In the matter of:
San Juan Coal Company
San Juan Mine 1
I.D. No. 29-02170

Petition for Modification

Docket No. M-2010-035-C

PROPOSED DECISION AND ORDER

On November 14, 2010, San Juan Coal Company (Petitioner) filed a Petition for Modification to amend terms and conditions of a granted Proposed Decision and Order (PDO), issued on January 17, 2001, (Docket No. M-2000-099-C) to the San Juan Mine 1, an underground coal mine in San Juan County, New Mexico. All provisions of the granted PDO finalized on February 16, 2001, are currently in effect. Once this PDO is final, it will supersede the decision to grant the modification of § 75.500(d) issued under Docket No. M-2000-099-C as it applies to the San Juan Mine 1.

30 C.F.R. § 75.500(d), Permissible electric equipment, provides:

> All other electric face equipment which is taken into or used inby the last crosscut of any coal mine, except a coal mine referred to in § 75.501, which has not been classified under any provision of law as a gassy mine prior to March 30, 1970, shall be permissible.

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 inby 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 Petitioner proposes to add non-permissible electronic testing, diagnostic, measurement, and survey equipment and remove or change specific terms and conditions for non-permissible equipment used in or inby the last open crosscut.

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

   (a) Non-permissible electronic testing and diagnostic equipment includes, lap top computers, oscilloscopes, vibration analysis machines, cable fault detectors, point temperature probes, infrared temperature devices, insulation testers (meggers), voltage, current and power measurement devices, signal analyzer devices, ultrasonic thickness gauges, electronic component testers, electronic tachometers.

   (b) Petitioner requests a modification to allow the use of a Leica TCR Models 303, 305, 307 survey devices and equivalent units with batteries having no greater voltage, in or inby the last open crosscut. Use of such devices increases the level of accuracy for the purpose of entry alignment and pillar sizing which has a positive impact on the safety of miners.

   (c) Petitioner requests a modification to allow the use of a Hilti, PD-30 or PD-40 laser range finder in or inby the last open crosscut. This device can be used to accurately measure depth of cuts for extended cut mining and other entry dimensions. Such measurements can be taken from under supported roof.

(d) All other electronic testing, diagnostic, measurement and survey equipment used in or inby the last open crosscut will be permissible.

(e) Other testing, diagnostic and survey equipment may be used under this petition for modification if that equipment is approved in advance by MSHA's District Office.

(f) All non-permissible testing and diagnostic equipment used in or inby the last open crosscut shall be examined, by a qualified person defined in existing 30CFR 75.153, prior to being used to insure the equipment is being maintained in a safe operating condition. The examination results shall be recorded in the weekly examination book and shall be made available to an authorized representative of the Secretary and the miner at the mine.

(g) 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 electronic test, diagnostic measurement or survey equipment in or inby the last open crosscut.

(h) Non-permissible electronic testing, diagnostic, measurement or survey 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 electronic equipment is being used, the equipment shall be de-energized immediately and the non-permissible electronic equipment will be withdrawn to outby the last open crosscut.

(i) All hand held methane detectors shall be MSHA approved and maintained in permissible and proper operating condition as defined in existing 30 CFR 75.320 and calibrated in accordance with the requirements in the approved ventilation plan.

(j) Except for time necessary to trouble shoot under actual mining conditions, coal production in the section will cease. However, coal may remain in or on the equipment in order to test and diagnose the equipment under "load".

(k) Non-permissible electronic test, diagnostic, measurement or survey equipment shall not be used when float coal dust is in suspension in the area.

(l) Qualified personnel engaged in the use of electronic test, diagnostic, measurement or survey shall be properly trained to recognize the hazards and limitations associated with the use of electronic test and diagnostic equipment.

(m) Any piece of equipment subject to this petition will be inspected by an authorized representative of the Secretary prior to initially placing it in service underground.

(n) Within 60 days after this Proposed Decision and Order becomes final, the petition shall submit proposed revisions for its approved 30 CFR 48 training plan to the Coal Mine Safety and Health District Manager. In addition to the requirements specified in items Nos. (h) and (i), these proposed revisions shall specify initial and refresher training regarding the terms and conditions stated in the Proposed Decision and Order.

(o) Petition submits that, for the reasons and on the terms stated above, use of non-permissible electronic test, diagnostic, measurement or survey equipment will at all times guarantee no less the same measure of protection afforded by the standard.

(p) A copy of this petition has been provided via email to the Representative of Miners and a copy of the petition has been posed on the mine bulletin board.

In summary, the petitioner's request consists of amending the list of affected equipment, waiving the requirement for permissible equipment and, instead, allowing the use of non-permissible electronic testing and diagnostic equipment including, laptop computers; oscilloscopes; vibration analysis machines; cable fault detectors; point temperature probes; infrared temperature devices; insulation testers (meggers); voltage, current, and power measurement devices; signal analyzer devices; ultrasonic thickness gauges; electronic component testers; and, electronic tachometers.

MSHA personnel conducted an investigation of the petition and filed a report of their findings and recommendations 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 and recommendations, and comments from United Mine Workers of America, this Proposed Decision and Order is issued.

Findings of Fact and Conclusion of Law

MSHA's investigation found that the San Juan Mine 1 is opened into the No. 8 coal seam through five drifts. There are 263 persons employed at the mine. The miners are represented by a union. Coal is mined on two production shifts per day, five or six days per week to produce a daily average of 3,500 tons of raw coal. The alternative method proposed by the Petitioner (as amended by the recommendations of MSHA) will at all times guarantee no less than the same measure of protection afforded the miners under 30 C.F.R. § 75.500(d) for the non-permissible electronic testing and diagnostic equipment listed below. Modification to 30 C.F.R. § 75.500(d) applies only to the use of the non-permissible electronic testing and diagnostic equipment listed below in or inby the last open crosscut. This modification does not allow the use of these non-permissible electronic testing and diagnostic equipment within 150 feet of pillar workings or longwall faces, and it does not allow the use of these non-permissible electronic testing and diagnostic equipment in the return air outby the last open crosscut. The use of this equipment in these areas would require modifications of 30 C.F.R. §§ 75.1002 and 75.507-1 respectively.

During breakdowns, large pieces of mining equipment, such as continuous mining machines, would require being pulled or pushed outby the last open crosscut by multiple pieces of equipment and steel ropes or chains. Specialized troubleshooting and diagnostic equipment has been designed specifically for determining the solution to complex mechanical problems. This specialized equipment, when used under the terms and conditions specified herein, would provide no less than the same measure of protection afforded by the standard.

Item 1(d) merely states that all other electronic testing, diagnostic, measurement and survey equipment used in or inby the last open crosscut will be permissible. Item 1(d) does not provide additional protection that would offset the hazards created.

Item 1(o) states that the provisions outlined in the Proposed Decision and Order will at all times guarantee no less the same measure of protection afforded by the standard. Item 1(o) does not provide additional protection that would offset the hazards created.

This modification does not permit the use of electronic Leica TCR Models 303, 305, 307 survey devices and equivalent units with batteries having no greater voltage, in or inby the last open crosscut since none of these equipments performs a diagnostic or testing function. In addition, the non-permissible, battery-powered surveying equipment requested to be used -- a 6-volt Leica Model 303, 305, or 307 total station -- has similar electrical circuitry as the Topcon GTP200 series. The Leica instrument manual states "**not suitable for use in aggressive or explosive environments**." Further, 6-volt Topcon GTP200 series instruments contain the warning: "**May ignite explosively**" and "**Never**

use an instrument near flammable gas, liquid matter, and do not use in a coal mine." MSHA found that the San Juan Mine 1 is a gassy mine that liberated 5.31 million feet of methane in a 24-hour period, pursuant to the results of bottle sampling conducted in the fourth quarter of fiscal year 2010. Use of the above equipment would create a safety hazard, and the proposed alternate methods provide no additional protection to offset the hazard that would be created by using the non-permissible survey equipment. MSHA has determined that levels of accuracy fully capable of protecting miners can be achieved using optical non-electric surveying equipment.

The petitioner asserts that the Hilti, PD-30, and PD-40 laser range finder will accurately measure the depth of extended cuts and other entry dimensions. MSHA has found that the Hilti PD-40 can be used in an area in or inby the last open crosscut if the equipment is provided with a currently approved enclosure. Therefore, electronic measuring devices are currently available for use in or inby the last open crosscut and are not considered in this petition.

On the basis of the petition and MSHA's investigation, MSHA has determined that application of the alternative method for the addition and use of survey devices and equivalent units with batteries having no greater voltage would not provide the same measure of protection to miners as the standard. Therefore, San Juan Coal Company is granted a modification of the application of 30 C.F.R. § 75.500(d) to the San Juan Mine 1 **only** for the use of the non-permissible electronic testing and diagnostic equipment listed below.

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 San Juan Coal Company's Petition for Modification of the application of 30 C.F.R. § 75.500(d) at the San Juan Mine 1 listed above is hereby:

GRANTED under 30 C.F.R. § 75.500(d), for the use of the specifically listed low-voltage or battery-powered non-permissible electronic testing and diagnostic equipment in or inby the last open crosscut, under controlled conditions, for testing and diagnosing the mining equipment, conditioned upon compliance with the following terms and conditions.

1. The use of non-permissible low-voltage or battery-powered electronic testing and diagnostic equipment shall be limited to **laptop computers; oscilloscopes; vibration analysis machines; cable fault detectors; point temperature probes; infrared**

temperature devices; insulation testers (meggers); voltage, current and power measurement devices; signal analyzer devices; ultrasonic thickness gauges; electronic component testers; and electronic tachometers, in or inby the last open crosscut.

2. The above-listed non-permissible electronic testing and diagnostic equipment shall be used only when equivalent permissible equipment is not available.

3. All electronic testing and diagnostic equipment shall be used only by qualified persons as specified in 30 C.F.R. § 75.153 and in accordance with the manufacturer's recommended safe use procedures. The qualified person must examine the equipment prior to being used to ensure the equipment is being maintained in a safe operating condition. Defective equipment shall not be used. The examination results shall be recorded in the weekly examination of electrical equipment book and shall be made available to an authorized representative of the Secretary and the miners at the mine.

4. 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 electronic testing and diagnostic equipment in or inby the last open crosscut.

5. The above-listed non-permissible electronic testing and diagnostic 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 electronic equipment is being used, the equipment shall be de-energized immediately and the non-permissible electronic equipment shall be withdrawn outby the last open crosscut.

6. All hand-held methane detectors shall be MSHA-approved and maintained in permissible and proper operating condition as defined in existing 30 C.F.R. § 75.320 and calibrated in accordance with the requirements in the approved ventilation plan.

7. Except for the time necessary to troubleshoot under actual mining conditions, coal production in the section shall cease. However, coal may remain in the equipment in order to test and diagnose the equipment "under load."

8. The above-listed non-permissible electronic testing and diagnostic equipment shall not be used to test equipment when float coal has accumulated on previously rock dusted surfaces, accumulated on equipment, or when float coal dust is in suspension.

9. All electronic test and diagnostic equipment shall be used in accordance with the manufacturer's recommended safe use procedures.

10. Qualified personnel using electronic testing and diagnostic equipment shall be properly trained to recognize the hazards and limitations associated with the use of electronic testing and diagnostic equipment.

11. The non-permissible low-voltage or battery-powered electronic testing and diagnostic equipment shall not be put into service until MSHA has inspected the equipment and determined that it is in compliance with all the above terms and conditions. The Petitioner shall notify MSHA before additional non-permissible electronic testing and diagnostic equipment is put into service in or inby the last open crosscut. The notice shall provide a reasonable time for MSHA to inspect such equipment before being used.

12. Cables supplying power to low-voltage test and diagnostic equipment shall be continuous in length, or provided with "twist lock" connectors when used in, or inby the last open cross-cut.

13. A copy of this petition has been provided via email to the Representative of Miners and a copy of the petition has been posted on the mine bulletin board.

14. Within 60 days after this Proposed Decision and Order becomes final, the petition shall submit proposed revisions for its approved 30 CFR 48 training plan to the Coal Mine Safety and Health District Manager. In addition to the requirements specified in items Nos. (10) and (11), these proposed revisions shall specify initial and refresher training regarding the terms and conditions stated in the Proposed Decision and Order.

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