefits is available in the Preliminary Regulatory Economic Analysis (PREA) supporting this proposed rule. The PREA is available on MSHA's Web site, at *http://www.msha.gov/REGSINF5.HTM* and *http://www.regulations.gov*.

D. Compliance Costs

This section presents MSHA's estimates of costs that would be incurred by underground coal operators to comply with the proposed rule. These costs are based on the assessment by MSHA staff of the most likely actions that would be necessary to comply with the proposed rule. MSHA estimates that the present value of the capital costs of the proposed rule over the 18 month phase-in period discounted at a 7 percent rate would be $36.3 million.

The yearly costs would gradually increase from $4.1 million in the first year to $8.2 million in the second year and every year thereafter, as the requirements are phased in. See Table 5.

TABLE 5—SUMMARY OVER THREE YEARS OF PHASED-IN CAPITAL COST, ANNUALIZED CAPITAL COST, ANNUAL COST, AND YEARLY COST OF PROPOSED RULE

Year	One-time cost of newly phased-in PDS	Annualized one-time cost of newly phased-in PDS [a]	Annual cost of newly phased-in PDS	Yearly cost of previously phased-in PDS	Yearly cost [b]
Year 1	$15,934,628	$2,897,443	$1,228,635	$0	$4,126,078
Year 2	21,793,850	3,094,727	972,001	4,126,078	8,192,806
Years 3+	0	0	0	8,192,806	8,192,806

[a] Annualized One-Time Cost is Capital Cost amortized at a 7 percent discount rate.

[b] Yearly Cost is the sum of Annualized One-Time Cost of Newly Phased-In PDS, Annual Cost of Newly Phased-In PDS, and Yearly Cost of Previously Phased-In PDS.

E. Net Benefits

This section presents a summary of estimated benefits and costs of the proposed rule for informational purposes only. Under the Mine Act, MSHA is not required to use estimated net benefits as the basis for its decision. The estimated yearly costs exceed the estimated yearly benefits in the first year, but in the second and subsequent years the expected benefits exceed the expected cost. However, MSHA does not believe that this presents a complete indication of the net benefits of the proposed rule (see Table 6). The Agency anticipates several benefits from the proposed rule which were not quantified due to data limitations. For example, MSHA anticipates that the proposed rule would result in additional savings to mine operators by avoiding the production delays typically associated with mine accidents. Pinning, crushing, or striking accidents can disrupt production at a mine during the time it takes to remove the injured miners, investigate the cause of the accident, and clean up the accident site. Such delays can last for a shift or more. Factors such as lost production, damaged equipment, and other miscellaneous expenses could result in significant costs to operators; however, MSHA has not quantified these savings due to the imprecision of the data.

TABLE 6—CUMULATED BENEFITS, COSTS, AND NET BENEFITS (NET COSTS) BY YEAR

[2009 Dollars]

Year	Yearly benefits	Yearly costs	Net benefits (net costs)
Year 1	$1,601,810	$4,126,078	($2,524,269)
Year 2	8,542,985	8,192,806	350,179
Years 3+	10,678,732	8,192,806	2,485,926

IV. Feasibility

MSHA has concluded that the requirements of the proposed rule are both technologically and economically feasible, and that the 18 month phase-in period would facilitate implementation of the proposed rule.

A. Technological Feasibility

MSHA concludes that the proposed rule is technologically feasible. Mine operators are capable of equipping continuous mining machines with a proximity detection system in accordance with the compliance dates. The technology necessary to perform the proximity detection function required by the proposed rule on continuous mining machines already exists and is commercially available for underground coal mines.

MSHA has experience with manufacturers of proximity detection systems in the United States and mine operators who have installed proximity detection systems on continuous mining machines in underground coal mines. MSHA has approved three proximity detection systems under existing regulations for permissibility in 30 CFR part 18, and at least 35 continuous mining machines equipped with proximity detection systems are operating in underground coal mines in the United States. MSHA has tested and observed proximity detection systems providing warning and shutdown activation as expected on continuous mining machines in several underground coal mines. MSHA has also observed continuous mining machines equipped with proximity detection systems in South Africa and reviewed comments on the RFI stating that proximity detection systems are used in other countries.

The process of equipping continuous mining machines with proximity detection systems takes time to complete. MSHA would provide operators sufficient time to equip these machines and train miners.

B. Economic Feasibility

MSHA has traditionally used a revenue screening test—whether the yearly compliance costs of a regulation are less than 1 percent of revenues, or are negative (*e.g.*, provide net cost savings)—to establish presumptively that compliance with the regulation is economically feasible for the mining industry. Based upon this test, MSHA has concluded that the requirements of the proposed rule would be economically feasible. For the purpose of this analysis MSHA analyzed the impact of the costs in the second year, as this year represents the yearly cost after all of the requirements of the proposed rule would be in effect.

The yearly compliance cost to underground coal mine operators beginning in the second year would be $8.2 million. This represents approximately 0.04 percent of total annual revenue of $18.5 billion ($8.2 million costs/$18.5 billion revenue) for all underground coal mines. Since the estimated compliance cost is below one percent of estimated annual revenue, MSHA concludes that compliance with the provisions of the proposed rule would be economically feasible for the underground coal industry.

V. Regulatory Flexibility Act and Small Business Regulatory Enforcement Fairness Act

Pursuant to the Regulatory Flexibility Act (RFA) of 1980, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), MSHA has analyzed the compliance cost impact of the proposed rule on small entities. Based on that analysis, MSHA certifies that the proposed rule would not have a significant economic impact on a substantial number of small entities in terms of compliance costs. Therefore, the Agency is not required to develop an initial regulatory flexibility analysis.

The factual basis for this certification is presented in full in Chapter VII of the PREA and in summary form below.

A. Definition of a Small Mine

Under the RFA, in analyzing the impact of a rule on small entities, MSHA must use the Small Business Administration's (SBA's) definition for a small entity, or after consultation with the SBA Office of Advocacy, establish an alternative definition for the mining industry by publishing that definition in the **Federal Register** for notice and comment. MSHA has not established an alternative definition, and is required to use SBA's definition. The SBA defines a small entity in the mining industry as an establishment with 500 or fewer employees.

MSHA has also examined the impact of the proposed rule on mines with fewer than 20 employees, which MSHA and the mining community have traditionally referred to as ''small mines.'' These small mines differ from larger mines not only in the number of employees, but also in economies of scale in material produced, in the type and amount of production equipment, and in supply inventory. Therefore, their costs of complying with MSHA's rules and the impact of the agency's rules on them will also tend to be different.

This analysis complies with the requirements of the RFA for an analysis of the impact on ''small entities'' while continuing MSHA's traditional definition of ''small mines.''

B. Factual Basis for Certification

MSHA's analysis of the economic impact on ''small entities'' begins with a ''screening'' analysis. The screening compares the estimated costs of the proposed rule for small entities to their estimated revenues. When estimated costs are less than one percent of estimated revenues (for the size categories considered), MSHA believes it is generally appropriate to conclude that there is no significant economic impact on a substantial number of small entities. If estimated costs are equal to or exceed one percent of revenues, further analysis may be warranted.

Revenue for underground coal mines is derived from data on coal prices and tonnage. The average open market U.S. sales price of underground coal for 2009 was $55.77 per ton. This average price of underground coal for 2009 is from the Department of Energy (DOE), Energy Information Administration (EIA), *Annual Coal Report 2009,* October 2010, Table 28.

Total underground coal production in 2009 was approximately 5.2 million tons for mines with 1–19 employees. Multiplying tons by the 2009 price per ton, 2009 underground coal revenue

was $287 million for mines with 1–19 employees. Total underground coal production in 2009 was approximately 242 million short tons for mines with 1–500 employees. Multiplying tons by the 2009 price per ton, 2009 underground coal revenue was $13.5 billion for mines with 1–500 employees. Total underground coal production in 2009 was approximately 332 million tons. Multiplying tons by the 2009 price per ton, total estimated revenue in 2009 for underground coal production was $18.5 billion.

For the purpose of this analysis MSHA analyzed the potential impact of the costs in the second year, as this year represents the yearly cost of the proposed rule after all of the requirements would be in effect. The estimated yearly cost of the proposed rule for underground coal mines with 1–19 employees is approximately $0.7 million beginning in the second year, which represents approximately 0.24 percent of annual revenues. MSHA estimates that some mines might experience costs somewhat higher than the average per mine in their size category while others might experience lower costs.

When applying SBA's definition of a small mine, the estimated yearly cost of the proposed rule for underground coal mines with 1–500 employees is approximately $7.5 million beginning in the second year, which represents approximately 0.06 percent of annual revenue.

Based on this analysis, MSHA has determined that the proposed rule would not have a significant economic impact in terms of compliance costs on a substantial number of small underground coal mines. MSHA has certified that the proposed rule would not have a significant impact on a substantial number of small mining entities, as defined by SBA. MSHA has provided, in the PREA accompanying this proposed rule, a complete analysis of the proposed cost impact on this category of mines.

VI. Paperwork Reduction Act of 1995

A. Summary

In the first three years the proposed rule would be in effect, the mining community would incur 2,582 annual burden hours with related annual burden costs of approximately $99,460, and other annual costs related to the information collection package of approximately $18,517.

B. Procedural Details

The information collection package for this proposed rule has been submitted to OMB for review under 44 U.S.C. 3504, paragraph (h) of the Paperwork Reduction Act (PRA) of 1995, as amended. For a detailed summary of the burden hours and related costs by provision, see the information collection package accompanying this proposed rule. A copy of the information collection package can be obtained from *http://www.msha.gov/regspwork.htm* or *http://www.regulations.gov* on the day following publication of this notice in the **Federal Register** or from the Department of Labor by electronic mail request to Michel Smyth at *smyth.michel@dol.gov* (e-mail) or (202) 693–4129 (voice) or Roslyn Fontaine at *fontaine.roslyn@dol.gov* or by phone request to (202) 693–9440 (voice).

MSHA requests comments to:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the Agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

Comments on the information collection requirements should be sent to both OMB and MSHA. Addresses for both offices can be found in the **ADDRESSES** section of this preamble. The Department of Labor notes that, under the PRA, affected parties do not have to comply with the information collection requirements in § 75.1732 until the Department of Labor publishes a notice in the **Federal Register** that they have been approved by the Office of Management and Budget (OMB). A delayed implementation of information collection requirements would not affect the implementation of the underlying substantive requirements.

The total information collection burden is summarized as follows:

Title of Collection: Proximity Detection Systems.

OMB Control Number: 1219–NEW NUMBER.

Affected Public: Private Sector-Businesses or other for-profits.

Estimated Number of Respondents: 433 respondents.

Estimated Number of Responses: 565,613 responses.

Estimated Annual Burden Hours: 2,582 hours.

Estimated Annual Cost Related to Burden Hours: $99,460.

Estimated Other Annual Costs Related to the Information Collection Package: $18,517.

VII. Other Regulatory Considerations

A. The Unfunded Mandates Reform Act of 1995

MSHA has reviewed the proposed rule under the Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1501 *et seq.*). MSHA has determined that the proposed rule would not include any Federal mandate that may result in increased expenditures by State, local, or Tribal governments; nor would it increase private sector expenditures by more than $100 million in any one year or significantly or uniquely affect small governments. Accordingly, the Unfunded Mandates Reform Act of 1995 requires no further Agency action or analysis.

MSHA estimates that the costs of the rule would vary by year, because of the different phase-in periods. The cost within each year is the sum of one-time costs of newly phased-in proximity detection systems and the annual cost of all phased-in systems. MSHA estimates the rule would cost approximately: $17.2 million ($15,934,628 + $1,228,635) in the first year, $24 million ($21,793,850 + $1,228,635 + $972,001) in the second year, and $2.2 million ($1,228,635 + $972,001) in each subsequent year. Since the proposed rule would not cost over $100 million in any one year, the proposed rule would not be a major rule under the Unfunded Mandates Reform Act of 1995.

B. Executive Order 13132: Federalism

The proposed rule does not have ''federalism implications'' because it would 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.'' Accordingly, under E.O. 13132, no further Agency action or analysis is required.

C. The Treasury and General Government Appropriations Act of 1999: Assessment of Federal Regulations and Policies on Families

Section 654 of the Treasury and General Government Appropriations

Act of 1999 (5 U.S.C. 601 note) requires agencies to assess the impact of Agency action on family well-being. MSHA has determined that the proposed rule would have no effect on family stability or safety, marital commitment, parental rights and authority, or income or poverty of families and children. Accordingly, MSHA certifies that this proposed rule would not impact family well-being.

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

The proposed rule would not implement a policy with takings implications. Accordingly, under E.O. 12630, no further Agency action or analysis is required.

E. Executive Order 12988: Civil Justice Reform

The proposed rule was written to provide a clear legal standard for affected conduct and was carefully reviewed to eliminate drafting errors and ambiguities, so as to minimize litigation and undue burden on the Federal court system. Accordingly, the proposed rule would meet the applicable standards provided in section 3 of E.O. 12988, Civil Justice Reform.

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

The proposed rule would have no adverse impact on children. Accordingly, under E.O. 13045, no further Agency action or analysis is required.

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

This proposed rule does not have ''Tribal implications'' because it would not ''have substantial direct effects on one or more Indian Tribes, on the relationship between the Federal government and Indian Tribes, or on the distribution of power and responsibilities between the Federal government and Indian Tribes.'' Accordingly, under E.O. 13175, no further Agency action or analysis is required.

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

Executive Order 13211 requires agencies to publish a statement of energy effects when a rule has a significant energy action that adversely affects energy supply, distribution or use. MSHA has reviewed this proposed rule for its energy effects because the proposed rule would apply to the underground coal mining sector. Because this proposed rule would result in maximum yearly costs of approximately $8.2 million to the underground coal mining industry, relative to annual revenues of $18.5 billion in 2009, MSHA has concluded that it would not be a significant energy action because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Accordingly, under this analysis, no further Agency action or analysis is required.

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

MSHA has reviewed the proposed rule to assess and take appropriate account of its potential impact on small businesses, small governmental jurisdictions, and small organizations. MSHA has determined and certified that the proposed rule would not have a significant economic impact on a substantial number of small entities.

VIII. References

Bartels, J.R., D.H. Ambrose, S.G. Gallagher. ''Analyzing Factors Influencing Struck-By Accidents of a Moving Mining Machine by Using Motion Capture and DHM Simulations,'' *SAE Int J Passeng Cars, Electron Electr Syst,* 1(1):559–604, April 2009.

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Ruff, TM. ''Recommendations for evaluating and implementing proximity warning systems on surface mining equipment,'' Spokane, WA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2007–146, RI 9672, 2007.

Schiffbauer, W. H. ''An Active Proximity Warning System for Surface and Underground Mining Applications,'' *Min Eng,* 54(12):40–48, 2002.

U.S. Department of Labor, Mine Safety and Health Administration, ''Program Policy Manual, Vol. V—Coal Mines, Criteria—Mantrips,'' October 2003 (Release V–34), pp. 126 and 127.

U.S. Department of Labor, Mine Safety and Health Administration, ''Proximity Protection System Specification.'' October 4, 2004.

U.S. Department of Labor, Mine Safety and Health Administration, Request for Information. ''Proximity Detection Systems for Underground Mines,'' **Federal Register**, Vol. 75, pg. 2009, February 1, 2010.

U.S. Department of Labor, Mine Safety and Health Administration. ''Preliminary Regulatory Economic Analysis for Proximity Detection Systems for Continuous Mining Machines in Underground Coal Mines, Proposed Rule (RIN 1219–AB65),'' *http://www.msha.gov/rea.HTM,* August, 2011.

List of Subjects in 30 CFR Part 75

Mine safety and health, Reporting and recordkeeping requirements, Underground coal mines.

Dated: August 25, 2011.

Joseph A. Main,

Assistant Secretary of Labor for Mine Safety and Health.

For the reasons set out in the preamble and under the authority of the Federal Mine Safety and Health Act of 1977, as amended, MSHA is proposing to amend chapter I of title 30 of the Code of Federal Regulations as follows:

PART 75—MANDATORY SAFETY STANDARDS—UNDERGROUND COAL MINES

1. The authority citation for part 75 continues to read as follows:

Authority: 30 U.S.C. 811.

2. Add § 75.1732 to subpart R to read as follows:

§ 75.1732 Proximity detection systems.

Operators shall install proximity detection systems on certain mobile machines.

(a) *Machines covered.* Operators must equip continuous mining machines (except full-face continuous mining machines) with a proximity detection system in accordance with the following dates.

Compliance date	Machine type	Date of manufacture
November 30, 2011	Continuous Mining Machines (except full-face continuous mining machines)	After August 31, 2011.
February 28, 2013	Continuous Mining Machines (except full-face continuous mining machines)	On or before August 31, 2011.

(b) *Requirements for proximity detection systems.* A proximity detection system must:

(1) Cause a machine to stop no closer than 3 feet from a miner except for a miner who is:

(i) In the on-board operator's compartment; or

(ii) Remotely operating a continuous mining machine while cutting coal or rock, in which case, the proximity detection system must cause the machine to stop before contacting the machine operator.

(2) Provide an audible or visual warning signal, distinguishable from other signals, when the machine is 5 feet and closer to a miner except for a miner who is:

(i) In the on-board operator's compartment; or

(ii) Remotely operating a continuous mining machine while cutting coal or rock.

(3) Provide a visual signal on the machine that indicates the system is functioning properly;

(4) Prevent movement of the machine if the system is not functioning properly. However, a system that is not functioning properly may allow machine movement if an audible or visual warning signal, distinguishable from other signals, is provided during movement. Such movement is permitted only for purposes of relocating the machine from an unsafe location for repair;

(5) Be installed to prevent interference with or from other electrical systems; and

(6) Be installed and maintained by a person trained in the installation and maintenance of the system.

(c) *Examination and checking.* Operators must:

(1) Designate a person who must perform a visual check of machine-mounted components of the proximity detection system to verify that components are intact, that the system is functioning properly, and take action to correct defects—

(i) At the beginning of each shift when the machine is to be used;

(ii) Immediately prior to the time the machine is to be operated if not in use at the beginning of a shift; or

(iii) Within 1 hour of a shift change if the shift change occurs without an interruption in production.

(2) Check for proper operation of miner-wearable components at the beginning of each shift that the component is to be used. Defects must be corrected before the component is used.

(3) Designate a qualified person under § 75.153 to examine proximity detection systems for the requirements in paragraphs (b)(1) through (5) of this section at least every 7 days. Defects in the proximity detection system must be corrected before the machine is returned to service.

(d) Certification and records. The operator must make and retain certification and records as follows:

(1) At the completion of the check required under paragraph (c)(1) of this section, a certified person under § 75.100 must certify by initials, date, and time that the check was conducted. Defects found as a result of the check in (c)(1) of this section, including corrective actions and date of corrective action, must be recorded.

(2) Defects found as a result of the check in (c)(2) of this section, including corrective actions and date of corrective action, must be recorded.

(3) At the completion of the examination required under paragraph (c)(3) of this section, the qualified person must record and certify by signature and date that the examination was conducted. Defects, including corrective actions and date of corrective action, must be recorded.

(4) Make a record of the persons trained in the installation and maintenance of proximity detection systems required under paragraph (b)(6) of this section.

(5) Maintain records in a secure book or electronically in a secure computer system not susceptible to alteration.

(6) Retain records for at least one year and make them available for inspection by authorized representatives of the Secretary and representatives of miners.

(e) *New technology.* Mine operators or manufacturers may apply to MSHA for acceptance of a proximity detection system that incorporates new technology. MSHA may accept a proximity detection system if it is as safe as those which meet the requirements of this section.

[FR Doc. 2011–22125 Filed 8–29–11; 11:15 am]

BILLING CODE 4510–43–P

POSTAL REGULATORY COMMISSION

39 CFR Parts 3001 and 3025

[Docket No. RM2011–13; Order No. 814]

Appeals of Post Office Closings

AGENCY: Postal Regulatory Commission.

ACTION: Proposed rulemaking.

SUMMARY: This document proposes revisions to the Commission's rules for appeals of post office closings. The existing rules are unnecessarily complex and outmoded. The revisions update the rules and shorten the appeal process. They also provide a clearer explanation of the appeal process, of how to participate in that process, and of the nature of the Commission's review. The Commission invites comments on the proposed revisions.

DATES: *Comments are due:* October 3, 2011.

ADDRESSES: Submit comments electronically by accessing the ''Filing Online'' link in the banner at the top of the Commission's Web site (*http://www.prc.gov*) or by directly accessing the Commission's Filing Online system at *https://www.prc.gov/prc-pages/filing-onling/login.aspx.* Commenters who cannot submit their views electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section for advice on alternatives to electronic filing.

FOR FURTHER INFORMATION CONTACT: Stephen L. Sharfman, General Counsel, at 202–789–6820 (for proposal-related information) or *DocketAdmins@prc.gov* (for electronic filing assistance.)

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Introduction

Section 404(d)(5) of title 39, U.S. Code, provides that when the Postal Service makes a decision to close or consolidate a post office, customers of the post office may appeal the decision to the Postal Regulatory Commission. The Commission's rules governing such