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Safety Standards Regarding the Recommendations of the Technical Study Panel on the Utilization of Belt Air and the Composition and Fire Retardant Properties of Belt Materials in Underground Coal Mining; Conveyor Belt Combustion Toxicity and Smoke Density; Proposed Rules

DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Parts 6, 14, 18, 48, and 75

RIN 1219–AB59

Safety Standards Regarding the Recommendations of the Technical Study Panel on the Utilization of Belt Air and the Composition and Fire Retardant Properties of Belt Materials in Underground Coal Mining

AGENCY: Mine Safety and Health Administration (MSHA), Labor.

ACTION: Proposed Rule, notice of public hearings.

SUMMARY: This proposal addresses the recommendations of the Technical Study Panel (Panel) on the Utilization of Belt Air and the Composition and Fire Retardant Properties of Belt Materials in Underground Coal Mining. Section 11 of the Mine Improvement and New Emergency Response (MINER) Act of 2006 required that this Panel be established. MSHA proposes new standards for: Conveyor belt flammability; qualifying Atmospheric Monitoring System operators; levels of methane and respirable dust in belt entries; airlocks between air courses; minimum and maximum air velocities; approval for the use of air from the belt entry to ventilate working sections; monitoring and remotely closing point-feed regulators; smoke sensors; standardized tactile signals on lifelines; replacing point-type heat sensors with carbon monoxide sensors; and belt conveyor and belt entry maintenance. Consistent with the MINER Act, the proposal includes MSHA's response to the Panel's report.

DATES: All comments must be received by midnight eastern standard time on September 8, 2008. MSHA will hold four public hearings on August 19, August 21, August 26, and August 28, 2008. Details about the public hearings are in the **SUPPLEMENTARY INFORMATION** section of this document.

ADDRESSES: Comments must be clearly identified with ''RIN 1219–AB59'' and may be sent to MSHA by any of the following methods:

(1) *Federal Rulemaking Portal: http://www.regulations.gov*. Follow the instructions for submitting comments.

(2) *Electronic mail: zzMSHA-Comments@dol.gov*. Include ''RIN 1219–AB59'' in the subject line of the message.

(3) *Facsimile:* (202) 693–9441. Include ''RIN 1219–AB59'' in the subject.

(4) *Regular Mail:* MSHA, Office of Standards, Regulations, and Variances, 1100 Wilson Blvd., Room 2350, Arlington, Virginia 22209–3939.

(5) *Hand Delivery or Courier:* MSHA, Office of Standards, Regulations, and Variances, 1100 Wilson Blvd., Room 2350, Arlington, Virginia 22209–3939. Sign in at the receptionist's desk on the 21st floor.

Comments can be accessed electronically at *http://www.msha.gov* under the ''Rules and Regs'' link. MSHA will post all comments on the Internet without change, including any personal information provided. Comments may also be reviewed at the Office of Standards, Regulations, and Variances, 1100 Wilson Blvd., Room 2350, Arlington, Virginia. Sign in at the receptionist's desk on the 21st floor.

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

Information Collection Requirements: Comments concerning the information collection requirements must be clearly identified by ''RIN 1219–AB59'' as comments on the information collection requirements 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 either electronically to *zzMSHA-Comments@dol.gov*, by facsimile to (202) 693–9441, or by regular mail, hand delivery, or courier to MSHA, Office of Standards, Regulations, and Variances, 1100 Wilson Blvd., Room 2350, Arlington, Virginia 22209–3939.

FOR FURTHER INFORMATION CONTACT: Patricia W. Silvey, Director, Office of Standards, Regulations, and Variances, MSHA, 1100 Wilson Blvd., Room 2350, Arlington, Virginia 22209–3939, *silvey.patricia@dol.gov* (e-mail), (202) 693–9440 (voice), or (202) 693–9441 (telefax).

SUPPLEMENTARY INFORMATION: The outline of this proposed rule is as follows:

I. Public Hearings

MSHA will hold four public hearings on the proposed rule. These public hearings will begin at 9 a.m. and end after the last speaker speaks, and in any event not later than 5 p.m., on the following dates at the locations indicated:

Date	Location	Contact information
August 19, 2008	Salt Lake City, UT 84101.	
August 21, 2008	Hilton Suites Lexington Green, 245 Lexington Green Circle, Lexington, KY 40503.	(859) 271–4000

Date	Location	Contact information
August 26, 2008	Embassy Suites Charleston, 300 Court St., Charleston, WV 25301	(304) 347–8700
August 28, 2008	Sheraton Birmingham, 2101 Richard Arrington Jr. Blvd., Birmingham, AL 35203.	(205) 324–5000

The hearings will begin with an opening statement from MSHA, followed by an opportunity for members of the public to make oral presentations. Requests to speak at a hearing should be made at least 5 days prior to the hearing date. Requests to speak may be made by telephone (202–693–9440), facsimile (202–693–9441), or mail (MSHA, Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2350, Arlington, Virginia 22209–3939).

Any unallocated time at the end of each hearing will be made available to persons making same-day requests to speak. Speakers will speak in the order that they sign in at the hearing. At the discretion of the presiding official, the time allocated to each speaker for their presentation may be limited. Speakers and other attendees may also present information to the MSHA panel for inclusion in the rulemaking record.

The hearings will be conducted in an informal manner. The hearing panel may ask questions of speakers. Formal rules of evidence or cross examination will not apply. The presiding official may exercise discretion to assure the orderly progress of the hearing and meeting and may exclude irrelevant or unduly repetitious material and questions. A verbatim transcript of the proceedings will be made a part of the rulemaking record. Copies of the transcript will be available to the public. The transcript will also be available on MSHA's Home Page at *http://www.msha.gov,* under Statutory and Regulatory Information.

MSHA will accept post-hearing written comments and other appropriate data for the record from any interested party, including those not presenting oral statements. Written comments will be included in the rulemaking record until the close of the comment period. MSHA will make transcripts of the hearings, post them on MSHA's Web site *http://www.msha.gov,* and include them in the rulemaking record.

II. Introduction

Section 11 of the MINER Act established the Technical Study Panel to provide an independent scientific and engineering review, and issue a report with recommendations regarding the use of air from the belt entry to ventilate working sections and the composition and fire retardant properties of belt materials in underground coal mining. The Secretary of Labor chartered the Panel on December 22, 2006 (71 FR 77069).

The Panel held five public meetings in Washington, DC; Pittsburgh, Pennsylvania; Salt Lake City, Utah; Birmingham, Alabama; and Reston, Virginia. The Panel solicited and reviewed comments from the mining community at the public meetings, and reviewed extensive material provided primarily by MSHA and the National Institute for Occupational Safety and Health (NIOSH). In addition, technical experts in mine ventilation, conveyor belt composition, and other pertinent areas submitted detailed information and made presentations to the Panel. Transcripts of the meetings, including technical and scientific material, are in the official record, and on MSHA's Web site.

In conjunction with the public meetings in Utah and Alabama, Panel members visited underground coal mines to observe conditions at mines that use air from the belt entry to ventilate working sections.

The Panel deliberated over a nine-month period and conducted its final public meeting on September 17–19, 2007, to discuss recommendations for its report. The Panel passed 20 recommendations as described below by a unanimous vote:

- Recommendation number 1—Conveyor Belt Flammability Testing and Approval;
- Recommendation number 2—Other Belt Tests;
- Recommendation number 3—Improved Fire Resistance Standards for all Underground Coal Mines;
- Recommendation number 4—Coordinating Belt Testing with Other Countries;
- Recommendation number 5—Belt entry and conveyor belt maintenance;
- Recommendation number 6—Special requirements for the use of belt air;
- Recommendation number 7—Belt air approval recommendation;
- Recommendation number 8—Discontinuing point-type heat sensors;
- Recommendation number 9—Smoke sensors;
- Recommendation number 10—Use of diesel-discriminating sensors;
- Recommendation number 11—Review of AMS records;
- Recommendation number 12—AMS operator training certification;
- Recommendation number 13—Minimum and maximum air velocities;
- Recommendation number 14—Escapeways and leakage;
- Recommendation number 15—Lifelines;
- Recommendation number 16—Point-feeding;
- Recommendation number 17—Respirable dust;
- Recommendation number 18—Mine methane;
- Recommendation number 19—Inspections; and
- Recommendation number 20—Research.

The Panel issued its report on December 20, 2007. A copy of this report is available on MSHA's Web site at *http://www.msha.gov.*

The Consolidated Appropriations Act of 2008 (Pub. L. 110–161, December 26, 2007) requires the Secretary to propose regulations consistent with the recommendations of the Technical Study Panel, to require that:

> [i]n any coal mine * * * belt haulage entries not be used to ventilate active working places without prior approval from the Assistant Secretary. Further, a mine ventilation plan incorporating the use of air coursed through belt haulage entries to ventilate active working places shall not be approved until the Assistant Secretary has reviewed the elements of the plan related to the use of belt air and has determined that the plan at all times affords at least the same measure of protection where belt haulage entries are not used to ventilate working places.

Based on the Panel's recommendations, MSHA is proposing new and revised safety standards for underground coal mines concerning 15 of the 20 recommendations which require rulemaking. The remaining recommendations would not require rulemaking.

This proposal is organized in two parts under Part III below. Part III (A) includes proposed requirements for improved flame-resistant conveyor belts. Part III (B) includes proposed requirements for fire prevention and detection and approval of the use of air from the belt entry to ventilate working sections.

MSHA is also publishing a Request for Information in the **Federal Register** for public comment on criteria for

testing the toxicity and density of smoke produced from burning conveyor belt or similar materials.

III. Section-By-Section Analysis

A. Flame-Resistant Conveyor Belt

1. General

(a) This proposal addresses Panel Recommendation No. 1—Conveyor Belt Flammability Testing and Approval, and Recommendation No. 3—Improved Fire Resistance Standards for All Underground Coal Mines. To address Panel Recommendation No. 2—Other belt tests, MSHA is evaluating the drum friction test to determine if it could complement the Belt Evaluation Laboratory Test method. This evaluation will occur over a two-year period, consistent with the Panel's recommendation.

The Panel recommended that MSHA revise and repropose the Agency's 1992 proposed rule on the ''Requirements for Approval of Flame-Resistant Conveyor Belts.'' The Panel also recommended that MSHA require the use of improved flame-resistant conveyor belts in all underground coal mines. Consistent with the Panel's recommendations, this proposal would require that conveyor belts in underground coal mines meet the Agency's proposed Belt Evaluation Laboratory Test (BELT). In addition, this proposal incorporates changes in MSHA's approval, quality assurance, and audit procedures.

(b) Rulemaking Background

Existing § 75.1108 requires underground coal mine operators to use only MSHA-approved, flame-resistant conveyor belts meeting the specifications of Part 18. All existing underground conveyor belts are accepted under Schedule 2G. This is a small-scale flame test, originated by the former Bureau of Mines of the Department of the Interior (Bureau), and conducted in a cubicle chamber, using four six-inch (15.2 cm) long by one half-inch (1.3 cm) wide belt samples. Each sample is subjected to the flame from a small natural gas burner for one minute.

In the late 1980s, MSHA and the Bureau developed a flame-resistance test called the Belt Evaluation Laboratory Test (BELT) that measures resistance to flame propagation rather than burn time. The BELT method consists of a mid-scale laboratory apparatus. Three samples of conveyer belt, 60 inches (152.4 cm) long and nine inches (22.9 cm) wide are tested. Flame from a natural gas impinged jet burner is applied to the test sample for five minutes.

On January 17, 1989, MSHA announced a public meeting to discuss the BELT method. Later that year, MSHA released a study on belt entry ventilation. In 1992, MSHA issued a Belt Air Advisory Committee Report. Both of these reports emphasized the need for an improved flame-resistance test that would result in reduced flame propagation of conveyor belts.

On December 24, 1992, MSHA published a proposal to revise the existing regulation for testing and acceptance of conveyor belts (53 FR 61524). On July 15, 2002, the Agency withdrew the proposal (67 FR 46431). This proposed rule would establish the BELT method for the approval of flame-resistant conveyer belts in underground coal mines and require that improved conveyor belts be used.

(c) Use of Conveyor Belts in Underground Coal Mines and Fire History

Conveyor belts used in underground coal mines generally consist of rubber-textile compositions, polyvinyl chloride (PVC), and combinations of rubber covers and solid woven carcass. Rubber belts constructed with steel cords or cable are also used. Typical rubber compounds are styrene-butadiene (SBR), chloroprene (CR), polybutadiene (BR) and copolymer acrylonitrile-butadiene (NBR). The carcass of the conveyor belts may be constructed of layered ply materials such as polyester and nylon or solid woven material impregnated with PVC. The amount of plies can range from 2 to 8 in rubber belts. Belt thickness ranges from about ⅜-inch to over 1-inch and belt width ranges from 36-inches to 96-inches.

The average conveyor belt length for both conveyance and return is: 9,894 feet (3,016 meters) in an average small underground coal mine with 1–19 employees; 51,964 feet (15,839 meters) in an average medium-sized mine with between 20 and 500 employees; and 199,159 feet (60,704 meters) in an average large mine with over 500 employees.

MSHA has reviewed fire incident data for conveyor belt entries in underground coal mines for the period 1980–2007. These data show that fires in conveyor belt entries represent about 15 to 20 percent of all underground coal mine fires. Friction at the belt drive and along the belt was the ignition source for 36 percent of the 65 conveyor belt fires reported. Other sources of belt fires included electrical (13%); hot rollers and bearings (10%); cutting and welding (8%); diesel and hydraulic (3%); and cause undetermined (30%). Data reveal that fires have burned substantial lengths of conveyor belt, as much as 2,000 feet (600 meters). Regardless of the ignition source, once a fire starts, a belt that has poor flame resistance will spread flames along exposed surfaces and eventually ignite other combustibles in the entry, including coal.

European efforts to seek improvements in both flame-resistant conveyor belt properties and testing protocols began in the early 1950s. Similar efforts in the United States were initiated around the same time by the Bureau. The Bureau developed a Schedule 28 (November 9, 1955) for the acceptance of fire-resistant conveyor belts and subsequently amended Schedule 28 (December 9, 1957). Schedule 28 contained a small-scale flame test for acceptance of fire-resistant conveyor belt. Schedule 28 was consolidated into Schedule 2G (30 CFR Part 18) on March 19, 1968. Existing 30 CFR Part 18.65 establishes the small-scale test for the acceptance of fire resistant conveyor belt.

In the 1980s, MSHA began developing a flame-resistance test for conveyor belts that would result in a higher level of flame resistance than the ''2G'' test. A large-scale test facility was constructed at the Lake Lynn Laboratory by the Bureau and MSHA. The large scale tests showed the effect of air flow on belt flammability. These tests were conducted over a wide range of air velocities. MSHA used the large-scale flammability test data to develop the BELT, a laboratory-scale flame resistance test.

MSHA developed the new BELT method to improve the fire resistant capability of belt material, and thereby greatly limit flame propagation. The BELT measures the length of burned belt on the test sample. The BELT is easy to perform, economical, and correlates well with large-scale tests. MSHA and the Bureau have performed extensive testing of the BELT method. Test results over a 34-month period, based on samples of the belt material, reveal that the BELT method is highly precise and accurate. Samples from the same belt pass the existing Schedule 2G Test, but fail under the new BELT.

2. Discussion of Proposed Rule

This proposal would establish a new Part 14 that would include approval requirements for flame-resistant conveyor belt. It would require that improved flame-resistant conveyor belts be used in all underground coal mines. The proposal would also make technical and conforming changes to Parts 6 and 18.

Part 14—Approval of Conveyor Belts in Underground Coal Mines

Subpart A—General

Proposed § 14.1 is derived from existing § 18.1. Part 14 would establish new flame resistance requirements for MSHA approval of conveyor belts for use in underground coal mines. It would also allow applicants for approval, approval holders and those seeking extensions a one year phase-in period to continue to use the acceptance criteria in existing Part 18. During this period, approval holders could apply for a Part 18 acceptance or a Part 14 approval. The Agency specifically solicits comments on the impact of the one year transition period on inventories and associated costs to approval holders.

Proposed § 14.2 would establish definitions applicable to approval of conveyor belts. The proposed definitions are as follows.

''Applicant'', derived from existing §§ 6.2 and 7.2, would refer to an individual or organization that manufactures or controls the production of a conveyor belt and who applies to MSHA for approval.

''Approval'', derived from existing § 7.2, would replace the term ''acceptance'' as defined in existing § 18.2. An approval, which would be issued by MSHA, would show that a conveyor belt has met the requirements of this Part, and would authorize a marking identifying the belt as approved. This is consistent with other MSHA approval regulations which define 'approved' as the general term which indicates that a product has met MSHA's technical requirements.

''Extension of approval'', derived from existing § 7.2, would be defined as a document issued by MSHA which states that a change to a conveyor belt previously approved by MSHA continues to meet the requirements of this Part. An extension of approval would authorize the continued use of the approval marking after the appropriate extension number has been added.

''Flame-retardant ingredient'' would be a new term, and means material that inhibits ignition or flame propagation.

''Flammable ingredient'', would be a new term and would mean material that is capable of combustion.

''Inert ingredient'', a new term, would mean a material that does not contribute to combustion.

''Post-approval product audit'', derived from existing § 7.2, would be an examination and testing of an approved conveyor belt sample to determine if it meets the technical requirements of its approval, and has continued to be manufactured as approved.

''Similar conveyor belt'', would be a new definition, and would apply to a conveyor belt that shares the same cover compound, general carcass construction, and fabric type as another approved conveyor belt. This definition would assist applicants in providing the appropriate information with their applications for approval. Similar belts may be considered as part of a given family, and approved under the same approval number.

Proposed § 14.3, derived from § 18.9(a), would limit the individuals who may be present during testing and evaluation to MSHA, representatives of the applicant, and other persons as agreed upon by MSHA and the applicant. This provision is intended to protect proprietary information. It is consistent with other MSHA approval regulations.

Proposed § 14.4, derived from §§ 7.3 and 18.6, would require applicants to follow certain procedures to obtain approval, or an extension of an approval, for a flame-resistant conveyor belt. This proposal would organize the application procedures into two actions: approval and an extension of an approval.

When requesting approval, proposed § 14.4 would require that the applicant submit all information necessary to properly evaluate a conveyor belt.

Proposed paragraph (a), based on existing §§ 7.3(a) and 18.6(a), would specify how and where an applicant would file for MSHA approval or extension. This procedure includes mail, online, and fax transmission.

Proposed § 14.4(b) would contain information the applicant would need to submit concerning the identification and construction of a conveyor belt. Each application would need to include this information, except any information submitted in a prior approval application need not be resubmitted. An application would address either a single specific construction, or multiple-ply construction consisting of the same cover compound and carcass construction varying only by the number of plies and fabric weight. In addition, if approval of multiple-ply construction is requested, the minimum and maximum number of plies both with thinnest-specified cover thickness and heaviest-specified fabric weight must be tested. These proposed requirements for conveyor belt applications are based on existing § 18.6(c).

Proposed § 14.4(b)(1) would require a technical description of the conveyor belt. This information would include: Trade name (specification or code numbers) or identification number; cover compound type and designation number; belt thickness and thickness of top and bottom covers; presence and type of skim coat; presence and type of friction coat; carcass construction and fabric; presence and type of breaker or floated plies; and the number, type, and size of cords or fabric for metal cord belts.

Proposed paragraph § 14.4(b)(2) would require information on the type of material comprising the conveyor belt (for example, styrene-butadiene rubber (SBR), polyvinyl chloride (PVC), chloroprene, composite, or steel cable). Formulation information on the compounds in the Conveyor belt could be shown by specifying each: (1) Ingredient by its chemical name along with its percentage (weight) and tolerance or percentage range; or (2) flame-retardant ingredient by its chemical or generic name with its percentage and tolerance or percentage range, or its minimum percent. The applicant would need to list each flammable ingredient by chemical, generic, or trade name along with the total percentage of all flammable ingredients. In addition, the applicant would need to list each inert ingredient by chemical, generic, or trade name along with the total percentage of all inert ingredients.

Proposed § 14.4(b)(3) would require that the applicant submit, as part of the application, the name, address, and telephone number of the applicant's representative responsible for answering any questions regarding the application. The applicant may also wish to include the representative's electronic mail (e-mail) address.

Proposed § 14.4(b)(4) would require that an application for approval of a conveyor belt similar to a previously approved conveyor belt include an explanation of any changes from the existing approval, along with the approval number of the belt being changed. Documentation which is listed in the prior approval would not need to be resubmitted.

MSHA's evaluation of whether a belt is similar will determine if the application has to be processed as an extension of approval or a new approval. For example, if a manufacturer submits a 5-ply belt that is identical, except in number of plies, to a family of belts with 3, 4, and 6 plies that has been previously approved, MSHA would likely grant an extension of approval to the 5-ply belt without additional testing.

After receipt of an approval, if the applicant requests an extension of

approval for the original conveyor belt, the applicant would not be required to resubmit documentation duplicative of previously submitted information. Similarly, only information related to changes in the previously approved conveyor belt would be required.

Proposed § 14.4(c) would require that any changes to the documentation of technical requirements of a previously approved flame-resistant conveyor belt must be approved by MSHA prior to implementing the change. This requirement would avoid unauthorized changes being made that could affect the flame-resistant properties of the conveyor belt.

Proposed § 14.4(c)(1) would require that each application for an extension of approval include the MSHA-assigned approval number of the conveyor belt which most closely resembles the new one. Proposed § 14.4(c)(2) would require that the application contain a description of any changes from the existing approval. This information would include the MSHA-assigned approval number for the conveyor belt for which the extension is sought; and a description of the proposed change to the conveyor belt. Proposed § 14.4(c)(3) would require the name, address, and telephone number of the applicant's representative responsible for answering any questions regarding the application. The applicant should also include the representative's e-mail address.

Proposed § 14.4(d) would permit MSHA to make a determination if additional information, samples, and testing are needed to evaluate the application. Additional samples may be requested by MSHA as a result of erroneous test results. This provision would also allow a statement by an applicant to explain reasons why flame testing of a specific conveyor belt may not be necessary.

Proposed § 14.4(e), based on existing § 18.6(a)(3), would permit an applicant to request testing and evaluation using non-MSHA product safety standards that have been determined by the Agency to provide at least the same degree of protection as the MSHA product approval requirements under this Part. This proposed paragraph would permit MSHA to approve products using the equivalent program authorized in § 6.20, entitled ''MSHA acceptance of equivalent non-MSHA product safety standards.''

Proposed § 14.4(f), consistent with existing § 18.6(a), would inform applicants that fees for services will be charged in accordance with Part 5, entitled: Fee for Testing, Evaluation, and Approval of Mining Products.

Proposed § 14.5 is new and would require, upon request by MSHA, the submission of three pre-cut, unrolled, flat samples of conveyor belt, 60 inches (152.4 cm) long by 9 inches (22.9 cm) wide, for flame testing. The proposed laboratory-scale test for flame resistance requires testing of three samples to determine acceptable performance. The proposal would require pre-cut and unrolled flat samples which can be mounted for testing. Samples submitted in an uncut, rolled (coiled) state, require additional time to be cut and flattened for subsequent mounting. MSHA uses the word ''pre-cut'' to inform the applicant that the samples would need to be sent to MSHA already cut to the required sample size.

Curling of samples can cause erroneous test results and has, at times, presented a problem during testing. MSHA has determined that most of this curling effect results from the conveyor belts having a ''pre-set'' from being rolled prior to testing. These proposed requirements, along with the proposed required preconditioning of samples serve to minimize curling of samples. The requirement to submit samples for testing is derived from existing § 18.6(i). However, the requirement for the number and dimension of samples is specific to the BELT method.

Proposed § 14.6, based on existing § 18.10, would address requirements related to the approval. Proposed § 14.6(a), would require that MSHA issue a notice of approval upon the successful completion of the Agency's investigation. The notice of approval would be accompanied by a list of documentation and related material, covering the details of design and construction of the conveyor belt upon which the approval is based. If approval is denied, MSHA will notify the applicant of the reasons for the denial.

Proposed § 14.6(b), based on existing § 18.10(c), would require that an applicant not advertise or otherwise represent a conveyor belt as approved until MSHA's notice of approval is received. To do otherwise would be a violation of MSHA standards and regulations.

Proposed § 14.7, based on existing §§ 7.6 and 18.11(c), would provide for marking of approved conveyor belts and retention of initial sales records.

Proposed § 14.7(a) would specify that approved conveyor belts be marketed only under the name specified in the approval.

Proposed § 14.7(b), based on § 18.65(f), would require conveyor belts to be legibly and permanently marked with the assigned MSHA approval number for the service life of the product. The letters and numbers of the approval marking would need to be at least ½ inch in size. Also, the approval marking would have to be placed at intervals not to exceed 60 feet (18.3 meters) and repeated at least once every foot (30.5 centimeters) across the width of the belt. MSHA proposes this marking method since a conveyor belt's edges can wear as it passes along the conveyor framework, causing fraying. Fraying of conveyor belts, which may occur during normal use, can cause the approval markings on belts to become illegible or worn. Relocating the markings from the edge of the belt to across its width would permit identification of the conveyor belt for a longer time. This method would also enable better identification of conveyor belts cut from larger to smaller widths, or where worn edges are trimmed.

Proposed § 14.7(c) would provide that where the construction of a conveyor belt does not permit marking as prescribed in proposed paragraph (b), other permanent marking may be accepted by MSHA. This proposed provision would allow alternatives for marking conveyor belts.

Proposed § 14.7(d) is new, and would require that the applicant maintain sales records for 5 years following the initial sale of any approved conveyor belt. Information needed on initial sales would be: The sale date, the customer name and address, and the belt identification on a slab, batch or lot basis. MSHA proposes a five-year retention period to conform to MSHA's audit cycle. This proposed time-frame period would also cover the period in which any potentially hazardous defects might be found.

MSHA requests comments on the 5-year retention period for retaining sales records.

The proposal does not specify the format in which the record has to be maintained. MSHA believes that this recordkeeping provision would impose a minimal burden because most manufacturers will use existing records to fulfill this requirement.

Proposed § 14.8 would include requirements for a manufacturer's ongoing quality assurance program. MSHA believes testing is essential to maintain the high level of flame resistance required for conveyor belts in underground coal mines. The specific provisions are new for conveyor belts, they are derived from existing § 7.7.

Proposed § 14.8(a) would require approval holders to perform a flammability evaluation on a sample of: (1) Each batch, lot, or slab of conveyor belts; or (2) inspect or test a sample of each batch or lot of the materials that

contribute to the flame-resistance characteristic. This will assure that the finished conveyor belt slab continues to meet the test for flame resistance.

Proposed § 14.8(b) would require that instruments used for the quality assurance inspection and testing be calibrated according to the instrument manufacturer's specifications. Under the proposal, instruments must be calibrated using calibration standards set by the National Institute of Standards and Technology, U.S. Department of Commerce or other nationally or internationally recognized standards. The proposal also would require that the instruments used be accurate to at least one significant figure beyond the desired accuracy. This calibration sequence is consistent with the procedure under existing § 7.7.

Proposed § 14.8(c) would require that approval holders control all production to assure that the conveyor belt is continuously manufactured as approved. This proposal would require each approval holder to implement procedures to assure that the product conforms to the approval specifications.

Proposed § 14.8(d) would require approval holders to immediately notify the MSHA Approval and Certification Center of any information that a conveyor belt has been distributed which does not meet the specifications of the approval. Notification can be by telephone, e-mail, or facsimile transmission. The notification must include a description of the nature and extent of the problem, the locations where the conveyor belt has been distributed, and the approval holder's plans for corrective action. Corrective action may include recalling the conveyor belt or restricting its use pending resolution of the defect.

Proposed § 14.9, derived from existing § 18.9, would address the disclosure of information on conveyor belts tested and evaluated under part 14. Under the proposal, MSHA intends to treat information on product material, specifications, and processes as potentially protectable under exemption 4 of the Freedom of Information Act (FOIA). Exemption 4 exempts from disclosure ''trade secrets and commercial or financial information'' obtained from an outside source and ''privileged or confidential.'' 5 U.S.C. 552(b)(4). Under the Department's regulations at 29 CFR 70.26, *Business information*, MSHA would notify the applicant of any FOIA request seeking information submitted by the applicant under this proposal. The applicant then would have a reasonable period of time in which to object to disclosure. An objecting applicant must submit a ''detailed written statement'' showing ''why the information is a trade secret or commercial or financial information that is privileged or confidential.'' 29 CFR 70.26(e). MSHA would consider the applicant's objections in deciding whether to disclose the information. If MSHA determines that the FOIA requires disclosure over the applicant's objections, MSHA would notify the applicant of the documents to be disclosed prior to the disclosure date (unless MSHA learns that the material already has been made public lawfully). 29 CFR 70.26(f), (g). Under 29 CFR 70.26(b), when submitting documents, applicants should identify the documents they wish to protect by marking them (such as stamping each page ''Confidential''). MSHA notes that it has no authority under the FOIA to withhold applicant documents requested by a Congressional oversight committee.

Proposed § 14.10, derived from existing §§ 6.10 and 7.8, would provide a mechanism for MSHA to periodically audit approved conveyor belts.

Proposed § 14.10(a) would provide that approved conveyor belts would be subject to periodic audits by MSHA to determine conformity with the technical requirements upon which the approval was based. MSHA would select representative conveyor belts to be audited. Upon request to MSHA, the approval holder may obtain any final audit report.

Proposed § 14.10(b) would require that approval holders make conveyor belts available to MSHA, at no cost, for audit upon request. Three samples sized according to § 14.5 would be required. Audits may be conducted no more than once a year, except for cause. The approval holder may observe any tests conducted during the audit.

Proposed § 14.10(c) would require manufacturers to allow MSHA to conduct an audit for cause at any time the Agency believes that an approved product is not in compliance with the technical requirements of the approval. Audits would allow MSHA to determine whether products are being manufactured as approved. MSHA would select the product, and may, if necessary, obtain products from sources other than the manufacturer such as distributors or wholesalers.

In determining which products to audit, MSHA will consider a variety of factors such as whether the manufacturer has previously produced the product or similar products, whether the product is new or part of a new product line, or whether the product is intended for a unique application or limited distribution. Other considerations could include product complexity, the manufacturer's previous product audit results, extent of the product's use in the mining community, and the time elapsed since the last audit or since the product was first approved.

There are other circumstances or causes when additional audits may be necessary to verify compliance with the technical requirements. Examples of such circumstances would include complaints about the safety or performance of a product, product changes that have not been approved, audit test results that warrant further testing to determine compliance, and evaluation of corrective action taken by an approval holder.

If discrepancies are discovered during an audit, the Agency will provide the approval holder an opportunity to present information. If the approval holder cannot demonstrate compliance, MSHA may initiate revocation proceedings under the revocation provisions of this proposal.

Proposed § 14.11 is derived from existing §§ 18.16, 7.9, and 15.11, and addresses the revocation procedure and rights of approval holders.

Proposed § 14.11(a) provides that MSHA may revoke an approval when a conveyor belt fails to meet the technical requirements of the approval, or creates a danger or hazard when used in an underground coal mine.

MSHA's practice is to treat approval holders as ''licensees'' under the Administrative Procedure Act (APA, 5 U.S.C. 558). Consistent with this practice, proposed § 14.11(b) would provide that approval holders be given certain due process considerations prior to revocation of an approval. These considerations include being provided with (1) a written notice of the Agency's intent to revoke a product approval; (2) an explanation of the reasons for the proposed revocation; and (3) an opportunity to demonstrate or achieve compliance with the technical requirements for approval.

Proposed § 14.11(c) would provide the approval holder the opportunity for a hearing to appeal MSHA's decision.

Proposed § 14.11(d) would provide for immediate suspension of the approval of the product without prior written notice to the approval holder if the product poses an imminent danger or hazard to the safety or health of miners. The suspension may continue until revocation proceedings are completed. Consistent with MSHA's practice, once an approval is suspended, MSHA would notify the public of this action through recall notices on its Web site at *http://www.msha.gov*. All affected products

must be removed immediately from underground coal mines, and MSHA would initiate enforcement action for failure to do so.

MSHA believes that it must have the capability to order removal of noncompliant belt if an imminent hazard is created. Removal would protect miners from potential injury and life-threatening fire hazards.

Subpart B—Technical Requirements

Flame-resistant conveyor belt would be tested under proposed § 14.20(a) in accordance with the flame test specified in proposed § 14.22. This test would assure that conveyor belts are difficult to ignite and thereby are highly resistant to flame propagation. MSHA recognizes that other tests may exist or be developed in the future which could also serve as appropriate for evaluating flame resistant qualities of conveyor belt for use in underground coal mines. Accordingly, proposed § 14.20(b) would permit an alternate test to be used to determine the flame resistance of conveyor belts for approval, as long as the alternate test is determined by MSHA to be equivalent.

Once a determination of equivalency is made an alternate test under existing § 6.20 and proposed § 14.4(e), MSHA would notify the public in the **Federal Register**. Applicants could choose to have their belts tested for approval using the laboratory-scale flame test or the equivalent alternate test.

Proposed § 14.21 would describe the principal parts of the BELT apparatus used to flame-test conveyor belts. Copies of drawings which depict the test apparatus will be available from MSHA upon request.

Proposed § 14.21(a) would require a horizontal test chamber 66 inches (167.6 cm) long by 18 inches (45.7 cm) square (inside dimension). The chamber dimensions were established from the large-scale belt flammability studies. The test chamber is constructed from 1 inch (2.5 cm) thick Marinite® I, or equivalent insulating material. Marinite® I was selected because it is a commercially available noncombustible insulating material that minimizes thermal losses through the walls and is able to withstand repeated test fires. The reference to Marinite® I is not an MSHA endorsement of the product. Should minor cracking occur in the Marinite® I, it can be repaired using an appropriate sealant. However, the Marinite® I or equivalent insulating material must be replaced and not repaired if the crack or break is across the total thickness.

Proposed § 14.21(b) would require a 16-gauge (0.16 cm) stainless steel duct section, tapering over at least a 24-inch (61 cm) length from a 20-inch (51 cm) square cross-sectional area at the test chamber connection to a 12-inch (30.5 cm) diameter exhaust duct, or equivalent. The interior surface of the tapered duct section would be lined with ½ inch (1.27 cm) thick ceramic blanket insulation or equivalent insulating material. The use of stainless steel minimizes corrosion and the tapered duct section allows a smooth airflow to enter the exhaust duct. The tapered duct is lined with ceramic blanket insulation to minimize high duct temperatures and thermal expansion.

Proposed § 14.21(c) requires a U-shaped gas-fueled impinged jet burner igniting source. The U-tube measures 12 inches (30.5 cm) long and 4 inches (10.2 cm) wide with two parallel rows of 6 jets each. The burner jets are slanted so that they point toward each other in pairs and the flames from these pairs impinge upon each other. The burner fuel is methane or natural gas of suitable purity. A burner unit available from the Solarflo® Corporation, Model U–10 using Model Number 640 jets producing 7,500 BTU per hour per jet is suitable to comply with these specifications. This burner unit, which is an impinged jet burner and is the burner type used as the igniting source in the BELT, is listed to assist the public and is not an MSHA endorsement of the Solarflo® product. Any other burner unit which meets the proposed specification would be appropriate to be used as part of the test apparatus. This burner was referenced because it is commercially available and provides a reliable, reproducible ignition source that can burn methane or natural gas. The BELT results correlate well with the large-scale belt flammability test results when using the described burner and gaseous fuel in conjunction with the other parameters.

Proposed § 14.21(d) would require a removable steel rack, consisting of 2 parallel rails and supports constructed from slotted angle iron, to be used to hold a belt sample. The rack dimensions of 7 ± ⅛ inches (17.8 ± 0.3 cm) wide, 60 ± ⅛ inches (152.4 ± 0.3 cm) long and 5 ± ⅛ inches (12.7 ± 0.3 cm) between the rails are specified in the proposal.

Typically, commercially available, 1 inch (2.5 cm) by 1¾ inch (4.4 cm) by ⅛ inch (0.3 cm) thick angle iron with predrilled ¼ inch (0.6 cm) diameter holes spaced 1 inch (2.5 cm) apart is used. The top surface of the rack is 8 ± ⅛ inches (22.9 ± 0.3 cm) from the inside roof of the test chamber. The rack materials and dimensions were selected so that the rack adequately supports the belt sample and withstands repeated tests with only minor warping due to heat while minimizing the rack's thermal mass. The distance from the top surface of the rack to the inside roof of the test chamber was established based on the comparison of the test results and the development of correlation parameters with the large-scale belt flammability studies.

The BELT apparatus does not contain any pollution control system for exhaust fumes created during flame tests. If an applicant chooses to build a test apparatus and perform the BELT for research or quality assurance purposes, some type of effluent control may be required to meet State and local emission standards. There may be a variety of methods and designs that will work to control exhaust fumes without affecting the test results. Because different jurisdictions can have different air quality standards, one pollution control system may not be suitable for all locations. Therefore, each unit should comply with applicable environmental regulations.

Proposed § 14.22 would specify how the test for flame resistance of conveyor belts would be conducted. It would provide that the test be performed in the required sequence using a flame test apparatus meeting the specifications of proposed § 14.21. Measurements are rounded to the nearest tenth of a centimeter.

Small changes in barometric pressure, humidity, and ambient temperature should not have a significant effect on the test results. Published literature indicates that small changes in atmospheric pressure have little or no effect on flame propagation. Variations in ambient temperature did not show a trend in either decreasing or increasing the burn damage of belts tested. A small increase or decrease of relative humidity will not have a significant effect on the flame propagation because conveyor belts are typically impervious to moisture.

The proposal addresses those variables that have an appreciable effect on the test results in order to maintain consistency in the testing method.

Proposed § 14.22(a) would specify the test procedure sequence needed to determine the flame resistance of conveyor belts. The technical dimensions and tolerances critical to the proper conduct of the test and to maintain consistency in the test method are specified in this proposal. Dimensions that have no effect on the test results are specified without a tolerance and are indicated as approximate. For example, in proposed § 14.22(a)(3), the securing locations for the fourth and fifth fastenings are not

critical and, therefore, the dimensions are specified as approximate. However, where dimensions could impact the test results, tolerances for the dimensions are given to maintain the consistency of test conditions.

Proposed § 14.22(a)(1) would require that three belt samples must be preconditioned by being laid flat at 70 ± 10° F (21 ± 5° C) for at least 24 hours prior to the test.This would: assure that the samples are at laboratory temperatures, facilitate sample mounting, and minimize curling during the test.

A conveyor belt that has been rolled prior to testing is more likely to rebound to the rolled position during testing. This action is considered ''curling'' and may lead to erroneous test results. Samples which have been rolled prior to testing can develop sufficient curling forces to overcome the holding capabilities of the cotter pins installed to retain the sample on the rack. Should curling occur, MSHA would need to test additional samples in order to assure that reliable test results have been obtained. The Agency has determined that the use of flat, unrolled samples greatly reduces the occurrence of curling.

Proposed § 14.22(a)(2) would require that the belt sample be placed on the rails of the rack with the load carrying surface facing up. If a belt is constructed without having a designated top cover, it will be mounted without regard to cover orientation. For example, many PVC belts are constructed with a solid woven carcass and the top or bottom cover is not designated. Therefore, either side of the belt could be mounted as the load-bearing cover. The sample must extend 1 ± ⅛ inch (2.5 ± 0.3 cm) beyond the front of the rails and 1 ± ⅛ inch (2.5 ± 0.3 cm) from the outer lengthwise edge of each rail.

This centers the longitudinal axis of the sample along the centerline of the rack with the first inch of the sample in the ignition area and not in contact with the rack. The 1 ± ⅛ inch (2.5 ± 0.3 cm) overlap that extends beyond the front of the rail facilitates ignition of the belt sample by minimizing the thermal heat sink created by the sample rack. A greater overlap can result in the sample curling or pulling back from the burner during the ignition period.

Proposed § 14.22(a)(3) would require that the belt sample be fastened to the rails of the rack by drilling or punching holes along the long edges of the sample and using steel washers and cotter pins as fasteners. Each washer is typically ¾ inch (1.9 cm) square and 1⁄16 inch (0.2 cm) thick with a 3⁄16 inch (0.5 cm) diameter hole. A washer is placed over each sample hole and a cotter pin is inserted through the hole in the belt and rail. The cotter pin is spread apart to secure the sample to the rail. The locations of the fasteners were chosen so that the majority (6 of 10) would be in the ignition area to minimize the belt sample pulling away from the burner, or lifting and curling during the ignition period. Specific fastener locations with tolerances for holes 4 and 5 were not identified. It is MSHA's experience that the exact location of these fasteners is not critical to the retention of the sample and does not influence the test results. Additional fasteners can be used in the ignition region for belts that lift excessively. The fasteners facilitate the secure mounting of the belt sample and are too small to influence the test results by heat absorption, even if additional fasteners are used.

Proposed § 14.22(a)(4) would require centering the rack and mounted sample in the test chamber with the front end of the sample 6 ± ½ inches (15.2 ± 1.3 cm) from the entrance of the chamber. This location reduces the disturbance of the airflow entering the test chamber. The location is based on the correlation of the BELT results to the results of large-scale belt flammability studies.

Proposed § 14.22(a)(5) would require the airflow passing over the belt sample to be 200 ± 20 ft/min (61 ± 6 m/min) as measured by a 4 inch (10.2 cm) diameter vane anemometer, or equivalent device. This anemometer measurement is taken on the inside of the chamber on the centerline of the belt 12 ± ½ inches (30.5 ± 1.3 cm) from the entrance of the chamber. The airflow and measuring location selected are based on comparison of the test results with the large-scale belt flammability studies. MSHA identified the variables that affect the conditions of the test, such as air velocity and the ambient air and tunnel temperatures while conducting several hundred belt flame tests. Therefore, this provision would require the airflow passing over the belt sample to be 200 ± 20 ft/min (61 ± 6 m/min).

Proposed § 14.22(a)(6) would require that, before starting a test of each sample, the inner surface temperature of the chamber roof be measured at points 6 ± ½, 30 ± ½, and 60 ± ½ inches (15.2 ± 1.3, 76.2 ± 1.3, and 152.4 ± 1.3 cm) from the front entrance. A ½ inch (1.3 cm) tolerance is added to the location for the temperature measurement points in paragraph (a)(6) because this tolerance is needed to maintain consistency of the test conditions. The temperature must not exceed 95 °Fahrenheit (35 °Centigrade) at any of these points with the specified airflow passing through the chamber. The temperature of the air entering the chamber during each test of the three samples is also required to be not less than 50 °Fahrenheit (10 °Centigrade). These temperature limits are specified to maintain the repeatability of the test results and to maintain the comparison obtained with the large-scale belt flammability studies. An upper limit on airflow and a lower limit on the temperature of the air entering the test chamber are included as test control parameters. These test parameters are designed to assure the test chamber temperature meets certain restrictions for each of the three tests.

Proposed § 14.22(a)(7) would specify that the burner be positioned in front of the belt sample's leading edge, so that when ignited the flames from the two rows of jets impinge in front of the belt's edge and distribute uniformly on the top and bottom surfaces of the sample. A ⅛ inch tolerance was added to the location dimension for the burner jets. This tolerance is important because it maintains the consistency of the test method. The alignment of the burner provides for the uniform heating of the sample, which is necessary to maintain the consistency of the test results.

The exact burner orientation needed to provide uniform distribution of flame on the top and bottom surfaces of the test sample may vary depending upon the belt sample's thickness. Based upon comparison tests and experience gained in developing the BELT procedure, the burner must be slanted downward from the vertical, at approximately a 15° angle, and located ¾ ± ⅛ inch (1.9 ± 0.3 cm) from the front edge of the belt. Slanting of the burner compensates for the buoyancy of the burner flames. The appropriate burner alignment necessary for uniform distribution of flame may be determined by adjustments prior to igniting the samples under test.

Proposed §§ 14.22(a)(8) and (a)(9) would require that, with the burner lowered away from the sample, the gas flow to the burner be adjusted to 1.2 ± 0.1 standard cubic feet per minute (SCFM) (34 ± 2.8 liters per minute) and be maintained at this value throughout the 5 to 5.1 minute ignition period. Once the test is completed, the flame should be safely extinguished. One standard cubic foot is defined as the amount of gas which occupies one cubic foot at 72 °F and one atmosphere pressure (1 cubic liter at 22 °C and 101 kilopascal. The specified gas flow provides a stable flame and is based on a comparison of the test results with the large-scale belt flammability studies.

After completion of each test, proposed § 14.22(a)(10) would require that the undamaged portion across the

entire width of the sample be determined by examining the tested sample. Blistering, without charring, is not considered damage because blistering could result from the effects of heat rather than the presence of flame. Determining the undamaged portion across the entire width of the sample is necessary for specifying acceptable performance of the conveyor belt.

For acceptable belt performance, proposed § 14.22(b) would require that each of the three tested samples exhibit an undamaged portion across the entire width of the sample length. This criterion is based on the correlation of the BELT results to the results of large-scale belt flammability studies.

Proposed § 14.23 is intended to facilitate the introduction of new technology or new applications of existing technology with respect to conveyor belts. This would provide for the approval of a conveyor belt which incorporates technology for which the requirements of this part are not now applicable.

Conforming Amendments

This proposal would require conforming amendments to existing approval regulations in parts 6 and 18 and safety standards for underground coal mines in part 75.

Part 6—Testing and Evaluation by Independent Laboratories and Non–MSHA Product Safety Standards

The definition of ''Equivalent non-MSHA product safety standards'' under § 6.2 and the applications for equivalency under § 6.20(a)(1) would be amended by adding Part 14 (Conveyor Belts in Underground Coal Mines) to the list of approval parts affected by this proposal. These are administrative and conforming provisions.

Part 18—Electric Motor-Driven Mine Equipment and Accessories

Part 18 would be amended by removing the term ''conveyor belt'' from existing §§ 18.1, 18.2, 18.6(a), 18.6(i), 18.9(a) and 18.65. The revised sections of Part 18 would only relate to acceptance of hoses, and existing § 18.6(c) would be removed and reserved. MSHA is proposing these conforming amendments to part 18 because applications for approval of conveyor belts will be considered only under Part 14.

Part 75—Mandatory Safety Standards—Underground Coal Mines

Subpart L—Fire Protection

Proposed § 75.1108 would require the use of improved flame-resistant conveyor belt in underground coal mines. Under the proposal, until one year after publication in the **Federal Register**, operators could use conveyer belts in underground coal mines which are either: (1) Approved as flame-resistant under Part 14, or (2) accepted as flame-resistant under Part 18. Proposed § 75.1108(b) would require that one year after the effective date of the rule, all conveyor belts purchased for use in underground coal mines must be approved as flame-resistant under Part 14.

Under this proposal, for a period of one year, mine operators would have the option of using conveyor belts which have been accepted under existing part 18, or have been approved under new part 14.

After one year, the mine operator would be required to purchase only belts meeting the requirements of proposed part 14. Mine operators would be permitted to use existing belts until replacement is necessary.

Section 75.1108–1 is removed from the 30 CFR because it is no longer needed.

B. Fire Prevention and Detection and Approval of the Use of Air From the Belt Entry To Ventilate Working Sections

1. General

This proposed rule will enhance miner safety and health by including improved requirements for the use of air from the belt entry, belt maintenance, and fire detection.

The proposal includes: New procedures to approve the use of air from the belt entry to ventilate working sections; replacing point-type heat sensors with carbon monoxide systems in all coal mines; qualifications for AMS operators; requirements for escapeways; limits on respirable dust in the belt entry; maximum and minimum air velocities in the belt entry; standardized tactile signals for lifelines; use of smoke sensors in mines using air from the belt entry; and improved belt entry maintenance.

The Panel was chartered to make recommendations regarding the utilization of air from the belt entry in underground coal mining; therefore, many of its recommendations deal with requirements for only those mines that use air from the belt entry to ventilate working sections. However, the Panel recommended that some requirements should be applied to all underground coal mines. These include: Airlock doors along escapeways; minimum belt entry air velocity; standardized tactile signals for lifelines; maintaining higher ventilating pressures in the primary escapeway to the extent possible; replacing point-type heat sensors with carbon monoxide sensors for fire detection in belt entries; and belt entry maintenance. Consistent with the Panel's recommendations, this proposed rule includes provisions applying to mines that use air from the belt entry to ventilate working sections, as well as to mines that do not.

As a result of the proposed change to require the use of carbon monoxide sensors for fire detection along belt lines in all mines, the Agency is proposing to revise several other related provisions. These include sensor spacing, establishing a warning level, responses to warning and malfunction signals, testing and calibration requirements, and minimum air velocity to incorporate the use of carbon monoxide sensors.

The Agency is aware that some mines currently use carbon monoxide sensors to monitor the belt entry under granted petitions for modification or existing provisions which allow systems equivalent to point-type heat sensors. These would be superseded by a final rule, and operators would be required to comply with all new requirements.

This part of the proposal addresses the following Panel recommendations:

- Recommendation number 5—Belt entry and conveyor belt maintenance;
- Recommendation number 6—Special requirements for the use of belt air;
- Recommendation number 7—Belt air approval recommendation;
- Recommendation number 8—Discontinuing point-type heat sensors;
- Recommendation number 9—Smoke sensors;
- Recommendation number 10—Use of diesel-discriminating sensors;
- Recommendation number 12—AMS operator training certification;
- Recommendation number 13—Minimum and maximum air velocities;
- Recommendation number 14—Escapeways and leakage;
- Recommendation number 15—Lifelines;
- Recommendation number 16—Point-feeding;
- Recommendation number 17—Respirable dust; and
- Recommendation number 18—Mine methane.

2. Discussion of Proposed Rule.

Part 48—Training and Retraining of Miners

Subpart B—Training and Retraining of Miners Working at Surface Mines and Surface Areas of Underground Mines

Section 48.27(a)—Training of Miners Assigned to a Task in Which They Have Had no Previous Experience; Minimum Courses of Instruction

The Panel recommended that MSHA initiate rulemaking to require the qualification and certification of AMS operators. To address Panel recommendation 12, MSHA is proposing a revision to existing § 48.27(a), and adding a new § 75.156.

Proposed § 48.27(a) would require that miners assigned new work tasks as Atmospheric Monitoring System (AMS) operators be trained before they perform these duties. MSHA believes that AMS operators must have the background, experience, training, and authority to assure that proper actions are taken in response to AMS signals, including alerts, alarms, and malfunctions, to provide the highest degree of safety to all affected miners.

Existing § 48.27(a) requires that a training plan be approved by MSHA for specific tasks, and that the training be provided prior to the miner performing those tasks. The Agency is proposing to add AMS operators as a specific task to be covered by this provision. AMS operators are required only at mines using air from the belt entry to ventilate working sections and areas where mechanized mining equipment is being installed or removed.

Part 75—Mandatory Safety Standards—Underground Coal Mines

Subpart B—Qualified and Certified Persons

Section 75.156—AMS Operator, Qualifications

Proposed § 75.156(a) would require that to be qualified as an AMS operator, a person shall be provided with task training in accordance with the mine operator's approved part 48 training plan. MSHA recognizes a significant portion of the knowledge necessary is mine-specific and must be tailored to conditions at each operation. MSHA is proposing that this task training be provided, at each mine where the AMS operator performs these duties.

Current AMS operators must have been provided task training under an approved part 48 plan to be considered qualified under § 75.156(a). To continue to perform the functions of a qualified AMS operator after the effective date of a final rule, this training must be provided.

The proposed training requirements would give the Agency oversight in the review and approval of the part 48 training plan for AMS operators, and allow MSHA inspectors to determine the effectiveness of this training. Under the proposal, AMS operators would need to be task trained at each mine in which they perform these duties due to different AMS designs, variations in ventilation plans and systems, complexities of evacuation plan requirements, and uniqueness of the mine configurations. MSHA will develop a compliance guide to assist mine operators in identifying essential elements to be included in the training plan.

Proposed § 75.156(b) would require that an AMS operator must be able to demonstrate to an authorized representative of the Secretary that he/she is qualified to perform the assigned tasks. The inspector will make a determination about the AMS operators qualifications during regular inspections. In making this determination, the inspector would ask the AMS operator questions regarding: The responses to AMS signals; notification requirements; approved mine plans; recordkeeping requirements; and AMS operating requirements. This would assure that the AMS operator fully understands how to operate and respond to the AMS.

The Panel also recommended certification or qualification of the responsible person, who is required in § 75.1501, to take charge during mine emergencies. MSHA addressed training of responsible persons in the Agency's final rule on Mine Rescue Teams (73 FR 7636).

Subpart D—Ventilation

Section 75.323—Actions for Excessive Methane

In Recommendation 18, the Panel stated that methane liberated from ribs along the belt, or from the broken coal on the belt, can present significant safety hazards. The Panel stated that if methane levels in the belt air course are too high to provide dilution of methane liberated at the working sections, then the use of the air from the belt entry to ventilate a working section should be discontinued.

To address the Panel's concern, MSHA is considering adding a new provision concerning methane levels in the belt entry. While this proposal does not contain a specific provision on this issue, MSHA is requesting comments on including a requirement in the final rule which would limit methane levels in the belt entry when the air from that entry is used to ventilate the working section. In making its recommendation, the Panel wanted to assure that ventilating in this manner would not increase the methane content at the working section. This new provision would provide an added margin of safety for miners as well as a greater probability that methane would be reduced when the air reaches the working section.

The Panel recommended that the District Manager regularly evaluate any working section that has methane readings in the belt entry at or above 0.5% methane, measured 200 feet outby the tailpiece of the belt, to prevent the gas liberated on a conveyor belt or from the belt entry from increasing the methane content at the working section above 1.0%.

Under the existing standard, the allowable limit for methane in belt air courses is 1.0 percent because of the potential fire and ignition sources in the belt entry. MSHA believes that this new provision would be consistent with the Panel's recommendation, and its intent that methane levels in the belt entry be kept to a minimum.

MSHA is considering including a specific requirement in the final rule that the mine operator make changes or adjustments to reduce the concentration of methane present in the belt entry as measured 200 feet outby the section loading point. At this point in the rulemaking, MSHA is considering requiring that operators take action when methane is between a range of 0.5 and 1.0 percent. MSHA is soliciting comments on the appropriateness of such a standard and on the specific level at which changes or adjustments should be made.

In its existing enforcement program, MSHA measures methane levels in the belt air course as part of the regular inspections made at all underground coal mines. As suggested by the Panel, MSHA will check the methane levels in belt air courses 200 feet outby the section loading point to assure that methane levels in the working section are not increased as a result of using air from the belt entry.

Section 75.333(c)(4)—Ventilation Controls

Proposed § 75.333(c)(4) is a new provision that addresses Panel Recommendation 14 dealing with airlock doors. High pressure differentials on doors can lead to serious injuries to miners opening and closing these doors. Providing an airlock between entries provides a safe means

for miners to travel between two air courses. An airlock consists of a pair of doors installed in ventilation controls between two air courses, which form a pressure equalizing chamber. A miner would open the first door, enter the airlock, and close the door. After equalizing the pressure, the miner can then open the second door and move into the adjacent entry.

The Panel stated that personnel doors along escapeways should be installed to establish an airlock when the static force created by the pressure differential exceeds 125 pounds.

MSHA agrees that there may be instances where the installation of an airlock is needed due to hazards associated with safely opening and closing personnel doors where high pressure differentials exist. The need for safe access is critical during a mine emergency evacuation when miners must move quickly to adjacent entries.

Proposed § 75.333(c)(4) would require an airlock be established where the air pressure differential between air courses creates a static force exceeding 125 pounds on closed personnel doors along escapeways. MSHA specifically solicits comments on other suitable pressures.

The Panel recommended a standard based upon the force on the personnel door of 125 pounds. This force on any specific door is dependent upon the pressure differential across the ventilation control, and the surface area of the personnel door. For the same pressure differential, the force required to open a personnel door increases proportionately with surface area. Mine operators may have alternatives to establishing airlocks, including reducing the size of a personnel door, providing a flap, or sliding door, which may reduce the static pressure to below 125 pounds. Reducing the size of a personnel door may lower the static pressure to below 125 pounds.

In order to calculate the force exerted by a pressure differential, the pressure differential and door dimensions must first be determined. As reflected in the Panel's example, a 125 pound force limitation on a 3-foot by 4-foot door would be created by a pressure differential of 2.0 inches of water. A 3-foot by 4-foot personnel door has an area of 1728 square inches ($3' \times 4' = 12$ square feet $\times$ 144 in^2/ft^2 = 1728 square inches). For a force of 125 pounds, the distribution is 0.0725 pounds per square inch (125 lb/1728 in^2= 0.0725 psi). Using the conversion factor, 1 psi = 27.68 inches of water, the equivalent pressure differential can be calculated to be 2.0 inches of water (0.0725 psi $\times$ 27.68 in. H_2O/psi = 2.0 inches of water).

The following table shows the door sizes and associated pressure differentials which create a 125 pound force:

Door area, square feet	Pressure differential, inches H_2O
4	6.0
6	4.0
9	2.7
10	2.4
12	2.0

The Agency solicits comments on the number of airlocks that would be required under this provision and the associated cost.

Section 75.350—Belt Air Course Ventilation

Proposed § 75.350(a)(2) would include a new requirement that the minimum air velocity in the belt entry be at least 50 feet per minute. MSHA has included this new requirement because of proposed § 75.1103–4 (fire detection systems) which, consistent with the Panel's recommendation, would prohibit point-type heat sensors for early-warning and detection of conveyor belt fires, and require the carbon monoxide fire sensor systems in all belt entries.

When point-type heat sensor (PTHS) systems are used for fire detection, no minimum velocity in the belt entry is needed because the sensors are heat-activated. When carbon monoxide sensors are used, a minimum air velocity of 50 feet per minute is necessary to assure that carbon monoxide gas produced by a fire will be carried by the air current to the downwind sensors in a timely manner. This minimum velocity has been required for over two decades in mines using carbon monoxide sensors for fire detection, and has been shown to provide effective early warning.

Under the proposal, lower velocities could be requested by the mine operator in the ventilation plan in areas where the minimum velocity cannot be maintained. Where the District Manager approves such a plan, carbon monoxide sensor spacing would have to be reduced to no greater than 350 feet. NIOSH research and Agency experience show that the reduced spacing is necessary to assure carbon monoxide resulting from a fire is moved quickly from a fire to downwind sensors.

Proposed § 75.350(b) addresses Panel Recommendation 7, which states that MSHA should evaluate, as part of the approval of the mine ventilation plan, the safety of the use of air in the belt entry to ventilate working sections. The Panel further stated that the District Manager must take special care to evaluate whether the air from the belt entry can be routed to the working face in a manner that is safe for all miners involved.

Under the proposal, MSHA would revise existing § 75.350(b) to require that the use of air from a belt entry to ventilate a working section be permitted only when evaluated and approved by the District Manager in the ventilation plan. Under the proposal, the mine operator would have to provide information in the plan that the use of air from the belt entry affords at least the same measure of protection where belt haulage entries are not used to ventilate working places. The mine operator should include and the District Manager would consider technical reasons to use air from the belt entry as an intake air source for the section. These reasons include dilution of methane gases and respirable coal mine dust, improved balancing of ventilation pressures between entries to minimize contamination of escapeways, and reduced ground control hazards. In developing cost estimates for the Agency's Preliminary Regulatory Economic Analysis, MSHA assumed that mines currently using belt air would continue to use belt air under the proposal. In making a determination as to whether to approve the plan, the District Manager will evaluate all of the conditions in the mine and the operator's information.

Under the proposal, MSHA would allow a 3-month delayed compliance date for mine operators to submit a revision of the ventilation plan to the District Manager. Failure to submit a revised ventilation plan would result in enforcement action by the Agency.

MSHA will evaluate revisions to the mine ventilation plans consistent with the existing policy and procedure for plan approval. The Agency will approve those plans and revisions that assure the use of air from the belt entry to ventilate working sections affords at least the same measure of protection where belt haulage entries are not used to ventilate working places. The District Manager will notify the operator in writing of the approval or denial of approval of a proposed ventilation plan or proposed revision. A copy of this notification will be sent to the representative of miners by the District Manager. If the District Manager denies approval of a proposed plan or revision, the District Manager will notify the operator, in writing, of the deficiencies and provide an opportunity for discussion with the District Manager. The District Manager will also notify the operator of the

deadline for submitting the required information.

If the operator does not respond by the deadline, or if issues cannot be resolved through discussion, the District Manager will send a second letter notifying the operator: (1) That the plan can not be approved; (2) of the final deadline for submitting any required information; and (3) that after that deadline, the plan will be revoked. If the operator does not submit the required information, the District Manager would send a letter notifying the operator that the plan is revoked. Revocation would not be effective until completion of current mining.

Operating after the revocation date is a violation of the standard requiring an approved plan. A citation would be issued for failure to have an approved plan, as required by the ventilation standard. MSHA solicits comments on this provision. The Agency is particularly interested in comments related to circumstances in which the District Manager does not approve the continued use of belt air to ventilate active workings.

MSHA recognizes that there are potential sources of fire in belt conveyor entries, and that the use of air from the belt entry to ventilate working sections can result in contaminants from a fire being carried to the working section. The Agency also recognizes that there may be technical reasons to use air from the belt entry as an intake air source for the section. These reasons include dilution of methane gases and respirable coal mine dust, and improved balancing of ventilation pressures between entries to minimize contamination of escapeways.

Based on Agency experience, MSHA has determined that ground control hazards may require a reduction in the number of entries developed on a working section, as well as the use of air from the belt entry to supplement the intake air quantity. Under the proposal, the District Manager will have the authority to approve the use of air in the belt entry to ventilate the working section only in sections developed with three or more entries. Like the existing standard, a petition for modification will be required for a mine developing sections with two entries to use air from the belt entry to ventilate the working section or to put the belt in the return air course.

To address the hazards associated with the use of belt entry air, an operator's request to use air from the belt entry to ventilate the working section must include additional protections for the safety of miners in the event of a fire in that entry. Under the existing standards, these protections include an early-warning fire detection system that will rapidly alert miners to a fire in the belt entry and allow time to escape; training for miners on required actions when an alert or alarm occurs; limiting to fifty percent the amount of air that can be delivered to the section from the belt entry; and monitoring of carbon monoxide levels upwind of point-feed regulators. Consistent with the Panel's recommendations, the Agency is proposing additional requirements that the District Manager would consider when approving a ventilation plan to allow the use of air from a belt entry to ventilate the working section.

Under the existing § 75.350(b)(3), the average concentration of respirable dust in the belt air course, when used as a section intake air course, must be maintained at or below 1.0 mg/m^3. Proposed § 75.350(b)(3) would additionally require that where miners on the working section are on a reduced respirable coal mine dust standard that is below 1.0 mg/m^3, the average concentration of respirable dust in the belt entry must be at or below the lowest applicable respirable dust standard on that section.

In Recommendation 17, the Panel stated that respirable coal mine dust concentrations in the air coursed through a belt conveyor entry, and used to ventilate working sections, should be as low as feasible and must not exceed the existing regulated concentration of 1.0 mg/m^3. The Panel also stated that District Managers should have the authority to require improvements in dust control in the belt entry if the dust concentration exceeds an 8-hour TWA of 1.0 mg/m^3 or raises the concentration in that section above the exposure limit.

Reduced standards are frequently established on working sections due to presence of respirable quartz. The exposure limit for respirable coal mine dust is 2.0 mg/m^3 when quartz levels are five percent or less. This standard is reduced when respirable dust in the mine atmosphere contains more than five percent quartz. Reduced standards are computed by dividing the percent of quartz measured in the mine atmosphere into the number ten. For example, if the mine atmosphere contains 20 percent quartz, the reduced standard would be 0.5 mg/m^3 (10/20 = 0.5 mg/m^3). The purpose of reduced standards is to limit miner exposure to respirable quartz.

This proposal assures that the respirable coal mine dust exposure of miners on the working section would not be increased by the use of air from the belt entry. For example, if the standard for the continuous miner operator (the designated occupation) is 2.0 mg/m^3 and the reduced standard for the roof bolter on the same working section (a designated area) is 0.8 mg/m^3, the average concentration of respirable dust in the belt entry used to ventilate that working section could not exceed 0.8 mg/m^3. This is because 0.8 mg/m^3 is below 1 mg/m^3 and is the lowest applicable respirable dust standard on the section.

If a mine operator is unable to effectively reduce the respirable dust levels in the belt entry to meet this proposed requirement, the District Manager would have the authority to revoke the ventilation plan which had allowed the use of air from the belt entry to ventilate the working section.

MSHA believes that technology is available to effectively lower respirable dust levels in the belt entry. Because a principal source of respirable dust is at belt transfer points, technologies such as improved water sprays may reduce dust concentrations. If a mine operator reduces the air velocity in the belt entry, this could result in less scouring and lower respirable dust concentrations. As the Panel indicated, the operator should implement improved engineering controls whenever possible, or use air from another intake air course.

The Agency solicits comments on this provision for assuring that air from the belt entry does not increase miners' exposure to respirable coal mine dust.

Proposed §§ 75.350(b)(7) and (b)(8) are new provisions to address Recommendation 13. The Panel recommended minimum and maximum air velocities in belt entries for mines using air from belt entries to ventilate working sections. The Panel recommended a minimum velocity of 100 feet per minute, and a maximum of 1,000 feet per minute in the belt entry, but acknowledged that there are situations where these velocities may be difficult to maintain. For this reason, the Panel recommended allowing the District Manager to approve exceptions to the minimum and maximum velocities.

In its report, the Panel provided three reasons for requiring a minimum velocity of 100 feet per minute: Improve the response time for fire detection; reduce the possibility of methane layering; and mitigate underground fog formation. The Panel recommended limiting the maximum velocity to 1,000 feet per minute to address physical discomfort to workers when air from the belt entry is used to ventilate working sections. Also, according to the Panel, when air from the belt entry is used to ventilate working sections, increased

velocity will result in a greater entrainment of dust particles, resulting in a need to limit the velocity.

Consistent with the Panel's recommendations, proposed § 75.350(b)(7) would require a minimum air velocity in the belt entry of 100 feet per minute. Proposed § 75.350(b)(8) would require a maximum air velocity of 1,000 feet per minute in the belt entry.

In its report, the Panel noted that it may be difficult to achieve minimum air velocities in locations outby point-feed regulators, and where the air meets a partial obstruction like an airway constriction at an overcast or undercast. MSHA believes that additional areas where minimum air velocities may be hard to achieve include where additional air is added to the belt air course, and in areas where entry height is exceptionally high.

Consistent with the Panel's recommendation, the proposal provides that the District Manager may approve exceptions to the minimum and maximum velocities based on specific mine conditions. These exceptions would be permitted where reductions to sensor spacing or alert and alarm levels are made to assure the fire detection capabilities of the AMS are maintained. In developing their ventilation plans, mine operators should use the criteria in NIOSH research (RI 9380) to determine appropriate alert and alarm levels.

Proposed §§ 75.350(d)(1) and (d)(7) address Recommendation 16. The Panel recommended that for mines using air from the belt entry to ventilate working sections and areas where mechanized mining equipment is being installed or removed, where possible, a second carbon monoxide sensor be installed in the primary escapeway 1,000 feet upwind of the sensor required by the existing standard. The Panel also recommended that, when these sensors detect alert or alarm levels of carbon monoxide and the mine has designated the belt as the alternate escapeway, the AMS operator should have the ability and authority to remotely close or open the point-feed regulator after consulting with the responsible person designated by the mine operator to take charge during mine emergencies.

MSHA is aware that point-feeding air from the primary escapeway to the belt entry designated as the alternate escapeway can present significant problems for miners who must evacuate the mine due to a fire in the primary escapeway.

Proposed § 75.350(d)(1) would require a second carbon monoxide sensor to be installed 1,000 feet upwind of the point-feed regulator, unless the mine operator requests a lesser distance be approved by the District Manager in the mine ventilation plan based on mine-specific conditions. The proposal would allow the District Manager to approve a lesser distance in the ventilation plan, dependent upon mine conditions. For example, it may be necessary to request a lesser distance near intake shafts where the distance from the point-feed regulator to the bottom of the shaft may be less than 1,000 feet.

The second sensor would monitor the primary escapeway for fire. Agency experience suggests this is possible in most cases since these regulators are typically near the mouth of development panels or deep into the mains of the mine.

MSHA believes that this proposal would expedite initiation of escape in the case of a fire or other emergency. Under the proposal, fire in the primary escapeway would be detected before contaminants would be allowed to inundate the secondary escapeway. This early-warning would provide the AMS operator and responsible person with additional time to assess potential hazards and determine necessary corrective actions.

Proposed § 75.350(d)(7) would require that where point-feeding air from a primary escapeway to a belt entry designated as an alternative escapeway, point-feed regulators be equipped with a means to remotely close the regulator or any other means to isolate the two escapeways. The AMS operator, after consultation with the responsible person and section foreman, would be capable of performing this function from the designated surface location. In case of fire or other emergency, closing of the point-feed regulator provides necessary separation of the primary and alternate escapeways.

This proposal permits the mine operator to close the regulator or provide an alternate means of isolating the two escapeways from the surface. The Agency believes that, in some cases, it may be more effective to provide an alternate means of isolation, such as an overhead door, than to close regulators.

When an investigation into the cause of alert and alarm signals is conducted, the AMS operator, responsible person, and section foreman would consult to determine the need to close point-feed regulators. The decision to close point-feed regulators would be made based on this consultation as recommended by the Panel.

Closure of a regulator can reduce the intake air quantity on a working section, and may cause sudden and rapid increases in methane concentrations at the working sections if mining continues. Closing regulators without notifying sections may lead to an ignition in the face area, fires and explosions.

This provision would also apply if the belt entry is common with another entry designated as the alternate escapeway, and the belt air course is used as a section intake. However, this provision would not apply if the mine is point-feeding a belt air course which is not used to ventilate a working section, or if the belt air course entry is not designated as the alternate escapeway.

The Panel also recommended requiring a means to remotely open the regulator from the designated surface location. Because the point-feed regulator is open under normal mining conditions, the Panel's recommendation would address re-opening the regulator after it is closed during a fire in the primary escapeway. MSHA believes that remote reopening could be accomplished by an electric device, such as an electric arm.

MSHA has not included a requirement for providing a means for re-opening the regulator from the designated surface location in the proposal. Even though reopening the point feed regulator could possibly be necessary if the airflow change caused by closing the point-feed turns out to have adverse effects on mine ventilation or smoke travel and must be reversed, MSHA believes that once evacuation is completed, the need for remote re-opening of the regulator will be rare. The Agency, however, solicits comments on whether a requirement to remotely re-open the regulator should be included in the final rule. Please be specific in your response, including the value of such a provision, alternatives, rationale, safety benefits to miners, technological and economic feasibility, and data to support your comment.

Section 75.351(b)—Designated Surface Location and AMS Operator

Proposed § 75.351(b)(2) addresses Panel Recommendation 12. In that recommendation, the Panel indicated that the highest priority of the AMS operator should be monitoring and responding to system signals.

Consistent with the Panel's recommendation, the proposal would require that AMS operators have as a primary duty the responsibility to monitor the malfunction, alert, and alarm signals of the AMS and to notify appropriate personnel of these signals. Under the proposal, the AMS operator would not be prohibited from performing additional duties as long as the alert, alarm and malfunction signals can be seen or heard, and a timely

response can be initiated. This proposal would assure that the AMS operator's other duties would not adversely affect his/her primary responsibility of responding to AMS signals.

Section 75.351(e)—Location of Sensors—Belt Air Course

Proposed § 75.351(e) addresses additional requirements for the location of carbon monoxide and smoke sensors in mines using air from belt entries to ventilate working sections. The proposal contains other organizational and clarifying changes.

Proposed § 75.351(e)(1), renumbered from existing § 75.351(e), addresses the location of approved sensors. The term approved has been added to clarify that all sensors used for fire detection must be approved under the existing authority of § 75.1103–2. The reference to smoke sensors has been deleted, since the requirements for smoke sensors would be addressed in § 75.351(e)(2).

Proposed §§ 75.351(e)(1)(i) and (ii), are renumbered from existing §§ 75.351(e)(1) and (2). No other changes have been proposed to these provisions.

Proposed § 75.351(e)(1)(iii), renumbered from existing § 75.351(e)(3), conforms the existing standard for sensor spacing to the minimum velocity of 100 feet per minute addressed in Panel Recommendation 13. At mines using air from the belt entry to ventilate the working sections, proposed § 75.351(e)(1)(iii) would require 1,000-foot sensor spacing where the minimum air velocity of 100 feet per minute (fpm) is maintained. If the mine operator requests approval to use velocities less than 100 fpm, but at least 50 fpm, maximum sensor spacing must be reduced to 500 feet. The proposal retains the existing requirement to reduce sensor spacing to 350 feet when the minimum velocity is less than 50 fpm.

The requirement for a minimum velocity in the belt entry is based on the time it would take for carbon monoxide or smoke to travel from a fire to the sensors. When the air velocity is reduced, the time required to carry carbon monoxide gas or smoke to a sensor is increased. Therefore, the distance between sensors needs to be reduced to maintain the same level of early-warning fire detection.

The proposed 500-foot spacing interval for velocities between 50 and 100 fpm is a new requirement. MSHA calculated the proposed spacing requirement, which provides a 10-minute maximum travel time for gases between sensors. The 500-foot spacing requirement with a velocity between 50 and 100 fpm is equivalent to the 1,000-foot sensor spacing with 100 fpm air velocity. The time for carbon monoxide gas or smoke to travel from a fire to a downwind sensor is no greater than 10 minutes.

Under the existing standard for sensor spacing of 1,000 feet and a minimum velocity of 50 fpm, the time for carbon monoxide or smoke to travel from a fire to the sensors is no more than 20 minutes. The proposed reduction in travel time for carbon monoxide or smoke to reach the sensors would significantly improve early detection of a fire in the belt entry.

Proposed § 75.351(e)(1)(iv) has been revised to add the requirement that if the distance between the belt drive unit, tailpiece transfer point, and belt take-up unit is more than 100 feet, an additional sensor would be required to monitor each of these belt conveyor components. These components are potential fire sources. The additional sensors will assure earlier detection of a fire.

Proposed § 75.351(e)(1)(v), is renumbered from existing § 75.351(e)(5). No other changes have been proposed to this provision.

Proposed § 75.351(e)(2) is a new provision which addresses Panel Recommendation 9. The Panel recommended that MSHA require the use of smoke sensors in addition to carbon monoxide sensors in mines using air from a belt entry to ventilate working sections at three specific locations. Under this proposal, smoke sensors would be required to be installed in areas where air from the belt entry is used to ventilate working sections and areas where mechanized mining equipment is being installed or removed.

When smoke sensors become available, mine operators must comply with the requirements for installing both smoke and carbon monoxide sensors in those mines that use air from the belt entry to ventilate the working section.

Proposed § 75.351(e)(2)(i) would require a smoke sensor to be installed at or near the working section belt tailpiece in the air stream ventilating the belt entry. In longwall mining systems, the sensor would be located upwind in the belt entry at a distance no greater than 150 feet from the mixing point where intake air is mixed with the belt entry air at or near the tailpiece. A smoke sensor at or near the section tailpiece will warn miners of smoke prior to it contaminating the working section. This allows more time for miners to evacuate the section with less exposure to potentially toxic fumes.

Proposed § 75.351(e)(2)(ii) would require a smoke sensor to be installed not more than 100 feet downwind of each belt drive unit, each tailpiece transfer point, and each belt take-up. Under the proposal, if the belt drive, tailpiece, and take-up for a single transfer point are installed together in the same air course, they may be monitored with one sensor located not more than 100 feet downwind of the last component of the belt drive. However, if the distance between the belt drive unit, tailpiece transfer point, and belt take-up units is more than 100 feet, an additional sensor would be required to monitor each of these belt conveyor components. These components are potential fire sources. The additional sensors will assure earlier detection of a fire.

Based upon the Panel's report and Agency experience, MSHA believes that smoke sensors provide additional protection at the belt drive, which can be a major source of frictional heating from belt slippage. This can often produce significant smoke with little carbon monoxide, and can result in a belt fire.

Proposed § 75.351(e)(2)(iii) would require smoke sensors to be installed at intervals not to exceed 3,000 feet along each belt entry. The Agency is not proposing to require a smoke sensor to be installed near the mid-point of the belt line as recommended by the Panel. The midpoint of the belt line will change with section advancement or retreat, which would require splicing of the data line when relocating the smoke sensor. The frequent splicing of the data lines could allow moisture and dust to enter the line and may result in communication failures. Miners have indicated that frequent splicing of the cable containing the AMS data line can adversely affect the reliability of a system.

MSHA believes the proposed requirement for smoke sensors along the belt entry is responsive to the Panel's goal for more effective and reliable detection of conveyor belt fires. The proposal would avoid problems associated with frequent relocation of the smoke sensor. The 3,000-foot spacing proposal would require longer belts to be monitored at additional locations.

In its report, the Panel suggested a delayed effective date for the smoke sensor requirement, to permit in-mine evaluation of the sensors. The Panel noted reliability and maintenance issues with the use of smoke sensors in underground coal mines, especially along conveyor belt entries. NIOSH is currently testing smoke sensors used in other harsh industrial environments for their potential use in underground

mines. NIOSH is evaluating these sensors to assess reliability and service life.

To allow for further in-mine evaluation and approval of smoke sensors, MSHA proposes in § 75.351(e)(2)(iv) that this provision be effective one year after the Secretary has determined that a smoke sensor is available to reliably detect fire in underground coal mines. The Secretary's determination would be made after a nationally recognized testing laboratory formally lists a smoke sensor specifically tested for use in underground coal mines. In making the determination regarding the availability of smoke sensors, the Secretary will also consider whether additional rulemaking is appropriate. MSHA will notify mine operators of the availability of smoke sensors by publishing a notice in the **Federal Register**.

This proposal is based on the Secretary's existing authority under § 75.1103–2 to approve nationally recognized testing laboratories. The Secretary has approved two such laboratories for listing or approving components of automatic fire sensors. They are Underwriters Laboratories (UL) and Factory Mutual (FM). These laboratories establish standards for manufacturers of components of automatic fire sensors used in underground coal mines.

MSHA has recommended change to a commercial standard for smoke detectors to be applied to address sensor reliability in underground coal mines. In December 2002, the Agency asked UL to add a category for smoke sensors for underground coal mines to their commercial performance standard for smoke sensors (UL268). In MSHA's request to UL, the Agency asked that the performance standard for smoke sensors include tests for sensitivity to smoldering and flaming coal. UL has formed a new working group, which includes an MSHA representative, to study false alarms caused by coal mine dust and other airborne particulates.

MSHA's Program Policy Manual provides additional guidance on the requirements of § 75.1103–2. The Manual states that fire sensors used in belt entries must be listed or approved by UL or FM. New or unique devices to be used as fire sensors that are not yet listed by UL or FM and which may meet the requirements of these standards can be submitted to MSHA's Office of Technical Support for a determination of whether they are acceptable to use.

Once a laboratory has formally listed a smoke sensor for use in underground coal mines, the Secretary will evaluate the sensor to determine if it will reliably detect a fire in the underground environment. MSHA believes that, once the smoke sensors for underground coal mines are available, one year will allow mine operators using air from belt entries to ventilate working sections sufficient time to purchase and install the sensors. The Agency intends to keep the mining community informed of ongoing activities with respect to the development of smoke sensors for underground coal mines.

Section 75.351(q)—Training

Proposed § 75.351(q) addresses Panel Recommendation 12. Consistent with the Panel's recommendation, the proposal would specify the content of required annual training for AMS operators.

Proposed § 75.351(q)(1) would require training subjects to include: Familiarity with underground mining systems; basic atmospheric monitoring system requirements; the mine emergency evacuation and firefighting program of instruction; the mine ventilation system including planned air directions; appropriate responses to alert, alarm and malfunction signals; use of mine communication systems including emergency notification procedures; and AMS recordkeeping requirements. MSHA expects the training to address the specific conditions and practices at the mine where the AMS operator is employed. Based on Agency experience, MSHA believes an understanding of these subjects is essential to properly perform the duties of an AMS operator.

Proposed § 75.351(q)(2) is new and would require that, at least once every six months, all AMS operators must travel to all working sections to retain familiarity with underground mining systems including haulage, ventilation, communication, and escapeways. The Panel stated that some AMS operators do not travel underground, and recommended that they be required to spend at least a day underground on a semi-annual basis. MSHA believes that the requirement in this proposal would allow AMS operators to retain familiarity with the mine.

Proposed § 75.351(q)(3) is changed to require records of the training be maintained for at least two years. The existing requirement is one year. This will allow MSHA to verify the training in the previous year has been conducted.

Section 75.352—Actions in Response to AMS Malfunction, Alert, or Alarm Signals

Proposed § 75.352(f) includes a conforming reference and organizational changes. It would delete the terms ''50-foot per minute'' and replace the reference to § 75.351(e)(3) with § 75.350(b)(7).

Proposed § 75.352(g) is a new provision addressing Panel Recommendation 16. The Panel recommended that when both of the sensors installed in the primary escapeway monitoring the point feed reach the carbon monoxide alert level, or if one sensor reaches the alarm level, a warning signal be given at the regulator location.

The Panel's recommendation addresses point-feed regulators where air is introduced to a belt entry and used to ventilate the working section. The Panel specifically limited this recommendation to point-feed regulators feeding the belt entries designated as alternate escapeways. Panel Recommendation 16, which relates to the installation of an additional sensor and remote closing of the point-feed regulator, is addressed by proposed § 75.351(d)(1) and (d)(7).

Proposed § 75.352(g) would require that the AMS automatically provide both a visual and audible signal in the belt entry at the point-feed regulator location, at sections affected by a potential fire, and the designated surface location. These signals would be activated when carbon monoxide concentrations reach the alert level at both point-feed intake monitoring sensors, or the alarm level at either point-feed intake monitoring sensor.

Under the proposal, visual and audible signals would have to be automatically activated at all three locations when concentrations of carbon monoxide at both of the sensors in the intake escapeway reach the alert level or when one sensor reaches the alarm level.

The signal at the regulator would provide notice to miners nearby that a fire may have occurred in the primary escapeway, and that the point-feed regulator could be (or has been) remotely closed. This information should assist miners in evacuating the mine.

The Panel did not specify in which escapeway the signal is to be located. Proposed 75.352(g) specifies that it would be located in the belt entry (alternate escapeway). Since the purpose of the signal is to warn of a potential fire in the primary escapeway and the point-feed regulator could be remotely closed from the surface, MSHA believes that it is more appropriate to locate the signal on the belt side of the regulator.

Section 75.371—Mine Ventilation Plan; Contents

Proposed § 75.371(jj) addresses Panel Recommendation 13 regarding the approval of air velocities in the belt entry. Although the Panel recommended minimum and maximum velocities in the belt entry, they recognized that in certain areas of underground coal mines it may be difficult to achieve these velocities. The Panel specifically noted that this may occur in the outby air split near a point-feed regulator, or where the air meets a partial obstruction like an airway constriction at an overcast or undercast. Where the recommended velocities cannot be achieved, the Panel recommended that the District Manager may approve exceptions in the mine ventilation plan, dependent upon specific mine conditions.

MSHA believes that requiring approval in the mine ventilation plan will allow the District Manager to fully evaluate the conditions in the mine including all aspects of the mine ventilation system. In making a determination on whether to approve requested velocities, the District Manager would evaluate the need for increasing fire detection sensitivity by adjusting alert and alarm levels for high velocities or reducing sensor spacing for low velocities.

Proposed § 75.371(mm) addresses Recommendation 10. The Panel recommended that MSHA perform regular, periodic reviews of the AMS records at mines using air from a belt entry to ventilate working sections to evaluate the number of occurrences of false alarms due to diesel exhaust. In those instances where such false alarms are excessive, the Panel recommended MSHA should require the use of existing diesel-discriminating sensors.

Based on Agency experience, diesel exhaust contains carbon monoxide, and can activate alerts and alarms. Under these circumstances, these signals may not be the result of a fire, but the result of diesel equipment operating in the area. An excessive number of these alert and alarm signals can cause miners to become complacent and routinely ignore them as false alarms. The benefit of diesel-discriminating sensors is that the frequency of signals caused by diesel engines is reduced.

Under the proposal, the District Manager could require the use of diesel-discriminating sensors in the approved mine ventilation plan. The proposal would require that the operator include in the ventilation plan the locations of any diesel-discriminating sensors. The District Manager approval of the use of these sensors would be based on mine conditions where diesel-powered equipment is used and excessive alert and alarm signals are caused by diesel exhaust. Since the proposal would be applicable to all mines using belt haulage, it deletes the reference to § 75.351(e)(5), which relates to mines using air from the belt entry to ventilate the working section.

MSHA does conduct periodic reviews of AMS records during regular inspections of the mine. MSHA re-emphasized procedures for inspecting an AMS in a recently revised Agency handbook which specifically provides inspectors with guidance on evaluating the frequency of diesel-related alert and alarm signals. (Carbon Monoxide and Atmospheric Monitoring Systems Inspection Procedures MSHA Handbook PH–08–V–2, February, 2008.)

Proposed § 75.371(nn) addresses Panel Recommendation 8. The Panel recommended discontinuing the use of point-type heat sensors, and using carbon monoxide sensors for all mines using belt haulage. Existing § 75.351(m) requires that the use and length of any time delays be approved by the District Manager in the mine ventilation plan for mines using air from the belt entry to ventilate the working section. Time delays may also be necessary in some mines that do not use air from the belt entry to ventilate working sections to aid in the reduction of false alarms. Proposed § 75.1103–4 would require the use of carbon monoxide sensors. Therefore, time delays for these mines must also be approved in the mine ventilation plan. Accordingly, the proposal deletes the reference to § 75.351(m) since it would apply to all mines using belt haulage.

Proposed § 75.371(yy) addresses Panel Recommendation 14 regarding the location of airlock doors installed between air courses. The Panel recommended that personnel doors along escapeways be structured to form an airlock when the force required to open a door, due to the pressure differential, exceeds 125 pounds.

Proposed § 75.333(c)(4) would require that an airlock be established where the air pressure differential between air courses creates a static force exceeding 125 pounds on closed personnel doors along escapeways. Proposed § 75.371(yy) would require the operator to submit the locations where airlock doors are installed between air courses in the ventilation plan for approval by the District Manager. This requirement would apply to all underground coal mines.

MSHA believes that requiring airlock doors to be approved in the mine ventilation plan will allow the District Manager to fully evaluate the conditions in the mine and all aspects of the mine ventilation system.

Proposed § 75.371(zz) addresses Panel Recommendation 14 regarding ventilating pressure within the primary escapeway. The Panel recommended that primary escapeways be ventilated with intake air preferably, and to the extent possible, the primary escapeway should have a higher pressure than the belt entry. The proposal would require that locations where the mine operator cannot maintain the pressure differential from the primary escapeway to the belt entry be included in the mine ventilation plan. This would allow the District Manager to evaluate specific mine conditions and require additional actions or precautions to be taken to protect the integrity of the primary escapeway, as appropriate.

Section 75.380—Escapeways Bituminous and Lignite Mines, and 75.381—Escapeways; Anthracite Mines

This proposal would amend paragraphs (d)(7)(v), and (vi) and (f)(1) and add paragraphs (d)(7)(vii), (viii) and (ix) to § 75.380. It also would amend similar language in paragraphs (c)(5)(v) and (vi), and (e) and add paragraphs (vii), (viii) and (ix) to § 75.381.

Proposed §§ 75.380(d)(7) and 75.381(c)(5) address Panel Recommendation 15. Proposed § 75.380 applies to escapeway requirements for bituminous and lignite mines, and § 75.381 applies to escapeway requirements for anthracite mines.

Although the Panel noted with approval recent MSHA standards on lifelines (71 FR 71430) it made two recommendations for improving requirements for lifelines. The first was to require tactile signals to identify impediments to travel, SCSR caches and personnel doors to adjacent escapeways. The second was to require nationwide standardization of all tactile signals.

The proposal includes both of these recommendations for the following reasons. The location of personnel doors may not be easily identifiable in smoke-filled entries, and signals would help miners move to alternate escapeways when the primary route is impeded or blocked against passage. Impediments to travel could cause delays and possible injury to escaping miners. Standardized signals will reduce the possibility of confusion in an emergency, and will provide an additional safety benefit to miners who transfer to different mines because they would not have to become familiar with new signal systems.

Existing §§ 75.380(d)(7)(v) and 75.381(c)(5)(v) require lifelines with directional indicators, signifying the

route of escape, placed at intervals not exceeding 100 feet. Proposed §§ 75.380(d)(7)(v) and 75.381(c)(5)(v) would require one cone to be used as the directional indicator. Like the existing rule, each cone would have to be installed so that the tapered section points inby.

Existing §§ 75.380(d)(7)(vi) and 75.381(c)(5)(vi) require tactile signals be attached to the lifeline to identify the location of SCSR caches, but do not specify the type of signal to be provided. Proposed §§ 75.380(d)(7)(vi) and 75.381(c)(5)(vi) require standardization of tactile signals. Consistent with the Panel's recommendation, the tactile feedback for SCSR storage locations would be six back-to-back directional cones.

Proposed §§ 75.380(d)(7)(vii) and 75.381(c)(5)(vii) are new provisions which would require standardized tactile signals to identify the location of personnel doors to adjacent crosscuts connecting escapeways. Consistent with the Panel's recommendation, the proposal would require that the tactile feedback for personnel doors be four back-to-back directional cones.

Proposed §§ 75.380(d)(7)(viii) and 75.381(c)(5)(viii) are new provisions which would require standardized tactile signals to identify the location of physical impediments in the escapeway. Consistent with the Panel's recommendation, the proposal would require that the tactile feedback for physical impediments would be two back-to-back directional cones. For example, when miners are approaching an overcast in an escapeway, two back-to-back directional cones would alert them to prepare to encounter a set of stairs to cross the overcast. Examples of other impediments include water sumps, track, conveyor belts, and regulators.

Under the proposal, MSHA defines back-to-back to mean that multiple cones are aligned so that they are in contact with one another, with all tapered sections pointing inby. As a miner's hand passes over these cones, the feedback for each of the recommended signals would be easily understood.

In another rulemaking, MSHA is proposing new requirements for refuge alternatives in underground coal mines. The Agency believes a distinctive tactile signal should also be attached to lifelines to identify the location of refuge alternatives. Because tactile signals on lifelines are addressed in this proposal, to provide a comprehensive and integrated approach for these requirements, the Agency is including this provision in this rulemaking.

Proposed §§ 75.380(d)(7)(ix) and 75.381(c)(5)(ix) would require lifelines to be marked to provide tactile feedback distinguishable from other markings to indicate the location of refuge alternatives. The tactile feedback for a refuge alternative would be a two-foot length of rigid spiraled coil (cork-screw style). This distinctive signal would improve safety by alerting miners to the location of refuge alternatives in areas of poor visibility. The proposal also would require another line to be attached from the lifeline to the refuge alternative. This line would be attached at the spiraled coil on the lifeline. This line would allow miners traveling in smoke to locate refuge alternatives along the escapeway, and return to the lifeline if refuge access is blocked.

Each of the signals in this proposal must be distinguishable from other markings. These signals, when integrated with escapeway drills, will help miners understand the differences in, and significance of, tactile signals and aid in evacuating the mine. The Agency specifically solicits comments on alternative tactile signal markings.

Proposed §§ 75.380(f) and 75.381(e) would require the primary escapeway to have a higher ventilation pressure than the belt entry. Under the proposal, the operator can submit an alternative in the mine ventilation plan to protect the integrity of the primary escapeway. Approval by the District Manager would be based on mine-specific conditions. This provision would apply to all mines using belt haulage.

In Recommendation 14, the Panel stated that primary escapeways should be designed, constructed, and maintained in accordance with the provisions of existing § 75.333 (b)–(d) to minimize the air leakage. The Panel also recommended that primary escapeways be ventilated with intake air preferably and, to the extent possible, the primary escapeway should have a higher pressure than the belt entry. Based on Agency experience, MSHA recognizes the need to maintain the pressure differential from the primary escapeway to the belt air course. A higher pressure in the primary escapeway would assure that air leakage would move from this escapeway to the belt entry. In case of a fire in the belt entry, the primary escapeway would not become contaminated.

The proposal would require the pressure differential to be maintained. However, under the proposal, the operator could submit an alternative in the mine ventilation plan to protect the integrity of the primary escapeway. MSHA agrees with the Panel's recognition that it is difficult to maintain the pressure differential from the intake to the belt entry at all times. The different resistances to air flow within the air courses will cause changes to the pressure differentials between the adjacent entries separated by permanent ventilation controls. At some locations, especially near working sections, pressure differentials will often reverse between the two air courses. MSHA experience is that these reversals are small in magnitude. However, even low pressure differentials can allow significant leakage where ventilation controls are not properly maintained.

There are two components to air leakage. First, the flow from one entry to the other is caused by the pressure differential. Air will tend to flow from high to low pressure. The other component is the resistance to flow. A high resistance will not allow high air flow rates even when the pressure differentials are considerable. A key to limiting air leakage through a ventilation control is to increase the resistance by sealing the control and its perimeter. Historically, MSHA has identified damaged and improperly installed doors as sources of high air leakage. Openings in stoppings to provide routing of air and water lines, electrical conductors and other conduits must also be sealed to minimize air leakage. When these conduits are removed, ventilation controls must be properly repaired.

The Agency does not expect mine operators to use check curtains or other temporary ventilation controls such as parachute stoppings to increase the resistance in the primary escapeway in order to pressurize the air course during normal mining. The use of such controls on a regular basis diminishes the efficiency of the ventilation system.

Subpart L—Fire Protection

75.1103–4—Automatic Fire Sensor and Warning Device Systems; Installation; Minimum Requirements

Proposed § 75.1103–4 addresses Panel Recommendation 8. The Panel recommended that MSHA initiate rulemaking to discontinue the use of point-type heat sensors (PTHS) for early-warning and detection of conveyor belt fires in all underground coal mines.

In making its recommendation, the Panel examined research comparing the fire detection capabilities of carbon monoxide sensors and PTHS. The Panel concluded that there are inherent inadequacies with PTHS for reliable early-warning belt fire detection. According to the Panel's report, carbon monoxide sensors can detect fires at an

earlier stage of fire development than PTHS. The Panel found the time it took for PTHS to alarm during a fire was much longer than the time it took carbon monoxide sensors to alarm. The Panel also found that the location and spacing of PTHS relative to fire location could result in fires not being detected in a timely manner.

Research and accident investigation reports on fires have consistently shown that carbon monoxide sensors are superior to PTHS. MSHA's accident investigation report of the Dilworth mine fire, (MSHA,1992 Greene County, PA) revealed that carbon monoxide sensors were superior to PTHS, where both sensors were installed in the same belt entry. The ignition source of the fire was located nearly midway between two heat sensors spaced at 50 feet. The fire was detected by the carbon monoxide sensor located 1,400 feet downwind of the fire. The fire was extinguished by miners without injury and with only little damage in the belt entry. The heat sensors installed along the belt did not detect the fire.

Proposed § 75.1103–4 would require the use of carbon monoxide sensors for fire detection along belt conveyors in all underground coal mines. In addition, the proposal includes installation, maintenance, operating and training requirements.

Proposed § 75.1103–4(a) would require the use of an early-warning fire detection system in all underground coal mines to identify fires along the entire belt conveyor system. The proposal would remove the requirement to identify the belt flight on which the system detects fire. When PTHS are used for fire detection, they are designed to identify the belt flight on which the fire occurs. Carbon monoxide sensors provide a more precise identification of the location, to within 1,000 feet.

For example, suppose a belt flight length of 4,800 feet is being monitored for a fire. If a PTHS indicated a fire, the system would identify the fire to be within an area encompassing 4,800 feet of beltline. Using carbon monoxide sensors, the system would identify the fire as being upwind of the sensor location and within 1,000 feet of the sensor. This will narrow the search area for determining the source of the alarm signal, and aid in extinguishing the fire in a more timely, effective manner. The proposed requirement for carbon monoxide sensors in all mines results in earlier identification of the location of a fire and is a significant improvement in fire detection.

Proposed § 75.1103–4(a)(1) would require the use of carbon monoxide sensors to be installed at specific locations along belt conveyors. These locations maximize the potential of early warning of a fire in the belt entry, and are based on Agency experience with the use of carbon monoxide sensors in underground coal mines.

Proposed § 75.1103–4(a)(1)(i) would require a sensor to be placed not more than 100 feet downwind of each belt drive unit, each tailpiece transfer point, and each belt take-up. Under the proposal, if the belt drive, tailpiece, and/or take-up are installed together in the same air course, they may be monitored with one sensor located not more than 100 feet downwind of the last component. However, if the distance between the belt drive unit, tailpiece transfer point, and belt take-up units is more than 100 feet, an additional sensor would be required to monitor each of these belt conveyor components.

This requirement is intended to provide early fire detection in the belt drive area, a potential fire source due to dust accumulations and electrical equipment.

Proposed § 75.1103–4(a)(1)(ii) would require a sensor to be installed in the belt entry not more than 100 feet downwind of each section loading point. Under the proposal, this sensor would monitor the section loading point, and provide miners on the section with warning of fire in the belt entry.

Proposed § 75.1103–4(a)(1)(iii) would require that sensors be located along the belt entry so that the spacing between sensors does not exceed 1,000 feet. Where air velocities are less than 50 feet per minute, spacing must not exceed 350 feet. The proposed 350-foot spacing has been shown in NIOSH research to provide effective early warning of a fire in the belt entry when the air velocity is 50 feet per minute or less. The combination of sensor spacing and air velocity is required to assure that carbon monoxide produced by a belt fire is transported to the sensor to provide for an effective warning.

Proposed § 75.1103–4(a)(1)(iv) would require sensors to be located upwind, a distance of no greater than 50 feet from the point where the belt air course is combined with another air course or splits into multiple air courses. This would require placing a carbon monoxide sensor in the belt entry just before the air stream splits to ventilate another belt entry. Also, if two belt air splits join, this provision would require a sensor in each air split immediately prior to joining. These sensors would provide a more precise location of the air split where the fire originated.

Proposed § 75.1103–4(a)(2) would remove the reference to point-type heat sensors and replace it with carbon monoxide sensors. In proposed § 75.1103–4(a)(1), MSHA would no longer accept the use of PTHS for fire detection along belt conveyors.

Proposed § 75.1103–4(a)(3) would remove the 125-foot spacing requirement for point-type heat sensors and replace it with conforming requirements for carbon monoxide sensor spacing. Because point-type heat sensors would no longer be permitted, spacing for these devices would no longer be applicable. Carbon monoxide sensors would be required to be added when the distance from the section loading point to the first outby sensor reaches 1,000 feet when air velocity is at least 50 feet per minute, and 350 feet if the velocity is less than 50 feet per minute.

Proposed § 75.1103–4(b) would require that sensors be installed near the center in the upper third of the entry, in a location that does not expose personnel working on the fire detection system to unsafe conditions. The proposal provides that sensors must not be located in abnormally high areas or in other locations where air flow patterns do not permit products of combustion to be carried to the sensors.

MSHA based this proposed requirement on the results of NIOSH research and Agency experience with carbon monoxide sensors. This data has shown that during both smoldering and open combustion fires, the products of combustion stratify, leaving higher concentrations of smoke and carbon monoxide near the mine roof. Based on this, NIOSH recommended installing sensors near the roof of the entry to take advantage of stratification. MSHA's experience is that when operators do not properly position sensors, fire detection can be hindered or delayed. For example, sensors that are positioned behind equipment or other obstructions may not be exposed to the products of combustion contained in the air stream, thereby impairing their ability to provide for effective fire detection.

This provision requires sensors to be installed near the center, and in the upper third, of the belt entry. In most cases, the safest location for installing a sensor is from a roof bolt plate or belt hanger located beside the belt along the walkway. This would prevent miners from being exposed to hazards such as a moving belt when calibrating or examining sensors.

Section 75.1103–5—Automatic Fire Warning Devices; Actions and Response

Proposed § 75.1103–5, which has been retitled, adds requirements for initiating warning signals and responses for automating fire warning devices. It provides conforming changes to § 75.1103–4.

Proposed § 75.1103–5(a) requires that when the carbon monoxide level reaches 10 parts per million above the ambient level at any sensor location, an effective warning signal must be provided at specific locations. Consistent with MSHA's existing standards for a warning signal to be effective, it must be seen or heard.

PTHS provide warning based on elevated temperatures, while carbon monoxide sensors provide warning based on elevated levels of carbon monoxide. The proposed requirement of carbon monoxide sensors represents a significant improvement in providing early warning of a fire in the belt entry over the use of point-type heat sensors. MSHA experience shows that an action level at 10 parts per million above the ambient level provides an effective warning of a fire and allows miners the opportunity to safely evacuate the affected area. The Agency is soliciting comments on this approach.

Proposed § 75.1103–5(a) would require warning signals to be provided at both underground work locations and on the surface. The existing standard requires that signals be provided at either underground work locations where miners may be endangered, or at a manned location.

Proposed § 75.1103–5(a)(1) would require effective warning signals to be provided to working sections and other work locations where miners may be endangered from a fire in the belt entry. Locations where miners may be endangered would include working sections, areas where mechanized mining equipment is being installed or removed, permanent work locations, and other locations specified in the Mine Emergency Evacuation and Firefighting Program of Instruction required by § 75.1502.

Proposed § 75.1103–5(a)(2) retains the existing requirement that the warning signal be provided to a manned location. The proposal would require that the manned location be on the surface. MSHA believes requiring that the warning be provided to a surface location will facilitate timely and effective evacuation of miners and improve communication with mine management. This will facilitate more effective decision-making in a mine emergency. The proposed requirement that the warning be provided on the surface would also allow for required communication with local emergency response personnel, appropriate state agencies, and MSHA. This is consistent with the Emergency Response Plan requirement in Section 2 of the MINER Act for local communication.

Proposed § 75.1103–5(a)(2)(i) retains the requirement for having a telephone or equivalent communication with all miners who may be endangered.

Proposed § 75.1103–5(a)(2)(ii) is new, and requires a mine map or schematic that shows the location of sensors and the intended air flow direction at these locations to be posted at the manned surface location. This new provision is necessary to assure that the location of a potential fire can be identified in a timely manner. With the use of carbon monoxide sensors, a fire location is identified by specific sensors. The sensor locations are most easily identifiable by using a map or schematic. The air directions are needed to facilitate fire fighting activities and evacuation in the event of a fire, explosion or other emergency.

Proposed § 75.1103–5(a)(3) is derived from the existing rule, and has not been changed, except for the numbering.

Proposed §§ 75.1103–5(d) through (h) are new provisions which would specify responses required to signals from the automatic fire warning devices. This proposal is consistent with requirements for responses to AMS signals in existing § 75.352. These provisions would apply to all mines using belt haulage.

Proposed §§ 75.1103–5(d) and (e) specify requirements for responses to malfunction and warning signals. When a malfunction or warning signal is received at the surface location, § 75.1103–5(d) would require that the sensor must be identified and appropriate personnel be immediately notified. Depending upon the circumstances at the mine, appropriate personnel may include the mine foreman, mine electrician, or other persons responsible for maintaining the sensors. Proposed § 75.1103–5(e) would require appropriate personnel to immediately initiate an investigation to determine the cause of the malfunction or warning signal and take necessary corrective action. These proposed provisions require immediate corrective actions to assure that the appropriate responses are taken in case of an emergency.

Proposed § 75.1103–5(f) would require specific procedures be followed in case of a warning signal. Proposed § 75.1103–5(f)(1) would require appropriate personnel to notify miners in affected working sections, in affected areas where mechanized mining equipment is being installed or removed, and at other locations specified in the § 75.1502 approved mine emergency evacuation and firefighting program of instruction when a warning signal is received. This notification is in addition to the automatic signal required in proposed § 75.1103–5(a)(1). Proposed § 75.1103–5(f)(2) would require all miners in the affected areas to be immediately withdrawn to a safe location identified in the mine emergency evacuation and firefighting program of instruction upon notification of a warning signal. Under the proposal, miners who are assigned emergency response duties do not have to be withdrawn.

The actions specified in §§ 75.1103–5(f)(1) and (f)(2) must be taken, unless the operator determines the source of the warning does not present a hazard to miners. For example, if the operator knows that the warning signal is caused by cutting and welding or calibration of a sensor, actions would not have to be taken. MSHA believes these proposed actions are needed to assure that the protective early-warning capabilities of the carbon monoxide sensor result in timely action and rapid evacuation in case of emergency.

Proposed § 75.1103–5(g) would require that, if the warning signal will be activated during calibration of sensors, personnel manning the surface location must be notified prior to and upon completion of calibration. The notification is also required for miners underground in affected areas. This proposal is necessary so that miners know that a warning signal is not a fire. This proposal would apply only at mines where calibration of sensors would cause activation of warning signals; many sensors have a calibration mode, where warning signals are blocked during calibration.

Proposed § 75.1103–5(h) would require that if any fire detection component becomes inoperative, immediate action must be taken to repair the component. This proposal would assure that repairs are made in a timely manner so that the fire detection system will remain capable of warning miners of a fire in the belt entry.

While repairs are being made, the belt may continue to operate if the requirements in proposed §§ 75.1103–5(h)(1) through (h)(6) are met. Otherwise, the belt must be taken out of service until necessary repairs are made.

Proposed §§ 75.1103–5(h)(1) through (h)(3) would require trained persons to continuously monitor or patrol the area of the mine where inoperable sensors

have been identified. When only one sensor is affected, § 75.1103–5(h)(1) would permit continued belt operation when a trained person is stationed at the sensor and monitors the air for carbon monoxide using a hand-held detector. If two or more adjacent sensors are affected, § 75.1103–5(h)(2) would permit continued belt operation if the area monitored by these sensors is patrolled so the area is traveled each hour in its entirety. As an alternative under the proposal, the mine operator could have a trained person stationed at each inoperative sensor location. Proposed § 75.1103–5(h)(3) would require the same monitoring if the entire fire detection system becomes inoperative.

Proposed § 75.1103–5(h)(4) would require the trained persons monitoring inoperable sensors to have two-way voice communication at intervals not to exceed 2,000 feet with the surface. The proposal would require that carbon monoxide levels be reported to the surface at intervals not to exceed one hour.

Proposed § 75.1103–5(h)(5) would require that trained persons monitoring under this section must immediately report to the surface when any concentration of carbon monoxide reaches 10 parts per million above the established ambient level, unless the operator knows that the source of the carbon monoxide does not present a hazard to miners. As stated previously, unless the carbon monoxide does not present a hazard to miners, the mine operator would be required to withdraw affected miners to the location specified in the approved Mine Emergency Evacuation and Firefighting Program of Instruction.

Proposed § 75.1103–5(h)(6) would require that handheld detectors used to monitor the belt entry under this section have a detection level equivalent to that of the carbon monoxide sensors.

Section 75.1103–6—Automatic Fire Sensors; Actuation of Fire Suppression Systems

Proposed § 75.1103–6 would provide that point-type heat sensors may be used to activate fire suppression systems. Although the Panel recommended discontinuing the use of point-type heat sensors for fire detection, it recognized a benefit in allowing them to be used for activating fire suppression systems. Consistent with the Panel's recommendation, under the proposal point-type heat sensors may continue to be used to actuate deluge-type water systems, foam generator systems, multipurpose dry-powder systems, or other equivalent automatic fire suppression systems.

Section 75.1103–8—Automatic Fire Sensor and Warning Device Systems; Inspection and Test Requirements

Existing § 75.1103–8 requires that the mine operator conduct weekly inspection and annual functional testing of the fire detection system, as well as make and retain records of the inspection and testing. These requirements were developed for point-type heat sensors, and do not provide adequate protection for carbon monoxide sensors.

MSHA experience has shown an examination of the carbon monoxide sensors at least once each shift when the belts are operated as part of a coal production shift is necessary to assure the sensors will operate and respond as required in the event of a fire. The mine environment in the belt entry can be harsh with potential roof falls, rock dusting, water sprays and coal dust. All of these physical factors can cause the carbon monoxide sensors to be compromised. Because sensors can be vulnerable to these factors, it is important that the mine operator examine the sensors each shift.

MSHA experience has shown annual testing of warning signals is not sufficient to assure these critical components will operate properly in time of emergency. Automatic fire warning system components commonly use batteries to activate warning signals. Annual functional testing may not identify batteries that are no longer capable of powering the warning signals. Proper weekly functional testing has been shown to provide assurance that properly installed batteries will activate warning signals.

Proposed § 75.1103–8(a) would require automatic fire sensor and warning device systems to be examined at least once each shift when belts are operated as part of a production shift, and a functional test of the warning signals to be made at least once every seven days. Increased frequency of examinations and functional tests of the system would better assure the system effectively maintains its fire warning capability so that it could provide adequate warning to miners of a fire. The increased examinations would also alert the mine operator to any damaged or missing components. Like the existing standard, the proposal would require that inspection and maintenance of these systems be completed by a qualified person.

Under the proposal, the functional test must be completed at intervals not to exceed 7 days. MSHA expects the functional test to verify that warning signals are effective at all locations where these signals are provided. MSHA would expect that a functional test would include application of carbon monoxide gas to the sensors necessary to activate each warning signal. These functional tests are needed to assure that the system retains its fire warning capability so that it will provide the proper warning signal in case of emergency. The Agency believes that the proposed examination requirements can be integrated into required preshift and on-shift examinations under existing §§ 75.360 and 75.362. The examinations would identify any problems with sensors such as improper installation, damaged sensors or cables, and missing components.

These examination frequencies are consistent with the Agency's current examination procedures for carbon monoxide sensors for all mines using these sensors in lieu of point-type heat sensors. These examinations are currently being performed at these mines, and are included in the mine ventilation plan or a granted petition for modification.

Like the existing rule, proposed § 75.1103–8(b) requires that the mine operator maintain a record of the functional tests. The proposal would also require that the mine operator keep a record of the functional tests for one year. Maintaining records for one year is consistent with other recordkeeping requirements, and would indicate to MSHA how warning signals operate over the course of a year. The proposal would delete the existing requirement that a record card of the weekly inspection be kept at each belt drive as this would no longer be necessary.

Proposed § 75.1103–8(c) would require that carbon monoxide sensors be calibrated at intervals not to exceed 31 days according to manufacturers' instructions. MSHA experience has shown this interval to be an appropriate time period to assure that carbon monoxide sensors respond effectively and reliably in the event of a fire. In addition, the proposal would require a record of sensor calibrations to be kept for a period of one year. The record will provide the mine operator with information to make necessary repairs and maintain the system, and will allow MSHA to verify that these corrective actions were taken in a timely manner.

Subpart R—Miscellaneous

Section 75.1731—Maintenance of Belt Conveyors and Belt Conveyor Entries

Proposed § 75.1731 is new and addresses Panel Recommendations 1, 5, 6 and 14 regarding belt entry and conveyor belt maintenance. It would

apply to all underground coal mines using belt haulage.

In their report, the Panel recommended that MSHA rigorously enforce existing standards on underground conveyor belt maintenance and fire protection, and improve inspection procedures. They also stated that MSHA should focus on required examinations of the belt lines by mine examiners to assure each belt is kept in good working order. The Panel identified the following areas for increased attention by belt examiners: Belts rubbing stands; damaged rollers; inadequate rock dusting; and accumulations of materials. In its enforcement of conveyor belt examinations, MSHA has traditionally focused on these and other hazards. Proposed § 75.1731 addresses areas associated with the belt entry and would require that the operator pay special attention to them to assure proper belt maintenance.

In its report, the Panel cited MSHA's investigation into the Aracoma Alma Mine No. 1 (Aracoma) belt fire as evidence of inadequate belt maintenance (MSHA Fatal Accident Report, Logan County, WV, 2007). MSHA identified as root causes of the fire deficiencies in belt maintenance and examinations. Prevention of belt fires is a critical element in improving miners' safety, and proper maintenance and examinations will reduce the likelihood of fires.

Proposed § 75.1731 would require: (a) Damaged rollers and other malfunctioning belt conveyor components to be immediately repaired or replaced; and (b) conveyor belts to be properly aligned to prevent the moving belt from rubbing against the support structure or other components. In both instances, improper belt examinations could lead to uncorrected hazards. This could result in frictional heating of combustibles in the belt entry which could cause a fire. The proposed provisions would require mine operators to assure that belt examiners identify and correct hazardous conditions in the conveyor belt entry to improve safety of miners.

Existing § 75.1725(a) contains inspection and maintenance requirements applicable to mobile and stationary machinery and equipment, including conveyor belts. Based on its experience, MSHA does not believe that the existing standard appropriately addresses the Panel's concerns regarding potential hazards resulting from inadequate examinations by belt examiners and inadequate maintenance. These hazards are caused by misalignment of the belt, damaged rollers and other belt components, and accumulations of non-combustibles. Proposed §§ 75.1731(a) and (b) specifically address these hazards.

Existing § 75.400 addresses accumulation of combustible materials, but it does not address hazards resulting from accumulation of noncombustible materials in the belt entry. Noncombustible materials include rock, trash, and discarded conveyor belt parts. These materials may become potential frictional ignition sources for combustible materials, resulting in a belt fire, or may pose tripping hazards in the belt entry. Proposed § 75.1731(c) would prohibit the accumulation of such noncombustible materials in the belt conveyor entry. The Agency does not intend that this provision apply to rock dust applied in the belt entry which is used to mitigate the accumulation of float coal dust.

Proposed § 75.1731(d) would require that splicing of any approved conveyor belt must maintain flame-resistant properties of the belt. Some belts can be a significant source of fuel for a mine fire. To protect miners, it is essential that any splices in the belt maintain the fire resistant properties of the belt so that it will not easily ignite or be a source of fuel for a fire.

MSHA recognizes the need to address splicing of the belt so that the materials and processes used in splicing do not compromise the flame resistant properties of the belt. Because splicing is a belt maintenance issue, the provision is included in this section.

MSHA requests comments on the following suggested effective and compliance dates for the final rule:

Effective dates: (following publication date of the final rule)—Compliance dates: Each mine operator shall comply with the following sections by the dates listed below.

1. § 75.156 AMS operator qualification—2 months.

2. § 46.27 Task Training Plan for AMS operators—2 months.

3. § 75.333(c)(4) Airlocks—3 months.

4. § 75.350(a)(2) Minimum Velocity—12 months.

5. § 75.350(b) Operator Submission of Revised Ventilation Plan for Approval for Use of Air from the Belt Entry—3 months.

6. § 75.351(e)(2) Smoke Sensors—12 months after Approval.

7. §§ 75.380 and 75.381 Lifeline Signals—6 months.

8. §§ 75.380 and 75.381 Primary Escapeway—6 months.

9. §§ 75.1103–4, 5, 8 Replacing PTHS—12 months.

10. § 75.1731 Maintenance of belt conveyors and belt conveyor entries—2 months.

IV. Executive Order 12866

Executive Order (E.O.) 12866 requires that regulatory agencies assess both the costs and benefits of regulations. To comply with E.O. 12866, MSHA has prepared a Preliminary Regulatory Economic Analysis (PREA) for this proposed rule. The PREA contains supporting data and explanation for the summary economic materials presented in this preamble, including data on the mining industry, costs and benefits, feasibility, small business impacts, and paperwork. The PREA is located on MSHA's Web site at *http://www.msha.gov/REGSINFO.HTM.* 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 the preamble. MSHA requests comments on all the estimates of costs and benefits 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. Based on the PREA, MSHA has determined that this proposed rule would not have an annual effect of $100 million or more on the economy and that, therefore, it is not an economically significant regulatory action. MSHA has concluded that the proposed rule is otherwise significant because it raises novel legal or policy issues.

A. Population at Risk

The proposed rule would apply to all underground coal mines in the United States. Based on the most recent MSHA data, there were 624 underground coal mines, employing 42,207 miners, operating in the U.S. in 2007.

B. Benefits

MSHA has qualitatively evaluated the potential safety benefits of the provisions of this proposed rule on improved flame-resistant conveyor belts, fire prevention and detection, and approval of the use of air from the belt entry to ventilate the working sections in underground coal mines. The proposal would implement Section 11

of the MINER Act and the recommendations of the Technical Study Panel (Panel) on the Utilization of Belt Air and The Composition and Fire Retardant Properties of Belt Materials in Underground Coal Mining.

The proposed provisions on improved flame-resistant conveyor belts would reduce belt entry fires in underground coal mines and would prevent related fatalities and injuries. From 1980 to 2007, there were 65 reportable belt entry fires. Almost all involved the conveyor belt itself. These fires caused over two dozen injuries and three deaths—one in 1986 at the Florence No. 1 Mine, and two in 2006 at the Alma No. 1 Mine. The Technical Study Panel noted that the number of belt fires had decreased over the past decade, but that the rate (i.e., number of fires per thousand mines) has remained constant. The Panel also noted that during this same period, although underground coal production increased so that the number of belt fires per 100 million tons decreased, there was high variability from year to year. These proposed provisions would prevent conveyor belt fires and, in turn, reduce accidents, injuries, and deaths caused by conveyor belt fires.

The proposed provisions on fire prevention and detection and approval of the use of air from the belt entry in underground coal mines would improve miner safety. The provision addressing maintenance of the belt conveyor and belt conveyor entry will improve safety to miners by requiring specific associated hazards to be corrected when found. These hazards, known to be sources of belt fire ignitions, include damaged and missing rollers and belt misalignment. For example, the MSHA Investigation Report of the Aracoma Alma Mine No.1 fire determined that the fire occurred as a result of the frictional heating due to a misaligned belt. The provision would also require that damaged components removed from service and other non-combustibles be removed from the belt entry. These non-combustibles are tripping hazards and potential sources of frictional heating that could lead to fire.

The proposed requirement to replace point-type heat sensors with carbon monoxide sensors for fire detection along belt conveyors in all underground coal mines would enhance miner safety because carbon monoxide sensors provide earlier fire detection. Earlier fire detection allows miners to better address the problem and/or evacuate the area. MSHA's research and accident investigation reports indicate that carbon monoxide sensors are superior to point-type heat sensors. For example, in the 1992 Dilworth Mine fire, the point-type heat sensors were no more than 27 feet away, but the carbon monoxide sensor that actually detected the fire was 1,400 feet downwind of the fire. Based on MSHA's research and experience, replacing point-type heat sensors with carbon monoxide sensors is an improvement in early fire warning detection.

Inadequate Atmospheric Monitoring System (AMS) operator training was identified as a contributing factor in the two fatalities in the Aracoma fire. Accident investigators found all miners assigned the duties of an AMS operator at this mine needed additional training to properly respond to alert, alarm, and malfunction signals generated by the AMS. The proposed provisions for AMS operator qualification and training would improve safety for miners by assuring that AMS operators will have the knowledge to respond properly to AMS signals. The qualification of miners as AMS operators would assure that MSHA has oversight in the development and approval of the task training, and annual retraining requirements would assure that AMS operators retain knowledge and training needed to perform specific duties and responsibilities. Specified training requirements would also assure that AMS operators are familiar with underground mining systems such as coal haulage, transportation, ventilation, and escape facilities.

Methane ignitions and explosions in the face areas can cause serious injuries or death to miners. The proposed provision requiring a reduced concentration of methane in the belt entry would improve safety for miners working on sections where air from the belt entry is used to ventilate the section. This reduced methane standard would provide a greater methane dilution capacity in face areas, reducing the risk of a methane ignition or explosion at the face.

The proposed provision requiring a higher ventilating pressure in the primary escapeway than the belt entry would assure that air leakage moves from this escapeway to the belt entry. If a fire were to occur in the belt entry, the primary escapeway would not become contaminated with smoke and carbon monoxide, thus maintaining the integrity of the escapeway and providing a safe means of egress for miners.

The proposed provision requiring lifelines to be marked with standardized tactile signals would aid miners evacuating the mine where visibility is obscured by smoke. New standardized signals would be required to: Identify impediments to travel within the escapeway; identify the location of personnel doors in adjacent crosscuts connected to adjacent escapeways; and identify the location of refuge alternatives. Existing signals for direction of travel and SCSR storage locations would also be standardized. Standardization of these signals would allow for consistent understanding of the signals so that miners who transfer between mines will not need to learn new signal systems, and generally would reduce the possibility of confusion, delay, or injury in an emergency.

C. Compliance Costs [1]

MSHA estimated the first year costs and the yearly costs of the proposed rule. MSHA estimated costs to mine operators on the following proposed provisions: Improved flame-resistant conveyor belt; installation and maintenance of carbon monoxide (CO) sensors in all underground coal mines; improved maintenance of conveyor belts and conveyor belt entries; atmospheric monitoring system (AMS) operator duties; standardized lifeline signals; and other provisions such as installation of airlocks along escapeways on personnel doors, an extra sensor and alarm unit on point feeds in mines using belt air, and a means to remotely close point feeds in mines using belt air where belt entry is an alternate escapeway.

MSHA estimates that the total first year costs would be approximately $66 million. Of the $66 million, MSHA estimates approximately $44 million in costs for the improved flame-resistant belts, and approximately $22 million in costs for the remaining provisions.

MSHA estimates that the proposed rule would result in total yearly costs of approximately $52 million. Of this amount, MSHA attributed approximately $90,000 in yearly costs to manufacturers of conveyor belts. Disaggregated by mine size, yearly costs would be approximately $5 million for mine operators with fewer than 20 employees. Of the 223 mines in this size category, MSHA estimates the cost would be approximately $21,000 per mine. Yearly costs would be approximately $43 million for mine operators with 20–500 employees. Of the 391 mines in this size category, MSHA estimates the cost would be approximately $110,000 per mine. Yearly costs would be approximately $4

[1] All costs have been rounded, therefore, some total costs may deviate slightly from the sum of individual costs.

million for mine operators with more than 500 employees. Of the 10 mines in this size category, MSHA estimates the costs would be approximately $410,000 per mine.

MSHA attributed the $52 million in yearly costs of the proposed provisions to mine operators as follows: Approximately $40.4 million for improved flame-resistant conveyor belt; approximately $6.3 million for installation and maintenance of CO sensors in all underground coal mines; approximately $3.5 million for improved maintenance of conveyor belts and conveyor belt entries; approximately $1 million for Atmospheric Monitoring System (AMS) operator duties; approximately $340,000 for standardized lifeline signals; and approximately $70,000 for other provisions mentioned above.

MSHA estimates the yearly cost for smoke sensors to be approximately $460,000; however, this cost is not included in the yearly costs of this rule because smoke sensors are not commercially available for use in underground coal mines.

Table 1 is a summary of the approximate yearly costs of the proposed rule by mine size and proposed provision. The Agency solicits comments on the estimated costs of these provisions.

TABLE 1

Proposed provisions	1–19 employees	20–500 employees	501+ employees	Total
Improved Flame Resistant Belt	$3.3 million	$33.4 million	$3.8 million	$40.4 million.
Improved Flame Resistant Belt (Manufacturers)	n/a	n/a	n/a	$90,000.
CO Sensors	$670,000	$5.5 million	$180,000	$6.3 million.
Maintenance of belts and belt entries	$750,000	$2.6 million	$130,000	$3.5 million.
AMS Operator duties	$57,000	$960,000	$29,000	$1 million.
Lifeline signals	$39,000	$290,000	$15,000	$340,000.
Other provisions	$1,300	$63,000	$3,700	$68,000.
Total	$5 million	$43 million	$4 million	$52 million.

V. Feasibility

MSHA has concluded that the requirements of the proposed rule would be both technologically and economically feasible.

A. Technological Feasibility

The proposed rule does not involve activities on the frontiers of scientific knowledge. Aside from proposed § 75.351(e)(2), compliance with the provisions of the proposed rule is technologically feasible because the materials, equipment, and methods for implementing these requirements currently exist.

Proposed section 75.351(e)(2) would require mines that use belt air to ventilate working sections to install smoke sensors one year after approval for use in underground coal mines. Smoke sensors are not technologically feasible because these sensors are not commercially available for use in underground coal mining. MSHA will notify the public when smoke sensors become available and are approved for use in underground coal mining.

B. Economic Feasibility

The yearly compliance cost of the proposed rule would be approximately $52 million for underground coal mines, which is 0.37 percent of annual revenue of $14.1 billion for all underground coal mines. MSHA concludes that the proposed rule would be economically feasible for these mines because the total yearly compliance cost is below one percent of the estimated annual revenue for all underground coal mines.

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

Under the Regulatory Flexibility Act (RFA) of 1980, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), MSHA has analyzed the impact of the proposed rule on small entities. Based on that analysis, MSHA has notified the Chief Counsel for Advocacy, Small Business Administration (SBA), and made the certification under the RFA at 5 U.S.C. 605(b) that the proposed rule would not have a significant economic impact on a substantial number of small entities. The factual basis for this certification is in the PREA and summarized below.

A. Definition of a Small Mine.

Under the RFA, in analyzing the impact of the proposed rule on small entities, MSHA must use the SBA 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 the SBA 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 this proposed rule on underground coal mines with fewer than 20 employees, which MSHA has 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, the cost of complying with MSHA's proposed rule and the impact of the proposed rule on small mines will also be different.

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

B. Factual Basis for Certification

MSHA initially evaluates the impact on small entities by comparing the estimated compliance cost of a rule for small entities in the sector affected by the rule to the estimated revenue of the affected sector. When the estimated compliance cost is less than one percent of the estimated revenue, the Agency believes it is generally appropriate to conclude that the rule would not have a significant economic impact on a substantial number of small entities. When the estimated compliance cost exceeds one percent of revenue, MSHA investigates whether further analysis is required.

Total underground coal production in 2007 was approximately 278 million tons for mines with 500 or fewer employees. Using the 2007 price of underground coal of $40.37 per ton, MSHA estimates that underground coal revenue was approximately $11.2 billion for mines with 500 or fewer employees. The yearly cost of the proposed rule for mines with 500 or fewer employees is estimated to be approximately $47.6 million, or

approximately $77,000 per mine. This is equal to approximately 0.42 percent of annual revenue. Since the yearly cost of the proposed rule is less than one percent of annual revenues for small underground coal mines, as defined by SBA, 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. However, MSHA has provided, in the PREA accompanying this rule, a complete analysis of the cost impact on this category of mines.

Total underground coal production in 2007 was approximately 7.7 million tons for mines with fewer than 20 employees. Using the 2007 price of underground coal of $40.37 per ton, MSHA estimates that underground coal revenue was approximately $310.2 million for mines with fewer than 20 employees. The yearly cost of the proposed rule for mines with fewer than 20 employees is estimated to be $4.8 million, or approximately $22,000 per mine. This is equal to approximately 1.54 percent of annual revenue.

The Agency has provided, in the PREA accompanying this rule, a complete analysis of the cost impact on this category of mines. MSHA estimates that some mines might experience costs somewhat higher than the average per mine in its size category while others might experience lower costs. Even though the analysis reflects a range of impacts for different mine sizes, from 0.42 to 1.54 percent of annual revenue, the Agency concludes that this is not a significant economic impact on a substantial number of small mines.

VII. Paperwork Reduction Act

A. Summary

This proposed rule contains information collection requirements that would affect requirements in existing paperwork packages with OMB Control Numbers 1219–0009, 1219–0054, 1219–0066, 1219–0073, and 1219–0088. The proposed provision on AMS operator training would modify ICR 1219–0009. Proposed provisions for fire protection would modify ICR 1219–0054. Proposed provisions that affect the information collected for approval of flame-resistant conveyor belts would modify ICR 1219–0066. Proposed provisions to amend the mine map would modify ICR 1219–0073. Proposed provisions that affect the information contained in the ventilation plan for underground coal mines would modify ICR 1219–0088.

In the first year that the rule is in effect, mine operators would incur 3,319 burden hours with related costs of $239,331. Annually, starting in the second year that the rule is in effect, mine operators would incur 2,350 burden hours with related costs of $183,246. In addition, conveyor belt manufacturers would incur 540 burden hours and related costs of $27,000 in the first year that the rule is in effect; 270 burden hours and related costs of $13,500 in the second year that the rule is in effect; and 170 burden hours and related costs of $8,500 in the third year that the rule is in effect.

Proposed § 14.7, which would require approval holders to retain initial sales records of conveyor belts, is considered by MSHA to be an information collection requirement that does not result in a paperwork burden because it is considered a part of normal business practices.

For a summary of the burden hours and related costs by proposed provision, see the PREA accompanying this proposed rule. The PREA is posted on MSHA's Web site at *http://www.msha.gov/REGSINFO.HTM.* A copy of the PREA can be obtained from MSHA's Office of Standards, Regulations, and Variances at the address provided in the **ADDRESSES** section of this preamble.

B. Procedural Details

The information collection package has been submitted to OMB for review under 44 U.S.C. 3504, paragraph (h) of the Paperwork Reduction Act of 1995, as amended. A copy of the information collection package can be obtained from the Department of Labor by electronic mail request to *king.darrin@dol.gov* or by phone request to 202–693–4129.

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 regulated community is not required to respond to any collection of information unless it displays a current, valid, OMB control number. MSHA displays OMB control numbers in 30 CFR part 3.

VIII. Other Regulatory Analyses

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; and it would not 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.

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

The proposed rule would have no effect on family well-being or stability, marital commitment, parental rights or authority, or income or poverty of families and children. Accordingly, § 654 of the Treasury and General Government Appropriations Act of 1999 (5 U.S.C. 601 note) requires no further agency action, analysis, or assessment.

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

The proposed rule would not implement a policy with takings implications. Accordingly, Executive Order 12630 requires no further agency action or analysis.

D. 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 meets the applicable standards provided in § 3 of Executive Order 12988.

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

The proposed rule would have no adverse impact on children.

Accordingly, Executive Order 13045 requires no further agency action or analysis.

F. Executive Order 13132: Federalism

The proposed rule would 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, Executive Order 13132 requires no further agency action or analysis.

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

The proposed rule would 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, Executive Order 13175 requires no further agency action or analysis.

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

The proposed rule has been reviewed for its impact on the supply, distribution, and use of energy because it applies to the coal mining industry. Because the proposed rule would result in yearly costs of approximately $52 million to the underground coal mining industry, relative to annual revenues of $14.1 billion in 2007, the proposed rule is not a ''significant energy action'' because it is not ''likely to have a significant adverse effect on the supply, distribution, or use of energy * * * (including a shortfall in supply, price increases, and increased use of foreign supplies).'' Accordingly, Executive Order 13211 requires no further Agency action or analysis.

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.

IX. Proposed Rule

List of Subjects

30 CFR Part 6

Mine safety and health, Reporting and recordkeeping requirements, Research.

30 CFR Part 14

Mine safety and health, Reporting and recordkeeping requirements.

30 CFR Part 18

Mine safety and health, Reporting and recordkeeping requirements.

30 CFR Part 48

Education, Mine safety and health, Reporting and recordkeeping requirements.

30 CFR Part 75

Communications equipment, Electric power, Emergency medical services, Explosives, Fire prevention, Mine safety and health, Reporting and recordkeeping requirements.

Dated: June 11, 2008.

Richard E. Stickler,

Acting Assistant Secretary 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 by the Mine Improvement and New Emergency Response Act of 2006, MSHA is proposing to amend chapter I of title 30 of the Code of Federal Regulations as follows.

PART 6—TESTING AND EVALUATION BY INDEPENDENT LABORATORIES AND NON-MSHA PRODUCT SAFETY STANDARDS

1. The authority citation for part 6 continues to read as follows:

Authority: 30 U.S.C. 957.

2. Amend § 6.2 by revising the definition of ''Equivalent non-MSHA product safety standards'' to read as follows:

§ 6.2 Definitions.

* * * * *

Equivalent non-MSHA product safety standards. A non-MSHA product safety standard, or group of standards, determined by MSHA to provide at least the same degree of protection as the applicable MSHA product approval requirements in parts 14, 18, 19, 20, 22, 23, 27, 33, 35, and 36 of this chapter, or which in modified form provide at least the same degree of protection.

* * * * *

3. Amend § 6.20 to revise paragraph (a)(1) to read as follows:

§ 6.20 MSHA acceptance of equivalent non-MSHA product safety standards.

(a) * * *

(1) Provide at least the same degree of protection as MSHA's product approval requirements in parts 14, 18, 19, 20, 33, 35 and 36 of this chapter; or

* * * * *

4. Add new part 14 to subchapter B chapter I, title 30 of Code of Federal Regulations to read as follows:

PART 14—REQUIREMENTS FOR THE APPROVAL OF FLAME-RESISTANT CONVEYOR BELTS

Subpart A—General Provisions

Subpart B—Technical Requirements

Authority: 30 U.S.C. 957.

Subpart A—General Provisions

§ 14.1 Purpose and effective date for approval holders.

This part establishes the flame resistance requirements for MSHA approval of conveyor belts for use in underground coal mines. Applications for approval or extension of approval submitted after [Insert date XXX days after the date of publication in the **Federal Register**] must meet the requirements of this Part.

§ 14.2 Definitions.

The following definitions apply in this part:

Applicant. An individual or organization that manufactures or controls the production of a conveyor belt and applies to MSHA for approval of conveyor belt for use in underground coal mines.

Approval. A document issued by MSHA which states that a conveyor belt has met the requirements of this part and which authorizes an approval marking identifying the conveyor belt as approved.

Extension of approval. A document issued by MSHA which states that a

change to a product previously approved by MSHA under this part meets the requirements of this part and which authorizes the continued use of the approval marking after the appropriate extension number has been added.

Flame-retardant ingredient. A material that inhibits ignition or flame propagation.

Flammable ingredient. A material that is capable of combustion.

Inert ingredient. A material that does not contribute to combustion.

Post-approval product audit. An examination, testing, or both, by MSHA of an approved conveyor belt selected by MSHA to determine if it meets the technical requirements and has been manufactured as approved.

Similar conveyor belt. A conveyor belt that shares the same cover compound, general carcass construction, and fabric type as another approved conveyor belt.

§ 14.3 Observers at tests and evaluations.

Only MSHA personnel, representatives of the applicant, and other persons agreed upon by MSHA and the applicant may be present during tests and evaluations conducted under this part.

§ 14.4 Application procedures and requirements.

(a) *Application address.* Applications for approvals or extensions of approval under this Part may be sent to: U.S. Department of Labor, Mine Safety and Health Administration, Chief, Approval and Certification Center, P.O. Box 251, Industrial Park Road, Triadelphia, West Virginia 26059. Alternatively, applications for approval or extensions of approval may be filed online at *http://www.msha.gov* or faxed to: Chief, Mine Safety and Health Administration Approval and Certification Center at 304–547–2044.

(b) *Approval application.* Each application for approval of a conveyor belt for use in underground coal mines must include the information below, except any information submitted in a prior approval application need not be re-submitted, but must be noted in the application.

(1) A technical description of the conveyor belt which includes:

(i) Trade name or identification number;

(ii) Cover compound type and designation number;

(iii) Belt thickness and thickness of top and bottom covers;

(iv) Presence and type of skim coat;

(v) Presence and type of friction coat;

(vi) Carcass construction (number of plies, solid woven);

(vii) Carcass fabric by textile type and weight (ounce per square yard);

(viii) Presence and type of breaker or floated ply; and

(ix) The number, type, and size of cords and fabric for metal cord belts.

(2) Formulation information on the compounds in the conveyor belt indicated by either:

(i) Specifying each ingredient by its chemical name along with its percentage (weight) and tolerance or percentage range; or

(ii) Specifying each flame-retardant ingredient by its chemical or generic name with its percentage and tolerance or percentage range or its minimum percent. List each flammable ingredient by chemical, generic, or trade name along with the total percentage of all flammable ingredients. List each inert ingredient by chemical, generic, or trade name along with the total percentage of all inert ingredients.

(3) The name, address, and telephone number of the applicant's representative responsible for answering any questions regarding the application.

(4) Identification of any similar conveyor belt for which the applicant already holds an approval.

(i) The MSHA assigned approval number of the conveyor belt which most closely resembles the new one; and

(ii) An explanation of any changes from the existing approval.

(c) *Extension of approval.* Any change in an approved conveyor belt from the documentation on file at MSHA that affects the technical requirements of this part must be submitted for approval prior to implementing the change. Each application for an extension of approval must include:

(1) The MSHA-assigned approval number for the conveyor belt for which the extension is sought;

(2) A description of the proposed change to the conveyor belt; and

(3) The name, address, and telephone number of the applicant's representative responsible for answering any questions regarding the application.

(d) MSHA will determine if testing, additional information, samples, or material is required to evaluate an application. If the applicant believes that flame testing is not required, a statement explaining the rationale must be included in the application.

(e) *Equivalent non-MSHA product safety standard.* An applicant may request an equivalency determination to this part under § 6.20 of this chapter, for a non-MSHA product safety standard.

(f) *Fees.* Fees calculated in accordance with part 5 of this chapter must be submitted in accordance with § 5.40.

§ 14.5 Test samples.

Upon request by MSHA, the applicant must submit 3 precut, unrolled, flat conveyor belt samples for flame testing. Each sample must be 60 ± ¼ inches long (152.4 ± 0.6 cm) by 9 ± ⅛ inches (22.9 ± 0.3 cm) wide.

§ 14.6 Issuance of approval.

(a) MSHA will issue an approval or notice of the reasons for denying approval after completing the evaluation and testing provided in this part.

(b) An applicant must not advertise or otherwise represent a conveyor belt as approved until MSHA has issued an approval.

§ 14.7 Approval marking and distribution records.

(a) An approved conveyor belt must be marketed only under the name specified in the approval.

(b) Approved conveyor belt must be legibly and permanently marked with the assigned MSHA approval number for the service life of the product. The approval marking must be at least ½ inch (1.27 cm) high, placed at intervals not to exceed 60 feet (18.3 m) and repeated at least once every foot (0.3 m) across the width of the belt.

(c) Where the construction of a conveyor belt does not permit marking as prescribed above, other permanent marking may be accepted by MSHA.

(d) Applicants granted approval must maintain records of the initial sale of each belt having an approval marking. The records must be retained for at least 5 years following the initial sale.

§ 14.8 Quality assurance.

Applicants granted an approval or an extension of approval under this part must:

(a) Flame test a sample of each batch, lot, or slab of conveyor belts; or flame test or inspect a sample of each batch or lot of the materials that contribute to the flame-resistance characteristic. This will assure that the finished conveyor belt slab will meet the flame-resistance test.

(b) Calibrate instruments used for the inspection and testing in paragraph (a) of this section according to the instrument manufacturer's specifications. Instruments must be calibrated using standards set by the National Institute of Standards and Technology, U.S. Department of Commerce or other nationally or internationally recognized standards. The instruments used must be accurate to at least one significant figure beyond the desired accuracy.

(c) Control production so that the conveyor belt is manufactured in accordance with the approval

document. If a third party is assembling or manufacturing all or part of an approved belt, the approval holder shall assure that the product is manufactured as approved.

(d) Immediately notify the MSHA Approval and Certification Center of any information that a conveyor belt has distributed that does not meet the specifications of the approval. This notification must include a description of the nature and extent of the problem, the locations where the conveyor belt has been distributed, and the approval holder's plans for corrective action.

§ 14.9 Disclosure of information.

(a) All proprietary information concerning product specifications and performance submitted to MSHA by the applicant will be protected.

(b) MSHA will notify the applicant or approval holder of requests for disclosure of information concerning its conveyor belts, and provide an opportunity to present its position prior to any decision on disclosure.

§ 14.10 Post-approval product audit.

(a) Approved conveyor belts will be subject to periodic audits by MSHA to determine conformity with the technical requirements upon which the approval was based. MSHA will select an approved conveyor belt to be audited; the selected belt will be representative of that distributed for use in mines. Upon request to MSHA, the approval-holder may obtain any final report resulting from the audit.

(b) No more than once a year, except for cause, the approval-holder, at MSHA's request, must make 3 samples of an approved conveyor belt of the size specified in § 14.5 available at no cost to MSHA for an audit. If a product is not available because it is not currently in production, the manufacturer will notify MSHA when it is available. The approval-holder may observe any tests conducted during the audit.

(c) A conveyor belt will be subject to audit for cause at any time MSHA believes the approval holder product is not in compliance with the technical requirements of the approval.

§ 14.11 Revocation.

(a) MSHA may revoke for cause an approval issued under this part if the conveyor belt—

(1) Fails to meet the technical requirements; or

(2) Creates a danger or hazard when used in a mine.

(b) Prior to revoking an approval, the approval-holder will be informed in writing of MSHA's intention to revoke. The notice will—

(1) Explain the reasons for the proposed revocation; and

(2) Provide the approval-holder an opportunity to demonstrate or achieve compliance with the product approval requirements.

(c) Upon request to MSHA, the approval-holder will be given the opportunity for a hearing.

(d) If a conveyor belt poses an imminent danger or hazard to the safety or health of miners, an approval may be immediately suspended without written notice of the Agency's intention to revoke. The suspension may continue until the revocation proceedings are completed.

Subpart B—Technical Requirements

§ 14.20 Flame resistance.

Conveyor belts for use in underground coal mines must be flame-resistant and:

(a) Tested in accordance with § 14.22 of this part; or

(b) Tested in accordance with an alternate test determined by MSHA to be equivalent under 30 CFR 6.20 and 14.4(e).

§ 14.21 Laboratory-scale flame test apparatus.

The principal parts of the apparatus used to test for flame resistance of conveyor belts are as follows—

(a) A horizontal test chamber 66 inches (167.6 cm) long by 18 inches (45.7 cm) square (inside dimensions) constructed from 1 inch (2.5 cm) thick Marinite I®, or equivalent insulating material.

(b) A 16-gauge (0.16 cm) stainless steel duct section which tapers over a length of at least 24 inches (61 cm) from a 20 inch (51 cm) square cross-sectional area at the test chamber connection to a 12 inch (30.5 cm) diameter exhaust duct, or equivalent. The interior surface of the tapered duct section must be lined with ½ inch (1.27 cm) thick ceramic blanket insulation, or equivalent insulating material. The tapered duct must be tightly connected to the test chamber.

(c) A U-shaped gas-fueled impinged jet burner ignition source, measuring 12 inches (30.5 cm) long and 4 inches (10.2 cm) wide, with two parallel rows of 6 jets each. Each jet is spaced alternately along the U-shaped burner tube. The 2 rows of jets are slanted so that they point toward each other and the flame from each jet impinges upon each other in pairs. The burner fuel must be at least 98 percent methane (technical grade) or natural gas containing at least 96 percent combustible gases, which includes not less than 93 percent methane.

(d) A removable steel rack, consisting of 2 parallel rails and supports that form a $7 \pm \frac{1}{8}$ inches (17.8 ± 0.3 cm) wide by $60 \pm \frac{1}{8}$ inches (152.4 ± 0.3 cm) long assembly to hold a belt sample.

(1) The 2 parallel rails, with a $5 \pm \frac{1}{8}$ inches (12.7 ± 0.3 cm) space between them, comprise the top of the rack. The rails and supports must be constructed of slotted angle iron with holes along the top surface.

(2) The top surface of the rack must be $8 \pm \frac{1}{8}$ inches (20.3 ± 0.3 cm) from the inside roof of the test chamber.

§ 14.22 Test for flame resistance of conveyor belts.

(a) *Test procedures.* The test must be conducted in the following sequence using a flame test apparatus meeting the specifications of § 14.21:

(1) Lay three samples of the belt, $60 \pm \frac{1}{4}$ inches (152.4 ± 0.6 cm) long by $9 \pm \frac{1}{8}$ inches (22.9 ± 0.3 cm) wide, flat at a temperature of 70 ± 10 °Fahrenheit (21 ± 5 °Centigrade) for at least 24 hours prior to the test;

(2) For each of three tests, place one belt sample with the load-carrying surface facing up on the rails of the rack so that the sample extends $1 \pm \frac{1}{8}$ inch (2.5 ± 0.3 cm) beyond the front of the rails and $1 \pm \frac{1}{8}$ inch (2.5 ± 0.3 cm) from the outer lengthwise edge of each rail;

(3) Fasten the sample to the rails of the rack with steel washers and cotter pins. The cotter pins shall extend at least ¾ inch (1.9 cm) below the rails. Equivalent fasteners may be used. Make a series of 5 holes approximately $\frac{9}{32}$ inch (0.7 cm) in diameter along both edges of the belt sample, starting at the first rail hole within 2 inches (5.1 cm) from the front edge of the sample. Make the next hole $5 \pm \frac{1}{4}$ inches (12.7 ± 0.6 cm) from the first, the third hole $5 \pm \frac{1}{4}$ inches (12.7 ± 0.6 cm) from the second, the fourth hole approximately midway along the length of the sample, and the fifth hole near the end of the sample. After placing a washer over each sample hole, insert a cotter pin through the hole and spread it apart to secure the sample to the rail;

(4) Center the rack and sample in the test chamber with the front end of the sample $6 \pm \frac{1}{2}$ inches (15.2 ± 1.27 cm) from the entrance;

(5) Measure the airflow with a 4-inch (10.2 cm) diameter vane anemometer, or an equivalent device, placed on the centerline of the belt sample $12 \pm \frac{1}{2}$ inches (30.5 ± 1.27 cm) from the chamber entrance. Adjust the airflow passing through the chamber to 200 ± 20 ft/min (61 ± 6 m/min);

(6) Before starting the test on each sample, the inner surface temperature of the chamber roof measured at points 6

± ½, 30 ± ½, and 60 ± ½ inches (15.2 ± 1.27, 76.2 ± 1.27, and 152.4 ± 1.27 cm) from the front entrance of the chamber must not exceed 95 °Fahrenheit (35 °Centigrade) at any of these points with the specified airflow passing through the chamber. The temperature of the air entering the chamber during the test on each sample must not be less than 50 °Fahrenheit (10 ° Centigrade);

(7) Center the burner in front of the sample's leading edge with the plane, defined by the tips of the burner jets, ¾ ± ⅛ inch (1.9 ± 0.3 cm) from the front edge of the belt;

(8) With the burner lowered away from the sample, set the gas flow at 1.2 ± 0.1 standard cubic feet per minute (SCFM) (34 ± 2.8 liters per minute) and then ignite the gas burner. Maintain the gas flow to the burner throughout the 5 to 5.1 minute ignition period;

(9) After applying the burner flame to the front edge of the sample for a 5 to 5.1 minute ignition period, lower the burner away from the sample and extinguish the burner flame;

(10) After completion of each test, determine the undamaged portion across the entire width of the sample. Blistering without charring does not constitute damage.

(b) *Acceptable performance.* Each tested sample must exhibit an undamaged portion across its entire width.

(c) MSHA may modify the procedures of the flammability test for belts constructed of thicknesses more than ¾ inch (1.9 cm).

§ 14.23 New technology.

MSHA may approve a conveyor belt that incorporates technology for which the requirements of this part are not applicable if the Agency determines that the conveyor belt is as safe as those which meet the requirements of this part.

PART 18—ELECTRIC MOTOR-DRIVEN MINE EQUIPMENT AND ACCESSORIES

5. The authority citation for part 18 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

§ 18.1 [Amended]

6. Section 18.1 is amended by revising the phrase ''hoses and conveyor belts'' to read ''hoses''.

§ 18.2 [Amended]

7. Section 18.2 is amended by revising the phrase ''hose or conveyor belt'' to read ''hose'' in the definitions of ''Acceptance'', ''Acceptance Marking'', and ''Applicant'' and removing the definition for ''Fire-resistant''.

§ 18.6 [Amended]

8. Section 18.6 is amended as follows:

a. Paragraph (a)(1) is amended by revising the phrase ''hose or conveyor belt'' to read ''hose''.

b. Paragraph (c) is removed and reserved.

c. Paragraph (i) is amended by revising the phrase ''hose or conveyor belt'' to read ''hose'' and removing the words ''conveyor belt—a sample of each type 8 inches long cut across the entire width of the belt''.

§ 18.9 [Amended]

9–11. Section 18.9(a) is amended by revising the phrase ''hose or conveyor belt'' to read ''hose''.

§ 18.65 [Amended]

12. Section 18.65 is amended by revising the phrase in the heading, ''Flame test of conveyor belting and hose'' to read ''Flame test of hose'' and by removing and reserving paragraph (a)(1) and removing and reserving paragraph (f)(1).

PART 48—TRAINING AND RETRAINING OF MINERS

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

Authority: 30 U.S.C. 811, 825.

Subpart B—Training and Retraining of Miners Working at Surface Mines and Surface Areas of Underground Mines

14. Amend § 48.27 to revise the first sentence in paragraph (a) to read as follows:

§ 48.27 Training of miners assigned to a task in which they have had no previous experience; minimum courses of instruction.

(a) Miners assigned to new work tasks as mobile equipment operators, drilling machine operators, haulage and conveyor systems operators, ground control machine operators, AMS operators, and those in blasting operations shall not perform new work tasks in these categories until training prescribed in this paragraph and paragraph (b) of this section has been completed.* * *

* * * * *

PART 75—MANDATORY SAFETY STANDARDS—UNDERGROUND COAL MINES

Subpart B—Qualified and Certified Persons

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

Authority: 30 U.S.C. 811.

16. Section 75.156 is added to read as follows:

§ 75.156 AMS operator, qualifications.

(a) To be qualified as an AMS operator, a person shall be provided with task training on duties and responsibilities at each mine where an AMS operator is employed in accordance with the mine operator's approved Part 48 training plan.

(b) An AMS operator must be able to demonstrate to an authorized representative of the Secretary that he/she is qualified to perform in the assigned position.

Subpart D—Ventilation

17. In § 75.333, paragraph (c)(4) is added to read as follows:

§ 75.333 Ventilation controls.

* * * * *

(c) * * *

(4) An airlock shall be established where the air pressure differential between air courses creates a static force exceeding 125 pounds on closed personnel doors along escapeways.

* * * * *

18. In § 75.350, paragraphs (a)(2), (b) introductory text, (b)(3), and (d)(1) are revised, and (b)(7), (b)(8), and (d)(7) are added to read as follows:

§ 75.350 Belt air course ventilation.

(a) * * *

(2) Effective [insert date one year after date of publication of the final rule in the **Federal Register**], unless otherwise approved by the District Manager in the mine ventilation plan, the air velocity in the belt entry must be at least 50 feet per minute. Air velocities must be compatible with all fire detection systems and fire suppression systems used in the belt entry.

(b) The use of air from a belt air course to ventilate a working section or an area where mechanized mining equipment is being installed or removed shall be permitted only when evaluated and approved by the District Manager in the mine ventilation plan. The mine operator must provide justification in the plan that the use of air from a belt entry would afford at least the same measure of protection where belt haulage entries are not used to ventilate working places. In addition, the following requirements must be met:

* * * * *

(3)(i) The average concentration of respirable dust in the belt air course, when used as a section intake air course, must be maintained at or below 1.0 mg/m^3.

(ii) Where miners on the working section are on a reduced standard below

1.0 mg/m^3, the average concentration of respirable dust in the belt entry must be at or below the lowest applicable respirable dust standard on that section.

(iii) A permanent designated area (DA) for dust measurements must be established at a point no greater than 50 feet upwind from the section loading point in the belt entry when the belt air flows over the loading point or no greater than 50 feet upwind from the point where belt air is mixed with air from another intake air course near the loading point. The DA must be specified and approved in the ventilation plan.

* * * * *

(7) The air velocity in the belt entry must be at least 100 feet per minute. When requested by the mine operator, the District Manager may approve lower velocities in the ventilation plan based on specific mine conditions.

(8) The air velocity in the belt entry must not exceed 1,000 feet per minute. When requested by the mine operator, the District Manager may approve higher velocities in the ventilation plan based on specific mine conditions.

* * * * *

(d) * * *

(1) The air current that will pass through the point-feed regulator must be monitored for carbon monoxide or smoke at a point within 50 feet upwind of the point-feed regulator. A second point must be monitored 1,000 feet upwind of the point-feed regulator unless the mine operator requests a lesser distance be approved by the District Manager in the mine ventilation plan based on mine specific conditions;

* * * * *

(7) Where point-feeding air from a primary escapeway to a belt entry designated as an alternate escapeway, point-feed regulators must be equipped with a means to remotely close the regulator or any other means to isolate the two escapeways. The AMS operator, after consultation with the responsible person and section foreman, must be capable of performing this function from the designated surface location.

19. Paragraph (b)(2), (e), and (q) of § 75.351 are revised to read as follows:

§ 75.351 Atmospheric monitoring systems.

* * * * *

(b) * * *

(2) The mine operator must designate an AMS operator to monitor and promptly respond to all AMS signals. The AMS operator must have as a primary duty the responsibility to monitor the malfunction, alert and alarm signals of the AMS, and to notify appropriate personnel of these signals.

* * * * *

(e) *Location of sensors-belt air course.*

(1) In addition to the requirements of paragraph (d) of this section, any AMS used to monitor belt air courses under § 75.350(b) must have approved sensors to monitor for carbon monoxide at the following locations:

(i) At or near the working section belt tailpiece in the air stream ventilating the belt entry. In longwall mining systems the sensor must be located upwind in the belt entry at a distance no greater than 150 feet from the mixing point where intake air is mixed with the belt air at or near the tailpiece;

(ii) No more than 50 feet upwind from the point where the belt air course is combined with another air course or splits into multiple air courses;

(iii) At intervals not to exceed 1,000 feet along each belt entry. However, in areas along each belt entry where air velocities are between 50 and 100 feet per minute, spacing of sensors must not exceed 500 feet. In areas along each belt entry where air velocities are less than 50 feet per minute, the sensor spacing must not exceed 350 feet;

(iv) Not more than 100 feet downwind of each belt drive unit, each tailpiece transfer point, and each belt take-up. If the belt drive, tailpiece, and/or take-up for a single transfer point are installed together in the same air course, and the distance between the units is less than 100 feet, they may be monitored with one sensor downwind of the last component. If the distance between the units exceeds 100 feet, additional sensors are required downwind of each belt drive unit, each tailpiece transfer point, and each belt take-up; and

(v) At other locations in any entry that is part of the belt air course as required and specified in the mine ventilation plan.

(2) Smoke sensors must be installed to monitor the belt entry under § 75.350(b) at the following locations:

(i) At or near the working section belt tailpiece in the air stream ventilating the belt entry. In longwall mining systems the sensor must be located upwind in the belt entry at a distance no greater than 150 feet from the mixing point where intake air is mixed with the belt air at or near the tailpiece;

(ii) Not more than 100 feet downwind of each belt drive unit, each tailpiece transfer point, and each belt take-up. If the belt drive, tailpiece, and/or take-up for a single transfer point are installed together in the same air course, and the distance between the units is less than 100 feet, they may be monitored with one sensor downwind of the last component. If the distance between the units exceeds 100 feet, additional sensors are required downwind of each belt drive unit, each tailpiece transfer point, and each belt take-up; and

(iii) At intervals not to exceed 3,000 feet along each belt entry.

(iv) This provision shall be effective one year after the Secretary has determined that a smoke sensor is available to reliably detect fire in underground coal mines.

* * * * *

(q) *Training.*

(1) All AMS operators must be trained annually in the proper operation of the AMS. This training must include the following subjects:

(i) Familiarity with underground mining systems;

(ii) Basic atmospheric monitoring system requirements;

(iii) The mine emergency evacuation and firefighting program of instruction;

(iv) The mine ventilation system including planned air directions;

(v) Appropriate response to alert, alarm and malfunction signals;

(vi) Use of mine communication systems including emergency notification procedures; and

(vii) AMS recordkeeping requirements.

(2) At least once every six months, all AMS operators must travel to all working sections.

(3) A record of the content of training, the person conducting the training, and the date the training was conducted, must be maintained at the mine for at least two years by the mine operator.

* * * * *

20. Section 75.352 is amended by revising paragraph (f) and by adding paragraph (g) to read as follows:

§ 75.352 Actions in response to AMS malfunction, alert, or alarm signals.

* * * * *

(f) If the minimum air velocity is not maintained when required under § 75.350(b)(7), immediate action must be taken to return the ventilation system to proper operation. While the ventilation system is being corrected, operation of the belt may continue only while a trained person(s) patrols and continuously monitors for carbon monoxide or smoke as set forth in §§ 75.352(e)(3) through (7), so that the affected areas will be traveled each hour in their entirety.

(g) The AMS shall automatically provide both a visual and audible signal in the belt entry at the point-feed regulator location, at affected sections, and at the designated surface location when carbon monoxide concentrations reach:

(1) The alert level at both point-feed intake monitoring sensors; or

(2) The alarm level at either point-feed intake monitoring sensor.

21. Section 75.371 is amended by revising paragraphs (jj), (mm), (nn), and by adding paragraphs (yy) and (zz) to read as follows:

§ 75.371 Mine ventilation plan; contents.

* * * * *

(jj) The locations and approved velocities at those locations where air velocities in the belt entry are above or below the limits set forth in § 75.350(a)(2) or §§ 75.350(b)(7) and 75.350(b)(8).

* * * * *

(mm) The location of any diesel-discriminating, and additional carbon monoxide or smoke sensors installed in the belt air course.

(nn) The length of the time delay or any other method used to reduce the number of non-fire related alert and alarm signals from carbon monoxide sensors.

* * * * *

(yy) The locations where airlock doors are installed between air courses.

(zz) The locations where the pressure differential cannot be maintained from the primary escapeway to the belt entry.

22. Section 75.380 is amended by revising paragraphs (d)(7)(v) and (vi) and (f)(1) and adding (d)(7)(vii), (viii) and (ix) to read as follows:

§ 75.380 Escapeways; bituminous and lignite mines.

* * * * *

(d) * * *

(7) * * *

(v) Equipped with one directional indicator cone, signifying the route of escape, placed at intervals not exceeding 100 feet. Cones shall be installed so that the tapered section points in by;

(vi) Securely attached to and marked to provide tactile feedback indicating the location of any SCSR storage locations in the escapeways. The tactile feedback for SCSR storage locations shall be six back-to-back directional cones;

(vii) Marked to provide tactile feedback distinguishable from other markings to indicate the location of readily accessible personnel doors installed in adjacent crosscuts connecting escapeways. The tactile feedback for personnel doors shall be four back-to-back directional cones;

(viii) Marked to provide tactile feedback distinguishable from other markings to indicate the location of physical impediments in the escapeway. The tactile feedback for physical impediments shall be two back-to-back directional cones; and

(ix) Marked to provide tactile feedback distinguishable from other markings to indicate the location of refuge alternatives. The tactile feedback for a refuge alternative location shall be a two-foot length of rigid spiraled coil (cork-screw style). Another line must be attached from the lifeline to the refuge alternative.

* * * * *

(f) *Primary escapeway.* (1) One escapeway that is ventilated with intake air shall be designated as the primary escapeway. The primary escapeway shall have a higher ventilation pressure than the belt entry unless the mine operator submits an alternative in the mine ventilation plan to protect the integrity of the primary escapeway, based on mine specific conditions, which is approved by the District Manager.

* * * * *

23. Section 75.381 is amended by revising paragraphs (c)(5)(v) and (vi) and (e), and adding (c)(5)(vii), (viii) and (ix) to read as follows:

§ 75.381 Escapeways; anthracite mines.

* * * * *

(c) * * *

(5) * * *

(v) Equipped with one directional indicator cone, signifying the route of escape, placed at intervals not exceeding 100 feet. Cones shall be installed so that the tapered section points in by;

(vi) Securely attached to and marked to provide tactile feedback indicating the location of any SCSR storage locations in the escapeways. The tactile feedback for SCSR storage locations shall be six back-to-back directional cones;

(vii) Marked to provide tactile feedback distinguishable from other markings to indicate the location of readily accessible personnel doors installed in adjacent crosscuts connecting escapeways. The tactile feedback for personnel doors shall be four back-to-back directional cones;

(viii) Marked to provide tactile feedback distinguishable from other markings to indicate the location of physical impediments in the escapeway. The tactile feedback for physical impediments shall be two back-to-back directional cones; and

(ix) Marked to provide tactile feedback distinguishable from other markings to indicate the location of refuge alternatives. The tactile feedback for a refuge alternative location shall be a two-foot length of rigid spiraled coil (cork-screw style). Another line must be attached from the lifeline to the refuge alternative.

* * * * *

(e) *Primary escapeway.* One escapeway that shall be ventilated with intake air shall be designated as the primary escapeway. The primary escapeway shall have a higher ventilation pressure than the belt entry unless the mine operator submits an alternative in the mine ventilation plan to protect the integrity of the primary escapeway, based on mine specific conditions, which is approved by the District Manager.

* * * * *

Subpart L—Fire Protection

24. Section 75.1103–4 is amended by revising paragraphs (a) and (b) to read as follows:

§ 75.1103–4 Automatic fire sensor and warning device systems; installation; minimum requirements.

(a) Effective [insert date one year after date of publication of the final rule in the **Federal Register**], automatic fire sensor and warning device systems that use carbon monoxide sensors shall provide identification of fire along all belt conveyors.

(1) Carbon monoxide sensors shall be installed at the following locations:

(i) Not more than 100 feet downwind of each belt drive unit, each tailpiece transfer point, and each belt take-up. If the belt drive, tailpiece, and/or take-up for a single transfer point are installed together in the same air course, and the distance between the units is less than 100 feet, they may be monitored with one sensor downwind of the last component. If the distance between the units exceeds 100 feet, additional sensors are required downwind of each belt drive unit, each tailpiece transfer point, and each belt take-up;

(ii) Not more than 100 feet downwind of each section loading point;

(iii) Along the belt entry so that the spacing between sensors does not exceed 1,000 feet. Where air velocities are less than 50 feet per minute, spacing must not exceed 350 feet; and

(iv) No more than 50 feet upwind from the point where the belt air course is combined with another air course or splits into multiple air courses.

(2) Where used, sensors responding to radiation, smoke, gases, or other indications of fire, shall be spaced at regular intervals to provide protection equivalent to carbon monoxide sensors, and installed within the time specified in paragraph (a)(3) of this section.

(3) When the distance from the tailpiece at loading points to the first outby sensor reaches the spacing requirements in § 75.1103–4(a)(1)(iii), an additional sensor shall be installed

and put in operation within 24 production shift hours. When sensors of the kind described in paragraph (a)(2) of this section are used, such sensor shall be installed and put in operation within 24 production shift hours after the equivalent distance which has been established for the sensor from the tailpiece at loading points to the first outby sensor is first reached.

(b) Automatic fire sensor and warning device systems shall be installed so as to minimize the possibility of damage from roof falls and the moving belt and its load. Sensors must be installed near the center in the upper third of the entry, in a manner that does not expose personnel working on the system to unsafe conditions. Sensors must not be located in abnormally high areas or in other locations where air flow patterns do not permit products of combustion to be carried to the sensors.

* * * * *

25. The section heading and paragraph (a) of § 75.1103–5 is revised and paragraphs (d), (e), (f), (g) and (h) are added to read as follows:

§ 75.1103–5 Automatic fire warning devices; actions and response.

(a) When the carbon monoxide level reaches 10 parts per million above the established ambient level at any sensor location, automatic fire sensor and warning device systems shall upon activation provide an effective warning signal at the following locations:

(1) At working sections and other work locations where miners may be endangered from a fire in the belt entry.

(2) At a manned surface location where personnel have an assigned post of duty. The manned surface location must have:

(i) A telephone or equivalent communication with all miners who may be endangered and

(ii) A map or schematic that shows the locations of sensors, and the intended air flow direction at these locations. This map or schematic must be updated within 24 hours of any change in this information.

(3) The automatic fire sensor and warning device system shall be monitored for a period of 4 hours after the belt is stopped, unless an examination for hot rollers and fire is made as prescribed in § 75.1103–4(e).

* * * * *

(d) When a malfunction or warning signal is received at the manned surface location, the sensors that are activated must be identified and appropriate personnel immediately notified.

(e) Upon notification of a malfunction or warning signal, appropriate personnel must immediately initiate an investigation to determine the cause of the malfunction or warning signal and take the required actions set forth in paragraph (f) of this section.

(f) If any sensor indicates a warning, the following actions must be taken unless the mine operator determines that the signal does not present a hazard to miners:

(1) Appropriate personnel must notify miners in affected working sections, in affected areas where mechanized mining equipment is being installed or removed, and at other locations specified in the approved mine emergency evacuation and firefighting program of instruction; and

(2) All miners in the affected areas, unless assigned emergency response duties, must be immediately withdrawn to a safe location identified in the mine emergency evacuation and firefighting program of instruction.

(g) If the warning signal will be activated during calibration of sensors, personnel manning the surface location must be notified prior to and upon completion of calibration. Miners on affected working sections, areas where mechanized mining equipment is being installed or removed, or other areas designated in the approved emergency evacuation and firefighting program of instruction must be notified at the beginning and completion of calibration.

(h) If any fire detection component becomes inoperative, immediate action must be taken to repair the component. While repairs are being made, operation of the belt may continue if the following requirements are met:

(1) If one sensor becomes inoperative, a trained person must continuously monitor for carbon monoxide at the inoperative sensor;

(2) If two or more adjacent sensors become inoperative, trained persons must patrol and continuously monitor the affected areas for carbon monoxide so that they will be traveled each hour in their entirety. Alternatively, a trained person must be stationed at each inoperative sensor to monitor for carbon monoxide;

(3) If the complete fire detection system becomes inoperative, trained persons must patrol and continuously monitor the affected areas for carbon monoxide so that they will be traveled each hour in their entirety;

(4) Trained persons who conduct monitoring under this section must have two-way voice communication capability, at intervals not to exceed 2,000 feet, and must report carbon monoxide concentrations to the surface at intervals not to exceed one hour;

(5) Trained persons who conduct monitoring under this section must immediately report to the surface, any concentration of carbon monoxide that reaches 10 parts per million above the established ambient level, unless the mine operator knows that the source of the carbon monoxide does not present a hazard to miners; and

(6) Handheld detectors used to monitor the belt entry under this section must have a detection level equivalent to that of the system's carbon monoxide sensors.

26. Section 75.1103–6 is revised to read as follows:

§ 75.1103–6 Automatic fire sensors; actuation of fire suppression systems.

Point-type heat sensors or automatic fire sensor and warning device systems may be used to actuate deluge-type water systems, foam generator systems, multipurpose dry-powder systems, or other equivalent automatic fire suppression systems.

27. Section 75.1103–8 is revised to read as follows:

§ 75.1103–8 Automatic fire sensor and warning device systems; inspection and test requirements.

(a) Automatic fire sensor and warning device systems shall be examined at least once each shift when belts are operated as part of a production shift. A functional test of the warning signals shall be made at least once every seven days. Inspection and maintenance of such systems shall be by a qualified person.

(b) A record of the functional test conducted in accordance with paragraph (a) of this section shall be maintained by the operator and kept for a period of one year.

(c) Sensors shall be calibrated at intervals not to exceed 31 days in accordance with the manufacturer's calibration instructions. A record of the sensor calibrations shall be maintained by the operator and kept for a period of one year.

28. Section 75.1108 is revised to read as follows:

§ 75.1108 Approved conveyor belts.

(a) Until [insert date one year after date of publication of final rule in the **Federal Register**] conveyor belts shall be:

(1) Approved under Part 14 of this chapter; or

(2) Accepted under § 18.65 of this chapter.

(b) Effective [insert date one year after date of publication of final rule in the **Federal Register**] all conveyor belts purchased for use in underground coal

mines shall be approved under Part 14 of this chapter.

§ 75.1108–1 [Removed]

29. Remove § 75.1108–1.

Subpart R—Miscellaneous

30. Section 75.1731 is added to read as follows:

§ 75.1731 Maintenance of belt conveyors and belt conveyor entries.

(a) Damaged rollers and other malfunctioning belt conveyor components must be immediately repaired or replaced.

(b) Conveyor belts must be properly aligned to prevent the moving belt from rubbing against the structure or components.

(c) Noncombustible materials shall not be allowed to accumulate in the belt conveyor entry.

(d) Splicing of any approved conveyor belt must maintain flame-resistant properties of the belt.

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BILLING CODE 4510–43–P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Part 18

RIN 1219–AB60

Conveyor Belt Combustion Toxicity and Smoke Density

AGENCY: Mine Safety and Health Administration (MSHA), Labor.

ACTION: Request for information.

SUMMARY: MSHA is requesting information from the public on smoke density and combustion toxicity tests that may be used to evaluate the fire hazard of conveyor belting and similar materials used in underground coal mines.

DATES: All comments must be received by midnight eastern standard time on August 18, 2008.

ADDRESSES:

Comments: Comments must be clearly identified with ''RIN 1219–AB60'' and may be sent to MSHA by any of the following methods:

(1) *Federal Rulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

(2) *Electronic mail: zzMSHA-Comments@dol.gov.* Include ''RIN 1219–AB60'' in the subject line of the message.

(3) *Facsimile:* (202) 693–9441. Include ''RIN 1219–AB60'' in the subject.

(4) *Regular Mail:* MSHA, Office of Standards, Regulations, and Variances, 1100 Wilson Blvd., Room 2350, Arlington, Virginia 22209–3939.

(5) *Hand Delivery or Courier:* MSHA, Office of Standards, Regulations, and Variances, 1100 Wilson Blvd., Room 2350, Arlington, Virginia 22209–3939. Sign in at the receptionist's desk on the 21st floor.

Comments can be accessed electronically at *http://www.msha.gov* under the ''Rules and Regs'' link. MSHA will post all comments on the Internet without change, including any personal information provided. Comments may also be reviewed at the Office of Standards, Regulations, and Variances, 1100 Wilson Blvd., Room 2350, Arlington, Virginia. Sign in at the receptionist's desk on the 21st floor.

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

FOR FURTHER INFORMATION CONTACT: Patricia W. Silvey, Director, Office of Standards, Regulations, and Variances, MSHA, 1100 Wilson Blvd, Room 2350, Arlington, Virginia 22209–3939, *silvey.patricia@dol.gov* (e-mail), (202) 693–9440 (voice), or (202) 693–9441 (Fax).

SUPPLEMENTARY INFORMATION:

I. Introduction

Under section 11 of the Mine Improvement and New Emergency Response (MINER) Act of 2006, the Secretary of Labor established the Technical Study Panel on the Utilization of Belt Air and the Composition and Fire Retardant Properties of Belt Materials in Underground Coal Mining (Panel) to conduct an independent scientific engineering review and to make recommendations with respect to the utilization of belt air and flame retardant properties of belt materials for use in underground coal mines. The Panel issued its final report on December 20, 2007. In a separate rulemaking published in today's **Federal Register**, MSHA is proposing to revise its approval test in existing regulations on flame-resistant conveyor belts for use in underground coal mines in accordance with section 101 of the Mine Act.

During the Technical Study Panel meeting in March, 2007, the Panel received information on hazards associated from the combustion products of burning conveyor belt. This information is related to combustion toxicity and smoke density generated from burning conveyor belt material. Those presenting the information to the Panel did not provide data on specific hazards or specific tests used to measure combustion toxicity and smoke density. Consequently, MSHA is requesting information on the tests, hazard evaluation studies and the application of data and methods for assessing the smoke density and toxic potency of smoke and other products produced from the combustion of conveyor belts and similar materials.

II. Information Request

MSHA is specifically soliciting information on:

1. Tests and related technical information including:

—The test method;
—The material or materials that the test is designed for;
—The advantages and disadvantages of the test;
—Research reports, technical studies and hazard assessment methods, incident reports involving the health and safety effects of smoke and combustion products on persons, conclusions, and technical opinions; and
—Costs of materials, labor, and the apparatus or equipment for conducting the tests.

2. Test methods used by international governmental agencies and other organizations (i.e., Australia, the European Economic Union) for smoke density or toxicity potency of smoke and other products produced from the of combustion of conveyor belting or similar materials. Please include:

—The health and safety benefits associated with compliance with the test methods and other requirements;
—The associated costs of compliance.

3. Requirements, standards and test methods for fire safety relating to smoke density and toxicity for materials such as electric cables where the test or information could be used to evaluate smoke density or the toxic potency of smoke and other products produced from combustion of conveyor belting or similar materials. MSHA is particularly interested in standards by private standard setting organizations such as the International Standards Organization and the National Fire Protection Association; and the States of California and New York. Please exclude information on materials that would not be relevant to underground coal mining, such as fabrics, wall board and surface coverings. Please report