

Comments Submitted on Behalf of Consol Energy, Inc.

Concerning

Proposed Rule

Testing Evaluation and Approval of Electric Motor Driven Mine Equipment and
Accessories

RIN 1219-AB93

Docket NO. MSHA 2020-0018

Submitted

By

J. Todd Moore
Vice President - Safety

We appreciate the opportunity to provide comments on the proposed rule concerning testing, evaluation and approval of electric motor-driven mine equipment and accessories. We believe that the proposed rule could be a significant improvement over the existing rule and could result in significant safety improvements because it will make available to the mining industry equipment that provides a great level of protection.

Consol has a significant interest in the adoption of this proposed rule. Consol is a Pennsylvania-based producer of thermal and crossover metallurgical coal. It owns and operates three mining operations in Southwestern Pennsylvania including the Bailey, Enlow Fork and Harvey Mines. It has the capacity to produce approximately 28.5 million tons per year from the Pittsburgh seam by longwall methods. In addition, it has significant reserves for future mining.

Consol supports the adoption of the rule because it should make available equipment that benefits safety. The market for equipment approved pursuant to MSHA permissibility standards is becoming unreasonably smaller as noted in the preamble at page. 85 Fed. Reg. 73661. Manufacturers have become increasingly reluctant to seek approval of such equipment because of the cost and the onerous, expensive and protracted nature of MSHA's approval process. A recent example is readily found with respect to permissible air powered respirators.

For more than 40 years the 3M™ Airstream™ Headgear-Mounted Powered Air Purifying Respirator (PAPR) System has been used by many mine operators to help protect their workers. During those years there have been technological advancements in products and services for industrial applications. Recently 3M has indicated that they have been facing multiple key component supply disruptions for the Airstream product line that have created issues with providing acceptable supply service levels. Because of those issues, 3M discontinued the Airstream June 1, 2020 and this discontinuation is global.

It has been replaced with a Versaflow™ TR-800 Intrinsically safe Powered Air Purifying Respirator unit which benefits from additional features and reduced weight. But this respirator is not approved as MSHA permissible.

Currently there are no replacement 3M PAPRs that meet applicable MSHA standards for permissibility. Electronic equipment used in underground mines in potentially explosive atmospheres is required to be approved by MSHA per 30 CFR. 3M does offer alternative products for many other environments and applications.

Following that discontinuation, mines that currently use the Airstream have no MSHA-approved alternative PAPR to provide to miners. When the supply of replacement parts is exhausted, miners will be left without equivalent protection. One of the benefits of the PAPRs is that they provide a constant flow of air inside the headtop or helmet. This constant airflow helps to provide both positive flow respiratory protection and comfort in hot working environments.

Despite the fact that the replacement air powered respirators are intrinsically safe, they are not available for use in underground mines where this type of respirator has been in use for well over 30 years and provides a level of protection against exposure to respirable coal mine dust above and beyond the protection afforded by the respirable dust mandatory standard. While one company has submitted petitions for modifications to permit use of the intrinsically safe model, that was in November 2019 and a proposed decision has just been issued. The petition process provides no effective remedy for this deficiency.

We believe that the equivalency of voluntary consensus standards to MSHA's permissibility standards has been established as discussed in "An Evaluation of the Relative Safety of US Mine Explosions Protected Equipment Approval Requirements versus those of International Standards" by William Calder, David Snyder (NIOSH) and John Burr (NIOSH). As discussed in that report, the equivalency is clear:

This is why, fundamentally, all such standards could be viewed as being the same but with differences in detail. The world at large has solved these detail differences by bringing intrinsic safety experts from all interested countries together via the International Electrotechnical Commission (IEC), where all the different issues have been fully debated, proposals voted on, and ultimately producing an IEC document on intrinsic safety, IEC 60079-11. This standard has been adopted by all participating countries and is available to all others who wish to use it. It has been adopted with national differences by the United States via the American National Standards Institute (ANSI) and the standards developers International Society for Automation (ISA) and Underwriters' Laboratories (UL). Furthermore, OSHA has recognized the current IEC 60079-11 standard for years.

(Calder at 3).

As demonstrated in this report, from the overall perspective of miner safety the differences between the ACR12001 criteria and the ANSI/ISA 60079-11 standard are rather insignificant. The work (opinions, knowledge, experience, etc.) of the individual intrinsic safety experts representing several countries, including the US, which resulted in the ANSI/ISA standard cannot to be [sic.] discounted. These experts have thoroughly vetted and upheld the standard in repeated reviews.

(Calder at 12)

The additional benefits to be derived from the NRTL-based oversight and quality control, as well as the potential for increasing the equipment available for use in the mines and reducing approval times, suggest that the overall level of protection afforded by the miner will not be reduced, and may be improved, by accepting the ANSI/ISA 60079-11 standard for portable equipment, as an alternative to ACR12001.

(Calder at 13). We have enclosed a copy of that report for your reference.

We fully support the provision in Section 18.103 concerning the review of more recent updates of the listed voluntary consensus standards. We would suggest, however, that this provision (assuming they meet the criteria for incorporation by reference) specifically provide for the incorporation by reference of updated standards. We recognize that under the provisions for incorporation by reference that it is not appropriate to incorporate future revisions to incorporated material at

the time of the initial rule; these provisions must specifically be incorporated. The revision Consol is proposing makes it clear that future incorporation by reference is intended. It is well known that the incorporation by reference of the 1968-69 National Electric Code without incorporating the updates to such code, has rendered that particular revision outdated, and as discussed below relatively unavailable. *See, e.g.*, 30 CFR §77.501-3 and 77.516. *See also, BHP Navajo Coal Co.*, 37 FMSHRC 2860 (ALJ Bulluck Dec. 13, 2015).

Consol also recommends that the agency negotiate licensing agreements with the agencies that develop the voluntary consensus standards so that the agency can make copies available to operators. We understand that copies are available to review at MSHA offices but for complex standards such as electrical standards, it is usually necessary to have actual hard copies. Copies of current consensus standards are usually available for purchase but older standards that the voluntary consensus standard body may consider outdated may not be readily available for purchase. In recent years, this has been a particular problem with the 1968-69 National Electrical Code. It would even be more helpful to have the standards in searchable electronic form. If the agency is going to enforce voluntary consensus standards, it is necessary to provide actual copies as we see it. We recognize there may be copyright issues with providing copies so we suggest that a licensing agreement of some sort would be appropriate.

Consol also supports that the proposed rule provides that equipment previously approved under MSHA's permissibility standards may continue to be sold and used after the transition period has expired. Since much equipment approved under such standards will remain in service for years after the transition period has elapsed, this provision is necessary. *See* 85 Fed. Reg. 73663. It may be appropriate to specifically include the language of the preamble in the rule, i.e.,

The proposed rule would not affect currently approved equipment and manufacturers and mine operators are permitted to continue to sell to purchase all currently approved equipment. If at a future date, a current approval holder wishes to alter approval, the application could comply with the requirements on which the approval was based or with the VCS requirements listed in this part or subsequently incorporated.

We are concerned that after the 12-month transition period, some manufacturers may be forced to leave the mining market because they do not believe it is economically feasible to change over the equipment to comply with voluntary consensus standards. There are too few manufacturers in the market already and we

believe that the proposed rule should be modified to permit use of the previous approval criteria after the transition period.

We also believe that the rule does not address the protracted delays caused by the current approval process. Such process seems intended to discourage manufacturers from seeking approval. It is our hope that adoption of voluntary compliance standards will permit the process to be streamlined and expedited. Since the preamble suggests that the approval will follow the same approval path, we are, however, concerned about this.

We appreciate the opportunity to comment on the Proposed Rule. As we have discussed, it should have certain safety benefits and we would urge, however, that the changes we have proposed be effectuated before the final rule is issued.



J. Todd Moore