

October 23, 2007

In the matter of
CONSOL Energy Inc.
Blacksville No. 2 Mine
I.D. No. 46-01968

Petition for Modification

Docket No. M-2006-006-C

PROPOSED DECISION AND ORDER

On January 30, 2006, a petition was filed seeking a modification of the application of 30 C.F.R. § 75.503 to the Blacksville No. 2 Mine located in Monongalia County, West Virginia. The Petition was investigated and evaluated as a request for modification to allow the use of non-permissible, battery-powered electronic surveying equipment (electronic surveying equipment/instrument or total station) in or inby the last open crosscut.

The relevant 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, 75.504 to be permissible which is taken into or used inby the last open crosscut of any such mine.

The Petitioner alleges that the alternative method outlined in its Petition regarding the use of the non-permissible, battery-powered electronic surveying equipment provides no less than the same measure of protection to the miners as provided by the standard.

The Petitioner's proposed alternative method consists of the following:

1. Consolidation Coal Company (CCC) proposes to use a Sokkia 530R electronic surveying instrument with a 7.2-volt battery or other similar electronic surveying equipment.
2. Immediately prior to and continuously while using any of the equipment in or beyond the last open crosscut, Petitioner shall test for methane in the mine atmosphere

and as close to the equipment as possible. Petitioner shall test with an approved instrument capable of providing both visual and audible alarms, which has been approved by MSHA pursuant to 30 C.F.R.

3. Petitioner will immediately cease the use of such equipment whenever 1.0 percent or more methane is detected.
4. Petitioner will ensure that qualified personnel, trained in the requirements of this Petition, will physically attend all such equipment whenever it is located in or beyond the last open crosscut.
5. Batteries contained in the surveying equipment must be "changed out" or "charged" in fresh air outby the last open crosscut.

The Petitioner's proposed alternative method thus consists of waiving the requirement for the use of permissible equipment, allowing the use of non-permissible, battery-powered electronic surveying equipment in or inby the last open crosscut, and the surveyor carrying the non-permissible, battery-powered electronic surveying equipment making appropriate and timely methane gas checks.

In support of its Petition, the Petitioner makes the following allegations:

1. This type of technology provides much more accuracy and precision relative to the extent of the mine workings and boundaries than its predecessor.
2. This technology provides horizontal measuring accuracy of 0.01 of a foot vs. 0.1 of a foot for a typical steel measuring tape.
3. Angular error is reduced by the ability to turn double angles. Electronic instruments such as the Sokkia allow for turning double angles [whereas] non-electronic transits do not have this ability.
4. Improved accuracy and precision are beneficial when active mining is near old workings that may have accumulated unknown quantities of water and contain unknown quantities of toxic gases such as oxygen deficiency.

5. This technology is powered by a relatively low energy battery.
6. In a Petition ([Docket]No. M-2002-02-M) a petitioner sought modification to use Topcon GTS 300 Series Electronic Total Station Surveying Equipment with a 9.6-volt battery or equivalent equipment. Through a consent agreement the petitioner was allowed to use the following equipment in or beyond the last open crosscut: Topcon GTS 300 Series Electronic Total Station Surveying Equipment with a 9.6 volt battery and/or equivalent units.

MSHA personnel conducted an investigation of the Petition and filed a report of their findings with the Administrator for Coal Mine Safety and Health. After a careful review of the entire record, including the Petition and MSHA's investigative report, this Proposed Decision and Order is issued.

Finding of Fact and Conclusion of Law

The Petition seeks modification of section 75.503 to permit the use of a non-permissible, battery-powered electronic surveying equipment in or inby the last open crosscut. The Petition identifies the equipment at issue as a Sokkia 530R electronic surveying instrument with a 7.2 volt battery.

The Coal Mine Health and Safety Act of 1969 (the 1969 Act), the Federal Mine Safety and Health Act of 1977 (the 1977 Act), and 30 C.F.R. § 75.503 are intended to reduce mine fatalities and serious injuries by reducing the number of potential ignition sources in gassy mines. The primary safety goal of § 75.503 is to prevent the use of equipment that could be a potential ignition source for a methane or coal dust explosion or fire. The requirement that all electric face equipment used inby or taken into the last open crosscut of a mine be permissible means that MSHA must have made an approval finding that the equipment will not cause a mine explosion or mine fire.

MSHA's investigation revealed that only one electronic surveying equipment manufacturer had requested its instrument be evaluated for use in underground coal mines where permissible equipment is required. That electronic equipment was approved permissible in 1979; however, it has not been manufactured in several years. Under an earlier petition for a similar modification, several electronic surveying equipment manufacturers were contacted; none of these manufacturers had submitted data to MSHA on their

equipment for possible permissibility approval or had intended to do so.

In addition, during review of other petitions filed previously to the one at issue herein, MSHA contacted the manufacturers of the surveying stations and reviewed the equipment's user manuals. This review indicated that no survey station was approved by its manufacturer for use in hazardous locations. For example, the manufacturer of the Nikon Model DTM-300 survey station, proposed by an earlier petitioner requesting a similar modification for use under similar conditions to the ones at issue herein, advised that the equipment, which uses a battery pack similar to that of the model requested in the Petition at issue herein, should not be used in underground coal mines. In addition, in the Nikon's instructional manual, a WARNING AND CAUTION states:

The instrument does not feature explosion-protected construction. Do not use in coal mines, in areas contaminated with coal dust, or near other flammable substances.

MSHA's investigation confirmed that the manufacturer of the petitioned Sokkia Series 530R Total Stations also does not certify its units for use in areas where explosive gases are present, and the operator's manual contains the following warning:

Do not use the unit in areas exposed to high amounts of dust or ash, in areas where there is inadequate ventilation, or near combustible materials. An explosion could occur.

In summary, MSHA's investigation revealed that no electronic surveying equipment or surveying stations currently being manufactured are approved as permissible.

Furthermore, as outlined above, in support of its Petition, the Petitioner refers to a petition for modification in Docket No. M-2002-02-M (that petition was initially denied but later granted pursuant to a consent agreement in Docket Nos. 2005-MSA-05 & 2005-MSA-08) that allowed the use of a non-permissible Topcon GTS 300 Series Electronic Total Station

Surveying Equipment in or beyond the last open crosscut.¹ However, there are significant differences between the mine at issue in Docket No. M-2002-02-M and the mine at issue herein (Blacksville No. 2) that render the aforementioned consent agreement irrelevant to the matter at issue herein. For example, the mine at issue in Docket No. M-2002-02-M was a trona mine, a metal/non-metal mine. Even though the standard at issue in that case, 30 C.F.R. § 57.22305², was similar to the one at issue herein regarding the permissibility requirement of equipment used in or beyond the last open crosscut, and even though similar equipment and mining methods are used in trona mines as are used in coal mines, trona mines are very different from a typical coal mine. Trona is a mineral that, when refined (dissolved and recrystallized with impurities dropped out by gravity), is used as the dust in fire extinguishers and in glass-making applications. Trona is non-flammable. In addition, trona deposits liberate methane from roof and floor shales and the liberation history of the petitioner's mine in Docket No. M-2002-02-M was a modest 400,000 cubic feet of methane per day, whereas the Blacksville No. 2 mine liberates approximately 7,313,200 cubic feet of methane per day.

MSHA has consistently denied similar petitions for modification to the one at issue herein due to the extensive history of coal mine explosions and the importance of eliminating all possible ignition sources by requiring the use of permissible equipment anywhere methane could accumulate.

Alternative Method

The Petitioner alleges that the alternative method outlined in its Petition regarding the non-permissible, battery-powered electronic surveying equipment will at all times guarantee no

1 The petitioner in that case had also requested a modification to allow use of handheld electric drills in or beyond the last open crosscut under Docket No. M-2002-001-M. MSHA initially denied both requested modifications, and, in a subsequent negotiated settlement (Consent Agreement), an agreement allowing the use of the surveying equipment and denying the use of battery-powered handheld drills was reached.

2 30 C.F.R. § 57.22305, Approved Equipment (III mines), provides: Equipment used in or beyond the last open crosscut and equipment used in areas where methane may enter the air current, such as pillar recovery workings, longwall faces and shortwall faces, shall be approved by MSHA under the applicable requirements of 30 C.F.R. parts 18 through 36. Equipment shall not be operated in atmospheres containing 1.0 percent or more methane.

less than the same level of protection to miners at Blacksville No. 2 Mine as would be provided by the standard. The Petition provides for the use of non-permissible, battery-powered electronic surveying equipment in or beyond the last open crosscut with the surveyor (using the petitioned equipment) making appropriate and timely methane gas checks. As stated above, the manufacturer's specifications for the petitioned non-permissible, battery-powered electronic surveying equipment provide the following warning in its operator's manual:

Do not use the unit in areas exposed to high amounts of dust or ash, in areas where there is inadequate ventilation, or near combustible materials. An explosion could occur.

Permissible equipment does not have the potential to release enough electrical or thermal energy to ignite a flammable mixture of gases when maintained as approved. Intrinsically safe equipment is incapable of releasing enough electrical or thermal energy under normal or abnormal conditions to cause ignition of a flammable mixture of methane. The petitioned equipment is neither permissible nor intrinsically safe and it carries the same warning as other similar equipment in that it cannot be used in an explosive environment. MSHA's investigation revealed that methane liberation for the Blacksville No. 2 Mine is 7,313,200 cubic feet per day; this is a high liberation rate for such an older mine with large sealed areas and active longwall mining sections. This level of liberation represents a potential for explosive accumulations of methane and results in MSHA conducting more frequent spot inspections of the mine's ventilation and of developing sections in the mine.

In addition, the legislative history of the 1969 Act documents numerous mine explosions that occurred at mines working above the water table and rejected the concept of non-gassy coal mines.

MSHA has granted modifications of standards similar to the one petitioned herein for use of low-voltage or battery-powered non-permissible electronic testing and diagnostic equipment in by the last open crosscut, primarily on longwall faces. Those modifications apply to electronic equipment for which no permissible alternative devices exist and for which no other practical means of testing to evaluate electrical failures exist. These modifications are narrow in their application to

specific circumstances. The necessity for the diagnostic testing is similar in nature to the use of gas torches or welding equipment inby the open crosscut, which is allowed under existing regulations because there is no practical alternative to doing so. Routine surveying does not fall into this category. Moreover, MSHA's investigation revealed that the manual methods of setting surveying stations during surveying have been successfully used without significant change over thirty years.

MSHA does not dispute that the total station or non-permissible battery-powered electronic surveying equipment, with its sophisticated laser distance-measuring devices and internal computational capabilities, is more convenient to use, produces electronic records, and provides nearly instantaneous computations -- all of which result in improvements in the accuracy of the measurements taken. However, such improvements can be achieved while using this non-permissible, battery-powered electronic surveying equipment without going into or inby the last open crosscut. Closed loop surveys can be carried out and closed without going into or inby the last open crosscut, and survey stations can be set in the last open crosscut without taking the non-permissible, battery-powered electronic surveying equipment into or beyond the last open crosscut.

Petitioner's proposed alternative method does not provide the same measure of protection to miners as the standard because the use of non-permissible, battery-powered electronic surveying equipment in a coal mine represents a possible ignition source for a methane or coal dust explosion or fire.

On the basis of the petition and the findings of MSHA's investigation, CONSOL Energy Inc. is not granted a modification of the application of 30 C.F.R. 75.503 at its Blacksville No. 2 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 Energy Inc.'s Petition for Modification of the application of 30 C.F.R. § 75.503 at its Blacksville No. 2 Mine is hereby:

DENIED.

Even though 30 C.F.R. §75.503 applies to electric face equipment taken into or used in by the last open crosscut, the reasoning and investigative information which compels the decision to deny the requested modification of 30 C.F.R. §75.503 applies equally well to any request to use non-permissible, battery-powered electronic surveying equipment at locations in which methane or coal dust accumulations may be present, such as those locations referenced in 30 C.F.R. §§ 75.500(b), 75.500(d), 75.507-1, and 75.1002.

Any party to this action desiring a hearing on this matter must file a request for hearing within 30 days after service of the Proposed Decision and Order in accordance with 30 C.F.R. 44.14. 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 and Order. A party other than the Petitioner who has requested a hearing shall 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, this Proposed Decision and Order will become final and must be posted by the operator on the mine bulletin board at the mine.

Terry L. Bentley
Acting, Deputy Administrator for
Coal Mine Safety and Health