

In the matter of  
Consol Pennsylvania Coal Company  
Bailey Mine  
I.D. No. 36-07230

Petition for Modification  
  
Docket No. M-2010-039-C

## PROPOSED DECISION AND ORDER

### Background

On November 08, 2010 a petition under Section 101 (c) of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. § 811(c) and 30 Code of Federal Regulations (30 C.F.R.) Part 44.11, et. seq. was filed by Consol Pennsylvania Coal Company. Petitioner requests a modification of the application of 30 C.F.R. § 75.503 and 30 C.F.R. § 18.35 to Petitioner's Bailey Mine located in Green County, Pennsylvania. Petitioner requests to increase the maximum lengths of the trailing for its 995-volt loading machines.<sup>1</sup> The Petitioner alleges that the alternative method proposed in the petition will at all times guarantee no less than the same measure of protection afforded by the standard.

30 C.F.R. § 75.503, Permissible electric face equipment; maintenance, provides:

The operator of each coal mine shall maintain in permissible condition all electric face equipment required by §§75.500, 75.501, and 75.504 to be permissible which is taken into or used in by the last open crosscut of any such mine.

The following MSHA approval regulations are also relevant to the petition. 30 C.F.R. § 18.35(a)(5)(i), Portable (trailing) cables and cords, provides:

Ordinarily the length of a portable (trailing) cable shall not exceed 500 feet. Where the method of mining requires the length of a portable (trailing) cable to be more than 500 feet, such length of cable shall be permitted only under the following prescribed conditions:

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<sup>1</sup> Section 101 (c) of the Mine Act provides for the modification of the application of any "mandatory safety standard" to a mine under certain conditions. The regulations in 30 C.F.R. Part 18 are not "mandatory safety standards." Rather, 30 C.F.R. Part 18 sets forth requirements to obtain MSHA approval of electrically operated equipment. Because the application of 30 C.F.R. § 18.35 is not a "mandatory safety standard" subject to modification under section 101 (c) of the Mine Act, MSHA is construing the petitioner's request only as a request to modify the application of 30 C.F.R. § 75.503.

- (i) The lengths of portable (trailing) cables shall not exceed those specified in Table 9, Appendix 1, titled "Specifications for Portable Cables Longer Than 500 Feet."

Under Table 9 of Appendix 1, the maximum allowable cable length for petitioner's 995-volt loading machines with a #2 trailing cable is 700 feet. In addition, 30 C.F.R. § 18.35(a)(5)(ii) provides:

Short-circuit protection shall be provided by a protective device with an instantaneous trip setting as near as practicable to the maximum starting-current-inrush value, but the setting shall not exceed the trip value specified in MSHA approval for the equipment for which the portable (trailing) cable furnishes electric power,

The petitioner alleges that the proposed alternative method regarding the length of cables for the 995-volt loading machines will at all times guarantee no less than the same measure of protection afforded by the standard with no diminution of safety to miners. In support of its petition, the petitioner states the following:

1. This petition shall only apply to trailing cables supplying three-phase, 995-volt power to loading machines.
2. The maximum length of the 995-volt trailing cables shall be 900 feet.
3. The trailing cables for the 995-volt loading machines shall not be smaller than No. 2 A.W.G. cable.
4. All circuit breakers used to protect the No. 2 A.W.G. trailing cables exceeding 700 feet in length shall have instantaneous trip units calibrated to trip at 800 amperes. The trip setting of these circuit breakers shall be sealed to insure that the settings on these breakers cannot be changed, and these breakers shall have permanent, legible labels. Each label shall identify the circuit breaker as being suitable for protecting the No. 2 A.W.G. cables.
5. Replacement circuit breakers and/or instantaneous trip units, used to protect the No. 2 A.W.G. trailing cables shall be calibrated to trip at 800 amperes, and this setting shall be sealed.

6. During each production day, persons designated by the operator shall visually examine the trailing cables to ensure that the cables are in safe operating condition and that the instantaneous settings of the specially calibrated breakers do not have seals or locks removed and that they do not exceed the stipulated settings.
7. Any trailing cable that is not in safe operating condition shall be removed from service immediately and repaired or replaced.
8. Each splice or repair in the trailing cable shall be made in a workmanlike manner and in accordance with the instructions of the manufacturer of the splice or repair materials. The outer jacket of each splice or repair shall be vulcanized with flame-resistant material or made with material that has been accepted by MSHA as flame resistant.
9. In the event the mining method or operating procedures cause or contribute to the damage of any trailing cable, the cable shall be removed from service immediately and repaired or replaced. Also, additional precautions shall be taken to ensure that, in the future, the cable is protected and maintained in safe operating condition.
10. Permanent warning labels shall be installed and maintained on the cover(s) of the power center identifying the location of each sealed or locked short-circuit protective device. These labels shall warn miners not to change or alter these short-circuit settings.
11. The Petitioner's alternative method shall not be implemented until all miners, who have been designated to examine the integrity of seals or locks and to verify the short-circuit settings and proper procedure for examining trailing cables for defects and damage, have received the elements of training specified in Item No. 12.
12. Within sixty (60) days after this Petition is granted, the Petitioner shall submit proposed revisions for its approved 30 C.F.R. Part 48 training plan to the Coal Mine Safety and Health District Manager for the area in which the mine is located. The training shall include the following elements:
  - a. Training in mining methods and operating procedures that will protect the trailing cables against damage.

- b. Training in the proper procedures for examining the trailing cables to ensure that the cables are in safe operating condition.
- c. Training in hazards of setting the instantaneous circuit breakers too high to adequately protect the trailing cables.
- d. Training in how to verify that circuit interrupting devices(s) protecting the trailing cable(s) are properly set and maintained.

The procedures, as specified in 30 C.F.R. 48.3, for approval of proposed revisions to already approved training plans shall apply.

13. A copy of this petition has been posted at the mine.

The United Mine Workers of America (UMWA) reviewed the petition and commented that the maximum safety and cable life is achieved by complying with 30 C.F.R. Part 18, Table 9 and that at the petitioner's proposed length and voltage, heating of the cable could occur.

MSHA personnel conducted an investigation on February 01, 2011 at the Bailey Mine regarding the petition and filed a report of their findings with the Chief, Safety Division, for Coal Mine Safety and Health. After a careful review of the entire record, including the petition, the UMWA's comments and the MSHA investigative report, this Proposed Decision and Order is issued.

#### Findings of Fact and Conclusions of Law

Petitioner proposed an alternative method of compliance with the standard in order to increase the maximum length of trailing cables to 900 feet for the 995-volt loading machines.

The petition for modification pertains to the Bailey Mine. The investigative report found that the Bailey Mine was operating in the Pittsburgh coal seam through two (2) slopes and nine (9) shafts. There are 889 persons employed at the mine, 821 that work underground and 68 that work on the surface. These employees are not represented by a union. The mine produces coal on three (3) production shifts per day, six (6) days per week, and produces a daily average of 63,570 tons of raw coal. This mine currently has

nine (9) continuous mining sections and two (2) longwalls. Coal is transported from the sections by conveyor belts to the outside.

The Bailey Mine is developing longwall panels as part of a continuing mining cycle. The longwall development panels consist of a three-entry system mined on 275 foot centers to improve roof and abutment pressure control during longwall mining. Approximately 875 feet of trailing cable is needed to finish the mining cycle as shown with enclosure number 1 that was provided with the petition.

The Short-Circuit Calculation Program, developed by MSHA's Approval and Certification Center, was used to evaluate the mine's electrical system and predict the fault current available for 900 feet of No. 2 AWG cable supplying 995-volt AC power to the loading machines. The short-circuit analysis indicated that adequate fault current was available to trip the protective circuit breakers for the loading machines under a short circuit condition

The alternative method, with MSHA recommendations, set forth in this Proposed Decision and Order will at all times guarantee no less than the same-measure of protection afforded the miners under 30 C.F.R. § 75.503.

On the basis of the petition and the findings of MSHA's investigation, Consol Pennsylvania Coal Company is granted a modification of the application of 30 C.F.R. § 75.503 to its Bailey Mine.

### ORDER

Wherefore, pursuant to the authority delegated by the Secretary of Labor to the Administrator for Coal Mine Safety and Health, and pursuant to Section 101(c) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 811(c), it is ordered that Consol Pennsylvania Coal Company's Petition for Modification of the application of 30 C.F.R. § 75.503 for trailing cables used in its Bailey Mine is hereby:

GRANTED, for the trailing cables supplying three-phase 995-volt power to loading machines used in these mines conditioned upon compliance with the following terms and conditions:

1. This petition shall apply only to trailing cables supplying three-phase, 995-volt power to loading machines.
2. The maximum length of the trailing cables supplying power to the loading machines shall be 900 feet.

3. The loading machines trailing cable shall not be smaller than No. 2 AWG.
4. All circuit breakers used to protect No. 2 A.W.G. trailing cables exceeding 700 feet in length on the loading machines shall have instantaneous trip units calibrated to trip at 800 amperes. The trip setting of these circuit breakers shall be sealed or locked so that the setting cannot be changed, and these circuit breakers shall have permanent, legible labels displaying maximum length of the cable and indicate the maximum short circuit setting. Calibration, sealing and labeling of circuit breakers shall be preformed by the circuit breaker manufacturer or an authorized repair facility outfitted with calibrated test equipment. Each label shall identify the circuit breaker as being suitable for protecting No. 2 A.W.G. cables. The label shall be maintained legible.
5. Replacement instantaneous trip units used to protect No. 2 A.W.G. trailing cables shall be calibrated to trip at 800 amperes and this setting shall be sealed or locked. Calibration, sealing, and labeling of the replacement units must be conducted by the device manufacturer or an authorized repair facility outfitted with calibrated test equipment.
6. All components that provide short-circuit protection shall have a sufficient interruption rating in accordance with the maximum calculated fault currents available.
7. Prior to putting the loading machines in service for each shift, examinations by persons designated by the mine operator shall be made to visually examine the trailing cables to ensure that the cables are in safe operating condition. The instantaneous settings of the specially calibrated circuit breakers shall also be visually examined to ensure that the seals or locks have not been removed and that they do not exceed the settings stipulated in item 4.
8. Permanent warning labels shall be installed and maintained on the cover(s) of the power center or distribution box identifying the location of each sealed short-circuit protective device. These labels shall warn miners not to change or alter these sealed short-circuit settings.
9. Any trailing cable that is not in safe operating condition or damaged in any way shall be removed from service immediately and repaired or replaced. Each splice or repair in the trailing cables shall be made in a

workmanlike manner and in accordance with the instructions of the manufacturer of the splice or repair materials. The splice or repair shall comply with 30 C.F.R. §§ 75.603 and 75.604.

10. The Petitioner's alternate method shall not be implemented until miners, who have been designated to examine the integrity of seals or locks, verify the short-circuit settings and proper procedures for examining trailing cables for defects and damage and designated operators of the 995-volt loading machines, have received the training specified in Item 12.
11. Prior to implementation of this petition, the circuit breakers outlined above shall be inspected by MSHA to ensure their conformity with the terms and conditions of this petition.
12. Within 60 days after this Proposed Decision and Order becomes final, the Petitioner shall submit proposed revisions for its approved 30 C.F.R. Part 48 training plan to the Coal Mine Safety and Health District Manager for the District in which the mine is located. The training shall include the following elements:
  - (a) Training in the mining methods and operating procedures that will protect the trailing cables against damage;
  - (b) Training in proper procedures for examining the trailing cables to ensure that they are in safe condition;
  - (c) Training in the hazards of setting the short circuit interrupting device(s) too high to adequately protect the trailing cables; and
  - (d) Training in how to verify that the circuit interrupting device(s) protecting the trailing cable(s) are properly set and maintained.

The procedures, as specified in 30 C.F.R. § 48.3, for approval of proposed revisions to already approved training plans shall apply.

Any party to this action desiring a hearing on this matter must file in accordance with 30 C.F.R. § 44.14, within 30 days. The request for hearing must be filed with the Administrator for Coal Mine Safety and Health, 1100 Wilson Boulevard, Arlington, Virginia 22209-3939.

If a hearing is requested, the request shall contain a concise summary of position on the issues of fact or law desired to be raised by the party requesting the hearing, including specific objections to the proposed decision. A party other than Petitioner who has requested a hearing may also comment upon all issues of fact or law presented in the petition, and any party to this action requesting a hearing may indicate a desired hearing site. If no request for a hearing is filed within 30 days after service thereof, the Decision and Order will become final and must be posted by the operator on the mine bulletin board at the mine.

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Charles J. Thomas  
Deputy Administrator for  
Coal Mine Safety and Health