

In the matter of:
Rosebud Mining Company
Beaver Valley
I.D. No. 36-08725

Petition for Modification

Docket No. M-2009-003-C

PROPOSED DECISION AND ORDER

On January 26, 2009, Rosebud Mining Company filed 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 C.F.R. Part 44. The petition sought a modification of the application of 30 C.F.R. § 75.1002(a) at Beaver Valley , I.D. No. 36-08725, located in Hookstown, Beaver County, Pennsylvania.

30 C.F.R. § 75.1002(a) states:

Electrical equipment must be permissible and maintained in a permissible condition when such equipment is located within 150 feet of pillar workings or longwall faces

The following definitions are also relevant to the petition. 30 C.F.R. § 18.2 defines “permissible equipment” as:

a completely assembled electrical machine or accessory for which a formal approval has been issued, as authorized by the Administrator, Mining Enforcement and Safety Administration under the Federal Coal Mine Health and Safety Act of 1969 (Pub. L. 91-173, 30 U.S.C. 801 or, after March 9, 1978, by the Assistant Secretary under the Federal Mine Safety and Health Act of 1977 (Pub. L. 91-173, as amended by Pub. L. 95-164, 30 U.S.C. 801).

In addition, 30 C.F.R. § 18.2 defines “intrinsically safe” as:

incapable of releasing enough electrical or thermal energy under normal or abnormal conditions to cause ignition of a flammable mixture of methane or natural gas and air of the most easily ignitable composition.

Further, 30 C.F.R. § 75.2 defines “permissible” as applied to electric face equipment, as:

all electrically operated equipment taken into or used in by the last open crosscut of an entry or a room of any coal mine the electrical parts of

which, including, but not limited to, associated electrical equipment, components, and accessories, are designed, constructed, and installed, in accordance with the specifications of the Secretary, to assure that such equipment will not cause a mine explosion or mine fire, and the other features of which are designed and constructed, in accordance with the specifications of the Secretary, to prevent, to the greatest extent possible, other accidents in the use of such equipment.

The petition alleges that application of Section 75.1002(a) would result in a diminution of safety to miners and that the alternative method proposed in the petition regarding the use of non-permissible, battery-powered (electronic) surveying equipment will at all times guarantee no less than the same measure of protection afforded by the standard. In support of its petition, the petitioner states that use of the most practical and accurate surveying equipment is necessary in order to comply with the requirements of 30 C.F.R §§ 75.372 (mine ventilation maps) and 75.1200 (mine maps), the State of Pennsylvania mine mapping requirements in Technical Guidance Document #563-2000-610, and the Pennsylvania Bituminous Coal Mine Safety Act. Furthermore, the petitioner states that underground mining by its nature, size, complexity of mine plans and relative closeness to other abandoned mines requires that accurate and precise measurements be completed in a prompt and efficient manner.

In addition, during MSHA's investigation of the petition, the petitioner asserted that the accuracy of the electronic surveying equipment is necessary, not only to comply with Pennsylvania's Technical Guidance Document, but also for the safety of the miners. The petitioner stated that because of the large number of gas wells within the permit boundaries of the mine, accurate surveys are needed to safely mine around the gas wells.

The petitioner's proposed alternative method includes the following proposed protections:

- a. All non-permissible battery powered surveying equipment to be used "in or inby the last open crosscut [sic]"¹ shall be examined prior to use to ensure the equipment is being maintained in a safe operating condition. In addition, the equipment will be examined at intervals not to exceed 7 days by a qualified person as defined in 30 C.F.R. § 75.153. Examination results shall be recorded in the weekly examination of electrical equipment book. These checks shall include:

¹Petitioner requested a modification of 30 C.F.R. § 75.1002(a) which pertains to permissible electrical equipment "used within 150 feet of pillar workings or longwall faces."

- (i) check the instrument for any physical damage and the integrity of the case;
 - (ii) remove the battery and inspect for corrosion;
 - (iii) inspect the contact points to ensure a secure connection to the battery;
 - (iv) reinsert the battery and power up and shut down to ensure proper connections; and,
 - (v) check the battery compartment cover to ensure that it is securely fastened.
- b. A qualified person as defined in existing 30 C.F.R. § 75.151 shall continuously monitor for methane immediately before and during the use of non-permissible surveying equipment within 150 feet of pillar workings.
- c. Non-permissible surveying equipment 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 further than 150 feet from pillar workings.
- d. Non-permissible surveying equipment shall not be used where float coal dust is in suspension.
- e. Batteries contained in the surveying equipment must be “changed out” or “charged” in fresh air “outby the last open crosscut [sic]”.²
- f. Qualified personnel engaged in the use of surveying equipment shall be properly trained to recognize the hazards and limitations associated with the use of surveying equipment.
- g. The non-permissible surveying equipment shall not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the above terms and conditions.
- h. Within 60 days after the Proposed Decision and Order becomes final, Rosebud Mining Company shall submit proposed revisions for its

² MSHA construes Petitioner’s proposed alternative method to include “Batteries contained in the surveying equipment must be “changed out” or “charged” in fresh air further than 150 feet of the pillar workings.” See footnote 1.

approved 30 C.F.R. Part 48 training plan to the Coal Mine Safety and Health District Manager. In addition to training regarding the requirements specified in item a, these proposed revisions shall specify initial and refresher training regarding the terms and conditions stated in the Proposed Decision and Order.

In summary, the petitioner's request consists of waiving the requirement for permissible equipment and instead, allowing the use of non-permissible, battery-powered (electronic) surveying equipment within 150 feet of pillar workings, provided that additional proposed protections are followed.

MSHA personnel conducted an investigation of the petition and filed a report of their findings and recommendations with the Chief, Safety Division for Coal Mine Safety and Health. After a careful review of the entire record, including the petition, comments submitted by the United Mine Workers of America, and MSHA's investigative report and recommendation, this Proposed Decision and Order is issued.

Findings of Fact and Conclusion of Law

MSHA's investigation found that Beaver Valley is opened into the Upper Freeport coal seam through four drifts. There is currently one person employed. The miners are not represented by any union. Coal is not being mined at this time. MSHA determined that the working section and all return air courses would be directly affected by this petition for modification. Although only the mine's surveyors would be using the proposed non-permissible equipment, all miners working in the mine would be affected by any modification.

One surveyor will typically work together with one miner from Beaver Valley putting in mining sights, running elevations and check loops, and measuring take-ups. Surveying is conducted as needed and the data collected by the surveyor is provided to Rosebud Mining Company's engineering department.

Although the petitioner asserts that the accuracy of the proposed electronic surveying equipment is needed because of the large number of gas wells within the permit boundaries of the mine, MSHA has determined that levels of accuracy fully capable of protecting miners can be achieved using optical non-electric surveying equipment. In addition, non-electrical surveying equipment can achieve even higher levels of accuracy through repetition of measurements and statistical applications.

During the investigation, the petitioner agreed with MSHA that a majority of the face survey work can be done while keeping the surveying instrument in intake air, outby the last open crosscut. Nonetheless, the petitioner maintained that situations occur

when directional sights or angles require the use of the instrument within 150 of the pillar workings. MSHA determined, however, that when using high-accuracy total stations -- non-permissible electronic surveying equipment -- the equipment need not be taken within 150 of the pillar workings if the surveying is carefully coordinated with the mining activity. For these reasons, MSHA does not agree that application of the standard would result in a diminution of safety for the miners.

In addition, the proposed alternative method will not provide the same measure of protection to miners as the standard, for the following reasons. Permissible equipment places electrical components in flanged containers which have flame cooling paths long enough not to propagate an explosion into the mine atmosphere. 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. MSHA requirements for permissible or intrinsically safe equipment are intended to prevent mine explosions from unpredicted methane accumulations, methane outbursts, or float coal dust in suspension by removing a possible ignition source. The petitioned equipment is neither permissible nor intrinsically safe. For these reasons, the petitioner proposes compensating protections designed to achieve an equivalent level of protection for miners. These proposals however, do not compensate for the hazards created by the non-permissible equipment.

Item a. of the proposed compensating protections in the petition involves pre-operational and weekly examinations of the equipment. These examinations would be typical of those which would be conducted to ensure that the equipment would function properly rather than provide alternative protective measures to the standard at issue. Also, the instruction manuals for the non-permissible, battery-powered surveying equipment requested to be used -- a 6-volt Topcon DT104L Theodolite and a 7.2-volt Topcon GPT-3003 pulse total station contain hazard warnings on use in coal mines and in areas that produce explosive gas³. Specifically, the manuals for the GPT-3003 total pulse station and 6-volt Topcon DT104L Theodolite contain the warning: "**May ignite explosively**" and "**Never use an instrument near flammable gas, liquid matter, and do not use in a coal mine.**" The 7.2-volt Topcon GPT-3003 utilizes similar battery circuitry requirements as the 7.2-volt Topcon GPT-200 series instruments. Neither the Topcon GPT-200 series, Topcon DT104L nor Topcon GPT-3003 is explosion proof. The 7.2-volt Topcon GPT-213 total station contains the warning "**Avoid using in an area that produces explosive gas.**" MSHA found that Beaver Valley is a gassy mine that

³ The distance meter is integrated in the 6-volt Topcon DT104L Theodolite and the 7.2-volt Topcon GPT-3003 electronic total station and so the request to use a distance meter is not actually a request to use a separate piece of equipment. In addition, the petitioner stated during MSHA's investigation that the laptop computer should be removed from the petition. For these reasons, these items are not addressed in this Proposed Decision and Order.

liberated 55,296 cubic feet of methane in a 24-hour period, pursuant to the results of bottle sampling conducted in the second quarter of 2011. Use of the above equipment would create a safety hazard, and the proposed examination items listed in items a(i) through a(v) of the petition provide no additional protection to offset the hazard that would be created using the non-permissible equipment.

Item b. of the proposal indicates that the petitioner will have a qualified person continuously monitor for methane immediately before and during the use of the surveying equipment. In most cases, the qualified person under 30 C.F.R. § 75.151 would already be continuously monitoring for methane as part of his normal functions in meeting the requirements listed under 30 C.F.R. §§ 75.360, 75.361, 75.362 and 75.1714-7. Normally, qualified persons will zero their instruments in fresh air upon entry into the mine, and the instrument will remain operating during the course of their shift. For these reasons, Item b. offers little or no additional protection that would offset the hazards created.

Item c. of the proposal indicates that non-permissible surveying equipment will be deenergized when methane is detected at 1.0 percent or higher. This action is already required. Under 30 C.F.R. § 75.323(b), all electrical equipment (except intrinsically safe AMS systems) is to be de-energized when 1.0 percent methane is present.

Item d. of the proposal states that non-permissible equipment shall not be used where float coal dust is in suspension. Float coal dust is defined in 30 C.F.R. § 75.400-1 (b) as "coal dust consisting of particles of coal that can pass a No. 200 sieve." MSHA believes that it is not possible for the petitioner to implement this action item. Float coal dust cannot be entirely eliminated during the cutting process of mining. The operator contends that even with the use of a scrubber, "float coal dust in the return air courses is minimal," conceding that it exists. Unless all mining were to cease, float coal dust would be generated from the mining process and contribute to the potential of an ignition hazard, fire, or explosion.

Item e. of the proposal states that the batteries in the surveying equipment must be changed out or charged in fresh air outby the last open crosscut. The operator's reference to "in fresh air outby the last open crosscut" has been interpreted by MSHA, in this petition, to mean "in fresh air further than 150 feet of the pillar workings." See footnote 1. To change out the battery, the contacts of the battery would be broken creating a potential arc or spark. Because battery connection points are not permissible, under 30.C.F.R. § 75.500 battery changes or charges already would need to be made outby the last open crosscut. Further, other existing standards require already that such changes or charges occur in intake air. Under 30 C.F.R. § 75.507, all power-connection points (e.g., battery connection points) outby the last open crosscut must be in intake air. Under 30 C.F.R. § 75.340, battery charging stations must be ventilated with intake

air (fresh air). For these reasons, Item e. appears to offer no additional protection that would offset the hazards created by the proposed modification.

Item f. of the proposal states that qualified personnel engaged in the use of surveying equipment shall be properly trained to recognize hazards and limitations associated with the use of the surveying equipment. This training is mandated already under 30 C.F.R. § 48.11, which requires hazard training for surveying personnel under Subpart A.

Item g. of the proposal indicates that the non-permissible surveying equipment shall not be put into service until MSHA has initially inspected the equipment to determine compliance with the terms and conditions. This item does not add additional protections to the miner nor would inspection of the equipment determine compliance with all the terms and conditions of the proposal.

Item h. of the proposal requires that the Part 48 training plan be amended within 60 days to reflect initial and refresher training regarding the terms and conditions stated in the Proposed Decision and Order. However, amending a training plan does not itself add protections that would tend to offset the hazards created by non-permissible surveying equipment. Rather, it simply memorializes other training actions contemplated.

On the basis of the petition and MSHA's investigation, MSHA has determined that application of the standard would not result in a diminution of safety to the miners and that the proposed alternative method will not provide the same measure of protection to miners as the standard. Therefore, Rosebud Mining Company is not granted a modification of the application of 30 C.F.R. § 75.1002(a) to Beaver Valley.

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 Rosebud Mining Company's Petition for Modification of the application of 30 C.F.R. § 1002(a) at Beaver Valley listed above is hereby:

DENIED.

Any party to this action desiring a hearing on this matter must file a request for a hearing within 30 days after service of the Proposed Decision and Order, in accordance with 30 CFR 44.14, 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 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, this Proposed Decision and Order will become final and must be posted by the operator on the mine bulletin board at the mine.

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