



DEPARTMENT OF LABOR

Mine Safety and Health Administration

Petition for Modification of Application of Existing Mandatory Safety Standards

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Notice.

SUMMARY: This notice is a summary of a petition for modification submitted to the Mine Safety and Health Administration (MSHA) by Consol Pennsylvania Coal Company, LLC.

DATES: All comments on the petition must be received by MSHA's Office of Standards, Regulations, and Variances on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments identified by Docket No. MSHA-2024-0084 by any of the following methods:

1. *Federal eRulemaking Portal:* <https://www.regulations.gov>. Follow the instructions for submitting comments for MSHA-2024-0084.
2. *Fax:* 202-693-9441.
3. *Email:* petitioncomments@dol.gov
4. *Regular Mail or Hand Delivery:* MSHA, Office of Standards, Regulations, and Variances, 201 12th Street South, 4th Floor West, Arlington, Virginia 22202-5452.

Attention: S. Aromie Noe, Director, Office of Standards, Regulations, and Variances. Persons delivering documents are required to check in at the receptionist's desk, 4th Floor West.

Individuals may inspect copies of the petition and comments during normal business hours at the address listed above. Before visiting MSHA in person, call 202-693-9455 to make an appointment.

FOR FURTHER INFORMATION CONTACT: S. Aromie Noe, Office of Standards, Regulations, and Variances at 202-693-9440 (voice), Petitionsformodification@dol.gov (email), or 202-693-9441 (fax). [These are not toll-free numbers.]

SUPPLEMENTARY INFORMATION: Section 101(c) of the Federal Mine Safety and Health Act of 1977 and title 30 of the Code of Federal Regulations (CFR) part 44 govern the application, processing, and disposition of petitions for modification.

I. Background

Section 101(c) of the Federal Mine Safety and Health Act of 1977 (Mine Act) allows the mine operator or representative of miners to file a petition to modify the application of any mandatory safety standard to a coal or other mine if the Secretary of Labor determines that:

1. An alternative method of achieving the result of such standard exists which will at all times guarantee no less than the same measure of protection afforded the miners of such mine by such standard; or
2. The application of such standard to such mine will result in a diminution of safety to the miners in such mine.

In addition, sections 44.10 and 44.11 of 30 CFR establish the requirements for filing petitions for modification.

II. Petition for Modification

Docket Number: M-2024-059-C

Petitioner: Consol Pennsylvania Coal Company, LLC, 275 Technology Drive, Suite 101, Canonsburg, PA 15317.

Mine: Enlow Fork Mine, MSHA ID No. 36-07416, located in Washington County, Pennsylvania.

Regulation Affected: 30 CFR 75.1002(a), Permissible electric equipment.

Modification Request: The petitioner requests a modification of 30 CFR 75.1002(a) as it pertains to use of battery-powered vibration analyzers and data collectors. Specifically, the petitioner is requesting to permit the use of battery-powered non-permissible SCOUT 140EX and

100EX vibration analyzers and the vb7 Portable Data Collector, Analyzer and Balancer within 150 feet of pillar workings or longwall faces.

The petitioner states that:

(a) The petitioner is requesting to utilize the SCOUT 140EX and 100EX vibration analyzers and the vb7 Portable Data Collector, Analyzer and Balancer within 150 feet of pillar workings or longwall faces .

(b) In approximately 2021, the SKF Microlog Analyzer CMXA 51, which was certified and approved by the U.S. Department of Labor’s Mine Safety and Health Administration (“MSHA”) for use in hazardous “gassy” areas of all mine operations in the United States, was discontinued and is no longer available for purchase. An email from SKF Technical Support states that the CMXA-51-MSHA Microlog has been discontinued and is no longer available for purchase.

(c) Currently, there is no other MSHA approved vibration analyzer and data collector still in production. Thus, there are no new MSHA approved vibration analyzers and data collectors that are available for purchase.

(d) Currently, there is no other MSHA approved vibration analyzer and data collector that is still in production.

(e) The SCOUT100EX Vibration Data Collector, Analyzer and Balancer is a portable hardware monitoring device that supports dual-channel vibration data collection, analysis, and balancing. The device can be used to collect data from sensors on a route, for machine-side analysis and diagnosis, and on-site dynamic balance correction. The SCOUT100EX is ATEX Zone 2 and IECEx Zone 2 compliant and safe for hazardous areas.

(f) The SCOUT140EX Vibration Data Collector, Analyzer and Balancer is a portable hardware monitoring device that supports four-channel vibration data collection, analysis, and balancing. The device can be used to collect data from sensors on a route, for machine-side analysis and diagnosis, and on-site dynamic balance correction. The SCOUT100EX is ATEX Zone 2 and IECEx Zone 2 compliant and safe for hazardous areas.

(g) The vb7 Portable Data Collector, Analyzer and Balancer instrument is a dual channel vibration data collector, analyzer and balancer. The device can be used for on-route and off-route data collection, machine-side analysis and diagnosis as well as on-site dynamic balance correction. The vb7 Portable Data Collector, Analyzer and Balancer is certified for Class 1 Division 2 hazardous areas.

(h) The SCOUT100EX, SCOUT140EX, and vb7 are certified for Class 1 Division 2 hazardous areas, and are IP-rated in North America as ATEX Zone 2 and internationally IECEx Zone 2, compliant and safe for use in hazardous areas.

(i) Consol shall use these devices to collect data from sensors on a route, for machine-side analysis and diagnosis, and on-site dynamic balance correction. Primarily, equipment contractors at Consol shall use these analyzers to take vibration readings on the shearing machine to predict and prevent gearing/motor failures while on the longwall face. A failure of a major component on the longwall face potentially poses many risks to miners when that particular component has to be changed out on the face.

(j) Some equipment manufacturers have historically had gearing issues with their shearer ranging arms on the shearing machines as well as cutter head gearboxes on their continuous miners and these components are very large and heavy.

(k) Consol relies on vibration collection to predict impending failures and successfully change individual parts and components before a catastrophic failure resulting in changing the entire ranging arm or cutter head gearcase.

(l) The SCOUT 140EX, 100EX, and vb7 shall be used by trained personnel from Consol or the vendor to take readings while running the associated motor or gearbox being tested. The shearing machine shall be out of service from production during the vibration collection.

(m) In addition, SCOUT 140EX, 100EX, and vb7 may be part of the weekly inspection of the shearing machines by the manufacturer representative or by Consol's mine maintenance staff. Regardless, the shearing machine shall not be producing coal or moving while in use unless

it has to be trammed to take readings on the haulage/tram gearbox. Regardless, the machines shall not be cutting coal at the time of use.

(n) Currently, SCOUT 140EX, 100EX, and vb7 are the only analyzers Consol has found to replace the older versions and the SKF versions, which are no longer manufactured and available for purchase. However, the SCOUT 140EX, 100EX, and vb7 are not approved under the applicable MSHA standards for permissibility.

(o) Electronic equipment used in underground mines in potentially explosive atmospheres is required to be approved by MSHA per 30 CFR. Bently Nevada and other manufacturers do offer alternative products for many other environments and applications.

(p) Given the benefits of the use of vibration analyzers, the application of the standard results in a diminution of safety at the mine. Consol petitions to permit the use of a SCOUT100EX, SCOUT140EX, and vb7 Vibration Data Collectors, Analyzers and Balancers.

(q) The SCOUT100EX, SCOUT140EX, and vb7 Portable Intrinsically Safe Vibration Data Collector, Analyzer and Balancer batteries qualify as intrinsically safe in the US, Canada, and any other country accepting IECEx reports. IECEx is the International Electrotechnical Commissions System for Certification to Standards Relating to Equipment for Use in Explosive Atmosphere.

(r) The vibration analyzers have an intrinsically safe (IS) rating of Division 1: IS Class I, II, III; Division 1 (includes Division 2) Groups C, D, E, F, G; T4, under the most current standard (UL 60079, 6th Edition, 2013). ATEX-certified with an intrinsically safe (IS) rating of “ia”

(s) Consol recognizes that (NIOSH) researchers have conducted studies on intrinsically safe (IS) equipment and believe that the International Electrotechnical Commission (IEC) document 60079-11, or the American National Standards Institute (ANSI)/International Society (ISA) document 60079-11 for two-fault equipment (marked as ia), would provide an equivalent level of safety as MSHA-approved equipment.

(t) Consol also recognizes that MSHA does not consider all equipment that meets the 60079-11 standard as equivalent to MSHA approval at this time. However, MSHA also recognizes that use of equipment meeting the 60079-11 standard for two-fault equipment (and even, to a lesser extent, equipment meeting one-fault (marked as ib) or no-fault (marked as ic) standards) provides a level of safety that is not provided by equipment that does not meet the IEC/ANSI/ISA standards.

(u) The battery is a Custom Lithium Ion Pack, 7.4V, 5000 mAh. There is internal charging with an external power pack 12V DC, 3A output.

(v) The standards for approval of these Vibration Data Collectors, Analyzers and Balancers are an acceptable alternative to MSHA's standards and provide an equivalent level of protection.

(w) The alternate method proposed by the Petitioner will at all times guarantee no less than the same measure of protection afforded the miners under the mandatory standard.

The petitioner proposes the following alternative method:

(a) The operator shall permit the use of the following Vibration Data Collectors, Analyzers and Balancers if they have an IP rating of 66 or greater in or inby the last open crosscut, in the return, or within 150 feet of pillar workings or longwall faces, subject to the conditions of the proposed decision and order (PDO) granted by MSHA: SCOUT100EX, SCOUT140EX, and vb7 are certified for Class 1 Division 2 hazardous areas, and are IP-rated in North America as ATEX Zone 2.

(b) All non-permissible Vibration Data Collectors, Analyzers and Balancers to be used in or inby the last open crosscut, in the return, or within 150 feet of pillar workings or longwall faces shall be examined by the person to operate the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. These examinations shall include:

(1) Check the instrument for any physical damage and the integrity of the case;

(2) Check the battery compartment cover or battery attachment to ensure that it is securely fastened.

(c) The equipment shall be examined at least weekly by a qualified person as defined in 30 CFR 75.153.

(d) The operator shall ensure that any repairs or servicing for all non-permissible Vibration Data Collectors, Analyzers and Balancers will be done by the manufacturer.

(e) The non-permissible Vibration Data Collectors, Analyzers and Balancers that will be used in or inby the last open crosscut, in the return, or within 150 feet of pillar workings or longwall faces shall not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of the PDO granted by MSHA.

(f) Non-permissible Vibration Data Collectors, Analyzers and Balancers shall not be used if methane is detected in concentrations at or above 1.0 percent methane. When 1.0 percent or more of methane is detected while the non-permissible surveying equipment is being used, the equipment shall be de-energized immediately and the non-permissible electronic equipment withdrawn outby the last open crosscut or out of the return. Prior to entering in or inby the last open crosscut, or within 150 feet of pillar workings or longwall faces, all requirements of 30 CFR 75.323 shall be complied with.

(g) All hand-held methane detectors shall be MSHA-approved and maintained in permissible and proper operating condition as defined by 30 CFR 75.320. All methane detectors shall provide visual and audible warnings when methane is detected at or above 1.0 percent.

(h) Prior to energizing any of the non-permissible Vibration Data Collectors, Analyzers and Balancers in or inby the last open crosscut or in the return, or within 150 feet of pillar workings or longwall faces, methane tests shall be made in accordance with 30 CFR 75.323(a).

(i) All areas where Vibration Data Collectors, Analyzers and Balancers are to be used shall be pre-shifted according to 30 CFR 75.360. If the area was not pre-shifted, a supplemental

examination according to 30 CFR 75.361 shall be performed before any non-certified person enters the area. If the area has been examined according to 30 CFR 75.360 or 30 CFR 75.361, additional examination is not required.

(j) A qualified person as defined in existing 30 CFR 75.151 shall continuously monitor for methane immediately before and during the use of non-permissible Vibration Data Collectors, Analyzers and Balancers in or inby the last open crosscut or in the return.

(k) Batteries contained in the Vibration Data Collectors, Analyzers and Balancers shall be "charged" in intake air outby the last open crosscut and out of the return. Before each shift requiring the use of Vibration Data Collectors, Analyzers and Balancers all batteries for the Vibration Data Collectors, Analyzers and Balancers shall be charged sufficiently that they are not expected to be charged on that shift.

(l) When using non-permissible Vibration Data Collectors, Analyzers and Balancers in or inby the last open crosscut or in the return, or within 150 feet of pillar workings or longwall faces, the operator shall confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, in the last open crosscut is at least the minimum quantity that is required by the mine's ventilation plan.

(m) Personnel engaged in the use of Vibration Data Collectors, Analyzers and Balancers shall be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.

(n) All persons who use Vibration Data Collectors, Analyzers and Balancers shall receive specific training on the terms and conditions of the PDO granted by MSHA before using non-permissible electronic equipment in or inby the last open crosscut or in the return, or within 150 feet of pillar workings or longwall faces. A record of the training shall be kept with the other training records.

(o) Within 60 days after the PDO granted by MSHA becomes final, the operator shall submit proposed revisions for its approved 30 CFR part 48 training plans to the Coal Mine Safety and

Health District Manager. These proposed revisions shall specify initial and refresher training regarding the terms and conditions stated in the PDO granted by MSHA. When training is conducted on the terms and conditions in the PDO granted by MSHA, an MSHA Certificate of Training (Form 5000-23) shall be completed. Comments shall be included on the Certificate of Training indicating that it was surveyor training.

(p) The operator is responsible for seeing that all contractors hired by the operator are using electronic equipment in accordance with the requirements of paragraph (s) above. The conditions of use in this Petition shall apply to all non-permissible Vibration Data Collectors, Analyzers and Balancers used in or inby the last open crosscut or in a return, or within 150 feet of pillar workings or longwall faces, regardless of whether the equipment is used by the operator or by an independent contractor.

(q) The operator shall post the PDO granted by MSHA in unobstructed locations on the bulletin boards and/or in other conspicuous places where notices to miners are ordinarily posted, for a period of not less than 60 consecutive days and shall remain on the mine bulletin board until such time as the ruling on the petition becomes final.

(r) There are no representatives of miners at the Enlow Fork Mine. A copy of this petition has been posted on the bulletin board as of September 30, 2024.

In support of the proposed alternative method, the petitioner has also submitted: a

SCOUT100EX Vibration Data Collector, Analyzer and Balancer datasheet, a SCOUT140EX Vibration Data Collector, Analyzer and Balancer datasheet, a vb7 Portable Data Collector, Analyzer and Balancer datasheet, and email communication from SKF Technical Support.

The petitioner asserts that the alternative method will guarantee no less than the same measure of protection afforded the miners under the mandatory standard.

Song-ae Aromie Noe,

Director,

Office of Standards, Regulations, and Variances.

