

**PROPOSED RULEMAKING  
BOARD OF COAL MINE SAFETY  
25 PA CODE CHAPTER 208**

**PREAMBLE**

The Board of Coal Mine Safety (Board) is proposing to add §§ 208.72 – 208.84 (relating to High-Voltage Continuous Mining Machine Standards for Underground Coal Mines) to read as set forth in Annex A. The proposed rulemaking, with one exception, conforms Pennsylvania regulations to federal regulations, thereby establishing standards for the use of high-voltage continuous mining machines of up to 2,400 volts in underground bituminous coal mines.

Sections 106 and 106.1 of the Bituminous Coal Mine Safety Act (52 P.S. §§ 690-106 and 106.1) (BCMSA) authorizes the adoption of regulations implementing the BCMSA, including additional safety standards. The Board is authorized to promulgate regulations that are necessary or appropriate to implement the requirements of the BCMSA, and to protect the health, safety and welfare of miners and other individuals in and about mines.

This notice is given under Board order at its meeting of \_\_\_\_\_, 2013.

**A. Effective Date**

This proposed rulemaking will be effective upon final-form publication in the *Pennsylvania Bulletin*.

**B. Contact Persons**

For further information, contact Joe Sbaffoni, Director Bureau of Mine Safety, Fayette County Health Center, 100 New Salem Road, Room 167, Uniontown PA 15401, (724) 439-7469, jsbaffoni@pa.gov, or Susana Cortina de Cárdenas, Assistant Counsel, Bureau of Regulatory Counsel, Office of Chief Counsel, Rachel Carson State Office Building, 9<sup>th</sup> Floor, P.O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060, scortina@pa.gov.

**C. Statutory Authority**

The proposed rulemaking is authorized under Sections 106 and 106.1 of the BCMSA, which grant the Board the authority to adopt regulations implementing the BCMSA, including additional safety standards. The Board is authorized to promulgate regulations that are necessary or appropriate to implement the BCMSA and to protect the health, safety and welfare of miners and other individuals in and about mines.

**D. Background and Purpose**

This proposed rulemaking would establish electrical safety standards for the installation, use, and maintenance of high-voltage continuous mining machines in underground bituminous coal mines. On April 6, 2010, the federal Mine Safety and Health Administration (MSHA) issued a final rule

addressing electrical safety standards for the installation, use, and maintenance of high-voltage continuous mining machines in underground coal mines (75 Fed. Reg. 17529). Previously, MSHA's standards did not specifically address high-voltage continuous mining machines because those machines were not available when the federal standards were developed. In order to use high-voltage equipment in underground mines, MSHA required mine operators to submit a Petition for Modification (PFM), as provided for under Section 101(c), of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 811(c). Since 1997, MSHA has granted 52 PFMs to allow mine operators to use high-voltage continuous mining machines. The final rulemaking issued by MSHA includes most of the requirements that were granted in the PFMs and new requirements to enhance safety associated with the operation of continuous mining machines, including provisions to protect against fires, explosions, and shock hazards. The final rulemaking became effective on June 7, 2010, and superseded all PFMs issued prior to the effective date of the rulemaking.

In developing the final rule, MSHA considered the experience of mine operators who had been using high-voltage continuous mining machines in underground coal mines. MSHA also considered the comments, hearing testimony, and its previous experience in reviewing and issuing PFMs in its development of the final rulemaking. The final federal rule codifies requirements at 30 CFR §§ 75.823 – 834 and 1002 that establish mandatory electrical safety standards for the installation of high-voltage continuous mining machines, electrical and mechanical protection of the equipment, handling of trailing cables, and procedures for performing electrical work. In promulgating the rulemaking, MSHA attested that the regulatory requirements are technologically and economically feasible and will reduce the potential for electrical-related accidents, thereby offering greater protection for underground coal miners against electrical shock, cable overheating, fire hazards, unsafe work and repair practices, and back injuries and other sprains caused by handling trailing cables.

On July 7, 2008, the General Assembly enacted the BCMSA. The BCMSA is the first significant update of the Commonwealth of Pennsylvania's underground bituminous coal mine safety laws since 1961 (52 P.S. § 690-103(a)). One of the significant changes made by the BCMSA is the authority to promulgate regulations for mine safety. The General Assembly established the Board to promulgate the regulations. This seven-member board consists of the Secretary of the Department of Environmental Protection (DEP) as Chair, and three members representing the viewpoint of mine workers and three members representing the viewpoint of underground bituminous coal mine operators (52 P.S. § 690-106). The BCMSA contains broad rulemaking authority to adopt regulations that are necessary or appropriate to implement the requirements of the BCMSA and to protect the health, safety and welfare of miners and other individuals in and about mines (52 P.S. § 690-106.1(a)). Moreover, the Board may promulgate final regulations consistent with federal standards (52 P.S. § 690-106.1(c)).

After learning of the revised MSHA standards concerning high-voltage continuous mining machines in underground coal mines, the Board determined it should promulgate an identical requirement with the exception of provisions concerning the mandatory distance between a spliced high voltage trailing cable and a continuous mining machine. Under BCMSA, at §316(d)(6), spliced trailing cables are prohibited within 50 feet of a continuous mining machine. In contrast, federal requirements at 30 CFR 75.830(b)(1) prohibit the splicing of high-voltage trailing cables within 35 feet of a continuous mining machine. Because Pennsylvania law

provides a more protective standard that enhances miner safety, the more stringent state requirement is proposed for inclusion in the rulemaking. The Board developed the proposed rulemaking to, among other things, obtain independent authority necessary to implement the federal regulations.

Revising electrical safety standards for the use, installation and maintenance of high-voltage continuous mining machines plays an important role in enhancing safety protection against fires, explosions and shock hazards in underground bituminous coal mines. In addition, it facilitates the use of advanced equipment designs. By proposing to adopt the federal MSHA regulation, with certain exceptions, the Board believes it will enhance DEP's ability to ensure the safety of miners by reducing the potential or severity of fires, explosions and shock hazards in bituminous coal mines, and allow DEP to have independent authority to enforce the federal requirement.

#### **E. Summary of Proposed Regulatory Requirements**

The rulemaking proposes the addition of 25 *Pa. Code* § 208.72 - 84 thereby establishing requirements for the use, installation and maintenance of high-voltage continuous mining machines in underground bituminous coal mines as follows:

##### **§ 208.72**

Proposed § 208.72 (relating to Scope) would incorporate by reference the federal provisions under 30 CFR 75.823 (relating to the scope), which provide that the standard addresses requirements for the use of high-voltage continuous mining machines of up to 2,400 volts in underground coal mines.

##### **§ 208.73**

Proposed § 208.73 (relating to Electrical Protection) would incorporate by reference the federal provisions under 30 CFR 75.824 (relating to electrical protection), which establish the electrical protection requirements for high-voltage continuous mining machines including requirements associated with the use of an adequate circuit-interrupting device capable of providing short-circuit, overload, ground-fault, and under-voltage protection.

##### **§ 208.74**

Proposed § 208.74 (relating to Power Centers) would incorporate by reference the federal provisions under 30 CFR 75.825 (relating to power centers.) The federal provisions set forth the requirements for power centers that supply high-voltage continuous mining machines, including provisions for the disconnecting switches and devices, barriers and covers, interlocks, emergency stop switches, grounding sticks, and caution labels.

##### **§ 208.75**

Proposed § 208.75 (relating to High-Voltage trailing cables) would incorporate by

reference the federal provisions under 30 CFR 75.826 (relating to high-voltage trailing cables.) The federal regulation defines the requirements that high-voltage trailing cables must meet, including compliance with existing design requirements at 30 CFR 18.35 and the approval requirements of high-voltage continuous mining machines.

#### **§ 208.76**

Proposed § 208.76 (relating to Guarding of trailing cables) would incorporate by reference the federal provisions under 30 CFR 75.827 (relating to guarding of trailing cables.) The federal regulation establishes the requirements for guarding trailing cables, including the location where the cables must be guarded, the materials (nonconductive flame-resistant material, or grounded metal) the guarding must be constructed from, and the requirements when equipment must cross any portion of the cables.

#### **§ 208.77**

Proposed § 208.77 (relating to Trailing cable pulling) would incorporate by reference the federal provisions under 30 CFR 75.828 (relating to trailing cable pulling.) The federal regulation establishes the requirements to be followed when the trailing cables are to be pulled by any equipment other than the continuous mining machine.

#### **§ 208.78**

Proposed § 208.78 (relating to Tramming continuous mining machines in and out of the mine and from section to section) would incorporate by reference the federal provisions under 30 CFR 75.829 (relating to tramming continuous machines in and out of the mine and from section to section.) The federal regulation includes requirements associated with tramming continuous mining machines in and out of the mine or from one section to another, and testing required prior to tramming.

#### **§ 208.79**

Proposed § 208.79 (relating to Splicing and repair of trailing cables) would incorporate by reference the federal provisions under 30 CFR 75.830 (relating to splicing and repair of trailing cables) with the exception of requirements at 30 CFR 75.830 (b)(1). The federal regulation establishes the requirements for performing splices and repairs of trailing cables, and the manner in which the trailing cable must be spliced or repaired to assure that miners are not exposed to shock and burn hazards. Concerning the provisions at 30 CFR 75.830 (b)(1), which require a mandatory distance of 35 feet between a spliced high voltage trailing cable and a continuous mining machine, the Board determined that the federal requirement was not as protective as requirements established under BCMSA. Therefore, at § 208.79(b)(1), requirements are proposed that are consistent with BCMSA and establish that splicing of high-voltage trailing cables within 50 feet of a continuous mining machine is prohibited.

## **§ 208.80**

Proposed § 208.80 (relating to Electrical work; troubleshooting and testing) would incorporate by reference the federal provisions under 30 CFR 75.831 (relating to electrical work; troubleshooting and testing.) The federal provisions concern the requirements for performing electrical work, including troubleshooting and testing.

## **§ 208.81**

Proposed § 208.81 (relating to Frequency of examinations; recordkeeping) would incorporate by reference the federal provisions under 30 CFR 75.832 (frequency of examinations; recordkeeping.) The regulations specify the frequency of testing certain equipment and circuits and the requirements for creating and maintaining adequate records.

## **§ 208.82**

Proposed § 208.82 (relating to Handling high-voltage trailing cables) would incorporate by reference the federal provisions under 30 CFR 75.833 (relating to handling high-voltage trailing cables.) The provisions set forth the requirements for handling energized trailing cables including provisions that prohibit handling energized trailing cables unless high-voltage insulating gloves or insulating cable handling tools are used.

## **§ 208.83**

Proposed § 208.83 (relating to Training) would incorporate by reference the federal provisions under 30 CFR 75.834 (relating to training.) The federal regulatory provisions require that miners who perform maintenance on high-voltage continuous mining machines be trained in high-voltage safety, testing and repair and maintenance procedures. Training provisions are also included for miners who work in the vicinity of high-voltage continuous mining machines or who move the high-voltage equipment or cables.

## **§ 208.84**

Proposed § 208.84 (relating to Installation of electric equipment and conductors; permissibility) would incorporate by reference the federal provisions under 30 CFR 75.1002 (relating to installation of electric equipment and conductors; permissibility.) This section addresses requirements for conductors and cables used in or in by the last open crosscut, as well as electrical equipment, conductors and cables used within 150 feet of pillar workings, and allows the use of shielded, high-voltage cables that supply power to permissible continuous mining machines in underground coal mines.

## **F. Benefits and Costs**

### **Benefits**

The proposed regulation will reduce the potential for electrical-related fatalities and injuries or loss of property when using high-voltage continuous mining machines in underground bituminous coal mine operations in Pennsylvania. The design and work practice requirements included in the rulemaking will result in greater protections for underground bituminous coal mine operators, including measures to reduce electrical shock, cable overheating, fire hazards, unsafe work and repair practices, and back injuries and other sprains caused by handling trailing cables. In addition, the regulation facilitates the use of more advanced equipment designs. The proposed regulation incorporates with certain exceptions the provisions of federal regulations into the state's regulations, thus enhancing the Commonwealth's mine safety program and its reputation for excellence.

### **Compliance Costs**

The proposed rulemaking will not add any compliance costs to those already existing, as a federal regulation is already in place in this regard. This rulemaking imposes standards that MSHA has already imposed and upon which underground bituminous coal mines in PA must comply.

### **Compliance Assistance Plan**

The Department plans to educate and assist the public and regulated community in understanding the proposed regulation and how to comply with it. This will be accomplished through the Department's ongoing compliance assistance program.

### **Paperwork Requirements**

The regulatory revisions will not increase the paperwork that is already generated because of the existing federal regulation that is already in place.

## **G. Sunset Review**

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether it effectively fulfills the goals for which it was intended.

## **H. Regulatory Review**

Under Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), the Department submitted a copy of the proposed rulemaking on \_\_\_\_\_, to the Independent Regulatory Review Commission ("IRRC"), and the Chairpersons of the Senate and House Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided IRRC and the Committees with a copy of a detailed

regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Department, the General Assembly and the Governor of comments, recommendations or objections raised.

## **I. Public Comments**

### **Written Comments –**

Interested persons are invited to submit comments, suggestions, or objections regarding the proposed regulation to the Board of Coal Mine Safety, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 16th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board on or before \_\_\_\_\_. Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by the Board on or before \_\_\_\_\_. The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulation will be considered.

### **Electronic Comments –**

Comments may be submitted electronically to the Board at [RegComments@pa.gov](mailto:RegComments@pa.gov) and must also be received by the Board on or before \_\_\_\_\_. A subject heading of the proposal and a return name and address must be included in each transmission. If an acknowledgment of electronic comments is not received by the sender within two working days, the comments should be retransmitted to ensure receipt.

By:

E. Christopher Abruzzo  
Acting Chairman