

Notice of Proposed Rulemaking
Department of Environmental Protection
BOARD OF COAL MINE SAFETY
(25 Pa. Code Chapter 208)
(Underground Coal Mine Safety)

Preamble

The Board of Coal Mine Safety (Board) is seeking comments to the proposed amendments to the Department of Environmental Protection's ("department" or "DEP") regulations by establishing 25 Pa. Code Chapter 208 (relating to underground coal mine safety) to read as set forth in Annex A. These regulations establish safety standards relating to belt conveyor flammability, the design, installation and maintenance of mine seals for abandoned areas, escapeways, emergency response, and self-contained self-rescue devices. These regulations incorporate by reference safety standards adopted by the United States Department of Labor, Mine Safety and Health Administration ("MSHA") found in 30 CFR Part 75 (relating to mandatory safety standards - underground coal mines). The MSHA regulations being incorporated by reference implement some of the requirements of the Mine Improvement and New Emergency Response ("MINER") Act of 2006 (MINER Act) (Pub. L. 109-236, June 15, 2006, 120 Stat. 493) (30 U.S.C.A. §§ 826 and 963-965).

This proposal was adopted by the Board at its meeting of _____, 2010.

A. Effective Date

This proposed rulemaking will go into effect upon final-form publication in the *Pennsylvania Bulletin*.

B. Contact Persons

For further information contact Joseph Sbaffoni, Director Bureau of Mine Safety, Fayette County Health Center, 100 New Salem Road, Room 167, Uniontown PA 15401, (724) 439-7469; or Marylou Barton, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposal appears in Section J of this preamble. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). This proposal is available electronically through the DEP web site (<http://www.depweb.state.pa.us>).

C. Statutory Authority

The amendments are proposed under the authority of:

1. Sections 106, 106.1 and 106.2 of the Bituminous Coal Mine Safety Act (52 P.S. §§ 690-106, 106.1, and 106.2) (BCMSA) which authorizes the adoption of regulations implementing the BCMSA including additional safety standards.

The Board is directed to consider adopting regulations implementing the MSHA MINER Act regulations.

2. Section 1917-A of The Administrative Code of 1929 (71 P. S. § 510-17), which authorizes the department to prevent the occurrence of a nuisance.

D. Background and Purpose

At the national level, MSHA regulates mine safety under the authority of the Federal Mine Safety and Health Act of 1977 (“Mine Safety Act”) 30 U.S.C.A. §§ 801 - 965. The MSHA regulations are found in 30 CFR parts 1 through 199. The operating requirements for underground coal mines are found in 30 CFR Part 75 *supra*.

The Mine Safety Act only pre-empts state laws or regulations that are less stringent than or that conflict with MSHA standards. *See*, Section 955 (regarding state laws) of the Mine Safety Act, 30 U.S.C.A. § 955. Unlike a state’s ability under other federal statutes to obtain primacy (primary enforcement authority), a state cannot obtain authority to enforce the Mine Safety Act in that state’s jurisdiction. As a result, a number of states maintain an independent underground coal mine safety program with the mine operator being subject to two mine safety programs.

On June 15, 2006, the United States Congress amended the Mine Safety Act by enacting the MINER Act. *See, supra*. The MINER Act addresses safety issues raised by fatal mine accidents at the Sago and Alma Mines in West Virginia, and the Darby Mine in Kentucky. In addition Congress adopted the Consolidated Appropriations Act of 2008 (Pub. L. 110–161, Dec. 26, 2007, 121 Stat. 1844) directing MSHA to adopt new belt conveyor flame-resistance standards. In accordance with these congressional mandates MSHA has promulgated regulations addressing the flammability of belt conveyors, the strength of seals for abandoned areas, escapeways, refuge alternatives, post-accident breathable air, communications, tracking, and mine rescue teams.

The Commonwealth of Pennsylvania has been regulating safety at underground bituminous coal mines since 1889. *See*, Act of May 9, 1889 (P.L. 154, No.171), entitled an act to provide for the recovery of the bodies of workmen. 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. *See*, Section 103(a) (regarding findings and purpose: findings) of the BCMSA, 52 P.S. § 690-103(a).

One of the significant changes made by the BCMSA is authority to promulgate regulations for mine safety. The General Assembly established the Board of Coal Mine Safety to promulgate the regulations. This 7-member board consists of the DEP’s Secretary as Chair and three members representing the view point of mine workers and the viewpoint of underground bituminous coal mine operators respectively. *See*, Section 106 (regarding board of coal mine safety) of the BCMSA, 52 P.S. § 690 - 106.

A significant problem with the pre-existing law is that its safety standards were becoming outdated. *See* section 103 *supra*. There was no effective mechanism to modify existing standards or to adopt new safety standards to address changes in technology or other hazards.

To rectify this problem the BCMSA contains broad rulemaking authority to adopt regulations to either modernize safety standards in the BCMSA or adopt new safety standards not contained in the BCMSA. *See*, section 106 *supra*. The Board was directed to start considering whether to adopt federal mine safety standards not in the BCMSA. *See*, section 106.1 (regarding rulemaking) of the BCMSA, 52 P.S. §§ 690-106.1. Of particular concern is the adoption of regulations implementing safety standards established by the MINER Act regulations. *See* Section 106.1 (h) *supra*.

This rulemaking implements the MINER Act's belt conveyor flammability, mine seal, escapeway, refuge alternatives and post accident breathable air.

As explained below, there are only a few instances where the MINER Act regulations need to be either strengthened or clarified. Therefore, this rulemaking incorporates by reference the applicable MSHA regulations. Adopting the MSHA regulations by reference will enhance safety at underground coal mines because the potential for confusion by operators as to the appropriate safety standard is minimized. Any future changes in a MSHA regulation that has been incorporated by reference takes immediate effect in Pennsylvania law. As a result, these regulations will remain current with the MSHA regulations. If it appears that a proposed change to one of the incorporated by reference MSHA regulations is inappropriate or will reduce the safety of miners, the Board can act to make the appropriate modification to the Department's regulations.

Sealing of abandoned areas of mines.

This issue is being addressed because inadequately sealed abandoned and unused portions of mines pose a significant safety hazard. Abandoned and unused areas of underground coal mines may contain coal dust and accumulated gas which can be ignited by rock falls, lightning, and in some instances, fires started by spontaneous combustion. Seals are used to isolate this environment from the active workings of the mine. They are also used to keep explosions in abandoned areas contained to that area. Without an adequate seal, the overpressure from an explosion in an abandoned area can cause serious injury to miners and damage mine equipment. In the Department's experience, the atmosphere in these abandoned areas does not remain inert. This creates the risk of having an abandoned area which could have a dangerous explosion that blows out the seals.

Pursuant to section 235 (regarding unused and abandoned parts of mines) of the BCMSA, 52 P.S. § 690-235, (and its predecessor section 247 of the Pennsylvania Bituminous Coal Mine Act ("PBCMA"), § 701-247), the Department is responsible for ensuring that abandoned parts of mines are adequately sealed. DEP has relied upon MSHA's determination that a proposed seal, if installed properly, will meet a specified over pressure standard. The Department ensures that the seal is properly installed and maintained.

Initially MSHA required seals to have a strength to withstand an overpressure of at least 20 pounds per square inch (“psi”). The 20 psi standard was set forth in the original version of 30 CFR 75.335 (relating to seal strengths, design applications, and installation). The definition of overpressure is set forth in 30 CFR 7.52. (relating to Definitions)

On May 22, 2007, as an Emergency Temporary Standard (“ETS”), MSHA revised the seal strength standard to be at least 50 psi. *See, 72 FR 28796.*

On April 14, 2008, MSHA finalized the ETS with some additional revisions. A significant change was that MSHA created a two-tier system. The operator can use a seal meeting the 50 psi standard where the atmosphere of the abandoned area is inert, there is monitoring to ensure that the atmosphere remains inert, and there are no other circumstances putting additional stress on the seals. Otherwise, the seal must have a strength of at least 120 psi. Rather than following this two-tier system, DEP has been requiring all seals to meet the 120 psi standard. As explained below, the proposed mine seal regulation codifies the current practice of:

- (1) DEP requiring seals to meet at least a 120 psi standard.
- (2) DEP relying on MSHA’s determination that the seal is designed to meet the 120 psi standard.
- (3) DEP insuring that the operator is properly installing and maintaining the seal.

Belt Conveyor Flammability

One of the most significant hazards in an underground coal mine is a belt conveyor fire. Under section 273 (regarding conveyor belts; construction and operation of conveyor equipment underground) of the PBCMA operators were required to install belts with adequate flame-resistant coverings. *See, § 701- 273.* In determining whether the belt covering was adequately flame-resistant, DEP relied upon MSHA’s approval of the belt as being flame-resistant.

The efficacy of the MSHA standard has been in question for some time.

At the time the BCMSA was being enacted, MSHA had not yet promulgated the new belt flammability resistance standards. Therefore, rather than enacting a provision requiring belt conveyor coverings to meet a flammability standard, the General Assembly directed the Board to consider promulgating a regulation addressing belt flammability after MSHA adopts MINER ACT regulations addressing belt flammability. *See, Section 106.1(h) supra.*

On December 31, 2008, MSHA promulgated a Final Rulemaking which, among other things, established a more stringent belt flammability standard and belt entry maintenance standards to minimize the possibility of a belt fire. *See, 73 FR 80580.* As explained below, the proposed rule incorporates by reference the requirement that belts meet the new flammability resistance standard.

Emergency Response

Most of the safety standards in the BCMSA are for the purpose of ensuring that a mine accident will not occur. Despite effective mine safety standards, serious accidents are still possible. Therefore, it is necessary to maximize the possibility of the miner's ability to survive a serious accident.

The MSHA regulations have always contained standards concerning escapeways as well as self-contained self-rescue devices which provide post accident breathable air. The MINER ACT regulations strengthen these provisions and also establish emergency response and post accident communications standards. Adopting these MSHA regulations will enhance DEP's ability to ensure the safety of miners if, despite the operational safety standards, a fire or explosion occurs.

E. Summary of Regulatory Requirements

These regulations will be placed in a new Chapter 208 (relating to underground coal mine safety). Creating a new chapter is necessary because the Commonwealth has never promulgated regulations addressing underground coal mine safety.

General Provisions

Section 208.1. Definitions.

Most of the terms being defined in this rulemaking are already defined in the BCMSA. They are restated here for convenience. These terms are: Act, approval or approved, miner, MSHA, NIOSH, operator, representative of miners and underground bituminous coal mine or mine.

In addition it is proposed to define overpressure, psi, and self-contained self-rescue device. The terms overpressure and psi are used in proposed § 208.11 (relating to seals) to describe the strength of seals. The term overpressure has been defined in accordance with MSHA standards. 30 CFR 7.52 The term self-contained self-rescue device is used in proposed § 208.61- 65) (relating to self -contained self rescue devices). The term has been defined in accordance with MSHA standards. 73 FR 21182.

Section 208.2. Scope.

The safeguards and procedures required by these regulations will apply to underground bituminous coal mines, operators, and miners subject to the act.

Section 208.3. Access to material.

This section authorizes DEP to obtain on an individual basis copies of the material an operator submits to MSHA pursuant to the regulations incorporated by reference in this Chapter. For the most part, DEP will be accepting MSHA's approval of seals and equipment. There are

instances where DEP will need copies of this information to approve a plan or to raise concerns to MSHA for its consideration as part of its review of the requested approval. The Department will provide this information to an official representative of the miners as requested, unless specified otherwise in the chapter.

Seals

Section 208.11. Seals.

Subsection (a) requires all seals for abandoned areas to be designed, constructed and installed to withstand an overpressure of at least 120 psi. As with current practice, this regulation is more stringent than the MSHA regulation. The MSHA regulation permits a 50 psi standard if the atmosphere in the abandoned area is and remains inert. However, the monitoring system only measures the atmosphere at or near the seal. It does not monitor the atmosphere throughout the abandoned area. Therefore, there is significant uncertainty as to whether the atmosphere throughout the abandoned area is inert. Also, in the Department's experience, the atmosphere in these abandoned areas does not remain inert. This creates the risk of having an abandoned area which could have a dangerous explosion that blows out the seals.

The Department is specifically requesting comments on proposed 25 Pa. Code 208.11(a).

Subsection (b) incorporates by reference 30 CFR 75.335(a) (2) and (c) *supra*. This incorporation by reference ensures consistency because the department will use MSHA's criteria for seals requiring a strength of 120 psi.

Subsection (c) incorporates by reference 30 CFR 75.335(a) (3) *supra*. This incorporation by reference ensures consistency because DEP will use MSHA's criteria to require a seal to have a strength greater than 120 psi.

Subsection (d) establishes two key points. First, DEP will accept MSHA's approval of the seal's design. Second, DEP will approve the installation of the seal as part of the ventilation plan for the abandoned area required by Section 235 of the BCMSA, *supra*. DEP needs to retain responsibility for the installation of seals because of the potential impact on mining operations and DEP's obligations under Section 235 of the BCMSA, *Id*. To minimize conflicts and paperwork the operator is to submit to DEP the same information it submits to MSHA for approval to install the seal. Unlike the MSHA requirements, if applicable, the operator shall provide a copy of the approved seal design installation application to the miners' representative at the same time the application is submitted to DEP. This enables the persons most at risk if the seal fails an opportunity to comment.

The Department did not duplicate the certification requirement in the proposed regulatory package because "preshift examination at fixed intervals" and "supplemental examination" (BCMSA, 52 P.S. 690-218(d), 690-218.1(b)) requires the person doing the examination to certify by initials, time and date the seals examined.

Section 208.12. Sampling and monitoring requirements.

This section incorporates by reference 30 CFR 75.336 (relating to sampling and monitoring requirements). The atmospheres of sealed areas shall be monitored by a person certified under the BCMSA as a mine foreman, assistant mine foreman or mine examiner. This monitoring can be conducted via an atmospheric monitoring system, rather than by using site specific sampling by a certified person.

Initially a sealed area is monitored once every 24 hours. If the seals' design strength is 120 psi or greater, then monitoring may cease once all the seals for the area reach the design strength. If the seal strength is less than 120 psi, monitoring must continue at a lesser frequency in accordance with the MSHA approved seal or ventilation plan. There are requirements to ensure that the monitoring points and sampling frequencies remain valid. Finally, for those areas where the seal strength is less than 120 psi, the regulation addresses the actions to be taken if the atmosphere stops being inert.

Section 108.13. Construction and repair of seals.

Subsection (a) incorporates by reference the provisions of 30 CFR 75.337 (relating to construction and repair of seals), MSHA's standards for approving the installation and repair of seals. This incorporation by reference ensures that DEP and MSHA will be enforcing the same standards to ensure the safe installation and repair of seals. The MSHA regulation:

- (1) Requires the operator to maintain and repair seals to protect miners from the hazards of sealed areas.
- (2) Specifies the actions to be taken by the operator prior to sealing an area.
- (3) Requires the operator to designate a certified person to directly supervise the installation and repair of seals. This certified person is not required to be certified as a mine foreman, assistant mine foreman, or examiner under the BCMSA.
- (4) Requires a senior mine official to certify that the seal has been installed in accordance with the approval.
- (5) Specifies the operator's notification and information submission requirements.
- (6) Prohibits, without approval, cutting, welding, or soldering within 150 feet of seals.
- (7) Specifies requirements for gas sampling pipes.
- (8) Requirements for draining water and slurry from a sealed area.

Subsection (b) requires that cutting, welding and soldering with an arc or flame within 150 feet of a seal must also be approved by DEP, as well as MSHA. Conducting welding, cutting or soldering within 150 feet of a seal, like the installation or repair of a seal, raises significant safety concerns relating to the operation of the mine.

The only difference between this proposed regulation and the MSHA regulation is that a copy of the information to justify welding, cutting or soldering within 150 feet of a seal is to be

submitted, if applicable, to the representative of the miners. This enables the persons who could be placed at risk by the welding, cutting or soldering activity have an opportunity to comment on the adequacy of the operator's proposal.

Section 208.14. Training.

This section establishes the training requirements for persons involved in the installation or repair of seals. It incorporates by reference the provisions of 30 CFR 75.338 (relating to training). As a result, DEP and MSHA will be using the same standards for determining who is qualified to be involved in the construction and repair of seals. The requirements can be summarized as follows:

- (1) Persons conducting sampling shall be trained as to the appropriate equipment, locations and methodologies for conducting sampling.
- (2) All persons involved in the installation or repair of seals shall be trained in the use of the approved materials and procedures for constructing and repairing seals.
- (3) The operator must certify that all persons involved in the installation and repair of seals have received the appropriate training.

Section 208.15. Seals records.

Subsection (a) incorporates by reference 30 CFR 75.339 (relating to seals records). The operator's record keeping and retention requirements for DEP will be identical to its requirements for MSHA. Subsection (b) obligates the operator, upon request, to provide these records to DEP and, if applicable, the representative of the miners.

Escapeways

Section 208.21. Escapeways.

Subsection (a) incorporates by reference 30 CFR 75.380 (relating to escapeways; bituminous and lignite mines). The requirements can be summarized as follows:

- (1) There shall be at least two distinct and travelable escapeways.
- (2) The escapeways shall run continuously from each working section, and each area where mechanized mining equipment is being installed or removed, to separate surface openings.
- (3) The escapeways shall be maintained in a safe and travelable condition.
- (4) Each escapeway shall be provided with a durable, flame-resistant lifeline which is equipped with directional signaling devices.
- (5) The openings shall be protected to prevent, fires, fumes or flood water from entering the mine.
- (6) One escapeway will be the primary escapeway which shall be ventilated with intake air at a higher pressure from the belt entryway. Alternative ventilation standards that maintain the integrity of the escapeway can be approved.

- (7) The alternative escapeway shall be isolated from the primary escapeway, except that the two escapeways may have a common air intake.
- (8) There is a limitation on the types of equipment that can be in the escapeways.
- (9) In general, the primary escapeway must be isolated from belt and haulage entries.
- (10) Shafts and slopes are to be provided with mechanical escape facilities.

Subsection (b) incorporates by reference 30 CFR 75.382 (relating to mechanical escape facilities). The requirements include: mechanical escape facilities shall be provided with overspeed, overwind, and automatic stop controls; every mechanical escape facility with a platform, cage, or other device shall be equipped with brakes that can stop the fully loaded platform, cage, or other device; mechanical escape facilities, including automatic elevators, shall be examined weekly; and a person trained to operate the mechanical escape facility always shall be available while anyone is underground.

Subsection (c) incorporates by reference 30 CFR 75.384 (relating to longwall and shortwall travelways). The requirements include: if longwall or shortwall mining systems are used and the two designated escapeways are located on the headgate side, a travelway shall be provided on the tailgate side of that longwall or shortwall; the route of travel shall be clearly marked; if a roof fall or other blockage occurs that prevents travel in the travelway, work shall cease and miners shall be withdrawn to a safe area and DEP shall be notified.

The BCMSA addresses mine openings or outlets at 52 P.S. 690-274. The provisions of this section specifically require that the two intake openings or outlets to the surface shall not be at a common shaft, slope or drift opening. It also states that the openings or outlets shall have a distinct means of egress available for use by the employees. For this reason, in 25 Pa. Code 208.21 (a), the Department did not incorporate by reference the language in 30 CFR 75.380(c) that allows two escapeways to end in one multiple compartment shaft or slope separated by walls. Both the state and the federal regulations require no fewer than two intake openings or outlets to the surface from every seam of coal being worked.

The Department will apply escapeway requirements in accordance with MSHA regulations to primary and secondary escapeways designated by mine operators. The BCMSA requires that the belt conveyor entry provides an intake escapeway to the main air current. 52 P.S. 690-230(c)(1)(iii). BCMSA also requires that intake and return entries shall be kept reasonable drained and reasonably free from refuse and obstructions of all kinds, so that individuals may safely travel throughout the whole length and have a safe means of egress from workings in case of emergencies. 52 P.S.690-274(e).

Belts

Section 208.31. Approval of Conveyor Belts.

This section incorporates by reference the provisions of 30 CFR 75.1108(b) and (c) (relating to approved conveyor belts). This provision provides:

- (1) Commencing on December 31, 2009, any conveyor belts installed by operators have been approved by MSHA as meeting the flame-resistant standards in 30 CFR part 14 (relating to requirements for the approval of flame-resistant conveyor belts).
- (2) The compliance date may be extended, if MSHA extends its compliance date for installing conveyor belts approved under 30 CFR Part 14 based on a determination that these belts are not available.
- (3) All belts in a mine are to be approved by MSHA under the part 14 flame-resistant standard by December 31, 2018.

Section 208.32. Maintenance of belt conveyors and belt conveyor entries.

Subsection (a) incorporates by reference 30 CFR 75.1731 (relating to maintenance of belt conveyors and belt conveyor entries) so that DEP will be using the MSHA belt and belt entry maintenance requirements. These requirements are common sense actions that will minimize the risk of a conveyor belt fire. Subsection (b) makes it clear that the belt conveyor pre-shift and fixed interval inspections address compliance with these maintenance requirements. The maintenance requirements can be summarized as follows:

- (1) Damaged belt conveyor components must be repaired or replaced.
- (2) Belt conveyors must be aligned to prevent rubbing.
- (3) Materials that contribute to a frictional heating hazard are to be excluded from the belt entry.
- (4) A spliced conveyor belt must retain its flame-resistant properties.

Emergencies

Section 208.41. Emergency evacuation.

Subsection (a) incorporates by reference 30 CFR 75.1501 (relating to emergency evacuations). This section requires that, for each shift underground, there shall be a person who will be responsible for taking charge during a mine emergency. The MSHA regulation permits this responsible person to be working underground. This runs the risk that the responsible person, due to the mine emergency, cannot take charge. Even if the responsible person is not caught up in the mine emergency, if that person is underground when the emergency happens, it will be difficult for that person to carry out all the duties of a responsible person. Therefore, subsection (b) adds to the MSHA requirements by requiring that an individual designated by the mine operator and trained to the same extent in emergency procedures as the responsible person shall be located on the surface at all times to take charge during mine emergencies if the responsible person is unable to carry out his duties. The individual on the surface is to have current knowledge of where persons are working underground, the mine's ventilation system, aspects of the mine relevant to post accident response, e.g. escapeways, communication systems, as well as, the different accident/emergency response plans and shall be annually trained in all the aspects of emergency response.

Responsible persons are authorized to initiate an evacuation when there is an imminent danger to miners due to fire or explosion or gas or water inundation. The operator is responsible for ensuring that persons working underground know the identity of their responsible person.

Section 208.42. Emergency evacuation and firefighting program of instruction.

This section incorporates by reference 30 CFR 75.1502 (relating to emergency evacuation and firefighting program of instruction). DEP will accept MSHA's approval of the emergency evacuation and firefighting program of instruction. The Department's interest is whether an operator is instructing all miners in the proper procedures they must follow if a mine emergency occurs. Miners shall be instructed in the following:

- (1) Mine evacuation procedures;
- (2) Procedures for assembling and deploying fire and rescue equipment and personnel;
- (3) Mine rescue devices;
- (4) Refuge alternatives;
- (5) The different mine evacuation scenarios;
- (6) Use of fire suppression and fighting equipment;
- (7) The escapeway system;
- (8) The storage of self-contained self-rescuers in the mine;
- (9) The mine map; and
- (10) The escape, firefighting, and emergency evacuation plans in effect at the mine.

Section 208.43. Use of fire suppression equipment.

This section incorporates by reference the provisions of 30 CFR 75.1503 (relating to use of fire suppression equipment). The operator is responsible for ensuring that the appropriate number of persons are trained in using the firefighting equipment available on:

- (1) Working sections;
- (2) Attended equipment; and
- (3) Maintenance shifts.

Section 208.44. Mine emergency evacuation training and drills.

This section incorporates by reference 30 CFR 75.1504 (relating to mine emergency evacuation training and drills). DEP will be ensuring that the operator is conducting its MSHA approved emergency training. Operators are required to conduct emergency training and require all miners to participate. The training and drill shall occur at least once each quarter. Each training and drill shall address the following:

- (1) Hands on training on all the types of self-contained self-rescuers at the mine.
- (2) A realistic escape scenario running the length of either the primary or alternative escapeway.

- (3) A review of the mine and escapeway maps, the firefighting plan, and the mine emergency evacuation plan in effect at the mine.
- (4) Operation and location of firefighting equipment and materials.
- (5) The procedures for deploying refuge alternatives.
- (6) Training in the transportation of the refuge alternative.

Section 208.45. Escapeway maps.

This section incorporates by reference 30 CFR 75.1505 (relating to escapeway maps). DEP and MSHA will be enforcing the same escapeway mine map requirements. These regulations address:

- (1) The map's depiction of all information a miner needs to either escape the mine or to seek refuge within the mine.
- (2) The places in the mine where the maps are to be posted.
- (3) Keeping the maps up to date.
- (4) Notifying all affected miners of changes in the escapeway system.

Section 208.46. Refuge alternatives.

This section incorporates by reference 30 CFR 1506 (relating to refuge alternatives). DEP will accept and enforce MSHA's approval of refuge alternatives and components. This incorporation by reference means that DEP and MSHA will be using the same standards to ensure that operators have established refuges in the mine as an alternative when escape is not feasible. The requirements address:

- (1) The use of refuge alternatives and components approved by MSHA.
- (2) The capacity of refuge alternatives.
- (3) The location of refuge alternatives.
- (4) Identification of roof and rib support for the refuge alternative.
- (5) Maintenance of the refuge alternative and the refuge alternative's site.
- (6) The identification of refuge alternatives.
- (7) Monitoring of the refuge alternative's atmosphere.
- (8) The provision of a fire extinguisher.

Section 208.47. Emergency Response Plan; refuge alternatives.

This provision incorporates by reference 30 CFR 75.1507 (relating to emergency response plan; refuge alternatives). Incorporating 30 CFR 1507 by reference enhances DEP's ability to ensure the adequacy of the mine refuge alternative being provided by an operator. The regulation requires the emergency response plan, required by the MINER Act, to address the following:

- (1) The provision of refuge alternatives.
- (2) The methods to be used to maintain the refuge alternatives' atmosphere.
- (3) The supplies, equipment and manuals to be included in a refuge alternative.

- (4) The procedures and arrangements to be used to provide additional supplies if the refuge alternative only has 48 hours of supplies.

Section 208.48. Training and records for examination, maintenance and repair of refuge alternatives and components.

This provision incorporates by reference 30 CFR 75.1508 (relating to training and records for examination, maintenance and repair of refuge alternatives and components). DEP will be using the MSHA requirements to ensure that refuge alternatives and components are properly maintained. The requirements address the following:

- (1) The training of all persons responsible for maintaining refuge alternatives and components.
- (2) Documenting all repairs made to refuge alternatives or components.
- (3) Maintenance of training and repair records.

Communications

Section 208.51. Communications facilities for refuge alternatives.

This provision incorporates by reference 30 CFR 75.1600-3 (relating to communications facilities; refuge alternatives). DEP and MSHA will be using the same standards to ensure that refuge alternatives are provided with affective communications systems. These requirements address:

- (1) A two way communications system.
- (2) An additional backup system.

Self-Contained Self-Rescue Devices

Section 208.61. Availability of approved self-contained self-rescue devices; instruction in use and location.

This provision incorporates by reference 30 CFR 75.1714 (relating to availability of approved self-rescue devices; instruction in use and location). DEP and MSHA will be using the same standards to ensure the availability of self-contained self-rescue devices. The regulation addresses the following issues:

- (1) The operator's obligation to provide to miners who go underground and authorized visitors approved self-contained self-rescue devices which provide breathable air for at least one hour.
- (2) Training in the use of self-contained self-rescue devices.

Section 208.62. Approved self-contained self-rescue devices.

This provision incorporates by reference 30 CFR 75.1714-1 (relating to approved self-contained self-rescue devices). DEP will be able to ensure that operators are using the appropriate self-contained self-rescue devices. In general, operators are required to provide self-contained self-rescue devices that are approved by MSHA and the National Institute of Occupational Safety and Health.

Section 208.63. Self-contained self-rescue devices; use and location requirements.

This provision incorporates by reference 30 CFR 75.1714-2 (relating to self-contained self-rescue devices; use and location requirements). DEP and MSHA will be using the same requirements on operators to provide self-contained self-rescue devices. The issues addressed are as follows:

- (1) The wearing or carrying of a self-contained self-rescue device by each person underground.
- (2) The conditions and circumstances under which self-contained self-rescue devices can be near the person working underground rather than worn or carried by the person.
- (3) MSHA's approval for an operator to place self-contained self-rescue devices more than 20 feet away from the person.
- (4) Storing self-contained self rescuers underground.
- (5) The use and location of devices with a 10-minute capacity and additional one-hour bottles.

Section 208.64. Self-contained self-rescue devices; inspection, testing, maintenance, repair, and recordkeeping.

This provision incorporates by reference 30 CFR 75.1714-3 (relating to self-contained self-rescue devices; inspection, testing, maintenance, repair, and recordkeeping). DEP will use the MSHA standards to ensure that self-contained self-rescue devices are properly maintained. The MSHA standards require the:

- (1) Inspection, testing, maintenance, and repair of self-contained self-rescue devices by an adequately trained person.
- (2) Inspection of self-contained self-rescue devices after being worn or used.
- (3) Testing filter self-contained self rescuers.
- (4) Testing of self-contained self-rescue devices.
- (5) Documenting the testing and maintenance activities.
- (6) The repair of self-contained self-rescue devices removed from service.

Section 208.65. Additional self-contained self rescue devices.

This provision incorporates by reference 30 CFR 75.1714-4 – (9relating to additional self-contained self rescuers (SCSRs)). DEP will be enforcing the MSHA requirements for additional self rescuers. The requirements address the following issues:

- (1) The provision of additional self-contained self rescuers in working places.
- (2) The provision of additional self-contained self rescuers on mantrips.
- (3) The provision of caches of self-contained selfrescuers in or between escapeways.

Section 208.66. Map locations.

This section incorporates by reference 30 CFR 75.1714-5 (relating to map locations of self-contained self-rescuers (SCSR)). This provision requires the mine operator to indicate the locations of all stored SCSRs on mine maps.

Section 208.67. Emergency tethers.

This section incorporates by reference 30 CFR 75.1714-6 (relating to emergency tethers). This provision requires at least one tether, which is a durable rope or equivalent material, to be provided and stored with the additional SCSRs.

Section 208.68. Multi-gas detectors.

This section incorporates by reference 30 CFR 75.1714-7 (relating to multi-gas detectors). This provision requires that a mine operator shall provide an MSHA-approved, handheld, multi-gas detector that can measure methane, oxygen, and carbon monoxide to each group of underground miners and to each person who works alone. It also requires that at least one person in each group of underground miners shall be a qualified person under 75.150 of the MSHA regulations and that each person who works alone shall be trained to use the device. Multi-gas detectors shall be maintained and calibrated.

Section 208.69. Reporting SCSR inventory, malfunctions and retention.

This section incorporates by reference 30 CFR 75.1714-8 (relating to reporting SCSR inventory and malfunctions; retention of SCSRs).

F. Benefits, Costs and Compliance

Benefits

The intent of these regulations is to enhance mine safety by ensuring that abandoned areas are isolated from the working mine, by reducing the possibility of belt conveyor fires and by enhancing the miners ability to survive a mine fire, cave-in, or the inundation of a mine by gas or water. Abandoned areas are effectively because the regulations adopt effective standards for the design, strength, installation and maintenance of mine seals. The possibility of a belt fire is reduced because DEP will be ensuring that belts have been approved under MSHA's new belt conveyor flame-resistance standard and that the belt conveyor entryway is maintained in a manner to minimize the possibility of a fire. The miners ability to survive a mine emergency is enhanced in several ways. First, DEP will be enforcing the MSHA requirements concerning emergency response and emergency response training. Second, to enhance the miners' ability to escape a mine, DEP will be ensuring that MSHA's requirements for escapeways, and self-

contained self-rescue devices are met. In case the miners cannot escape the mine, DEP's enforcement of MSHA's refuge alternative requirements will enhance the miners' ability to remain alive pending a rescue.

Currently there are 38 underground bituminous coal mines in the Commonwealth of Pennsylvania. These mines employ approximately 4,420 persons (not all of whom work underground).

These regulations reduce the possibility that one or more of the 4,420 persons working at the mines will suffer a serious or fatal injury due to a mine fire, cave-in, or an inundation of a mine by gas or water. Also, the belt conveyor fire-resistance and mine seal standards reduce the possibility of an explosion or a fire that would seriously damage the mine, mining equipment or cause the loss of life. The Department lacks the data to estimate the potential benefits from reducing these risks. Nonetheless, the potential benefits are significant because, as explained below, the costs are minimal.

The only alternative to be considered was writing regulations that primarily restate the MINER Act regulations. This approach was rejected for two reasons.

First, in rewriting the regulations there is always the possibility of unintended differences, of style if nothing else, with the MINER Act regulations. These differences could become a source of confusion as to the appropriate standard to be followed by operators. Incorporating by reference the MSHA regulations with a few differences stated in the regulation minimizes this problem.

Second, the incorporation by reference enables the Department's regulations to remain consistent with the MSHA regulations. Of particular concern are incorporating any changes to the MSHA regulations due to a law suit brought by the International Mine Workers challenging some of the aspects of MSHA's belt flammability and alternative refuge regulations. This incorporation by reference will implement any changes to the MSHA MINER Act regulations due to this litigation.

Compliance Costs

This rulemaking does not impose any new compliance costs. For the most part this rulemaking imposes standards already being imposed by MSHA. The only difference is those instances where the regulations require a seal with a strength of 120 psi and MSHA would permit a seal of 50 PSI. However, this is not new. Since October 20, 2008, DEP has been requiring all new seals to have a strength of 120 psi.

Compliance Assistance Plan

The Department will work with the Pennsylvania Coal Association to assist coal mine operators in complying with these regulations. In addition, compliance assistance will be provided by the mine inspectors as part of their inspections of mines.

Paperwork Requirements

The only paperwork requirement imposed by this rulemaking is that operators will be required to submit to the Department applications to conduct welding, cutting or soldering within 150 feet of a seal.

G. Sunset Review

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation 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 (blank) 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 by (blank) (within 30 days of publication in the *Pennsylvania Bulletin*). 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 (blank) (within 30 days following publication in the *Pennsylvania Bulletin*). 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@state.pa.us and must also be received by the Board by _____, 20___. 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:

John Hanger
Chairman
Board of Coal Mine Safety