CCASE: SOL (MSHA) v. CONSOLIDATION COAL DDATE: 19910930 TTEXT: Federal Mine Safety and Health Review Commission Office of Administrative Law Judges 2 Skyline, 10th Floor 5203 Leesburg Pike Falls Church, Virginia 22041

SECRETARY OF LABOR, MINE SAFETY AND HEALTH	CIVIL PENALTY PROCEEDING
ADMINISTRATION (MSHA),	Docket No. WEVA 91-286
PETITIONER	A.C. No. 46-01452-03773
v.	
	Arkwright No. 1 Mine

CONSOLIDATION COAL COMPANY, RESPONDENT

DECISION

Appearances: Charles M. Jackson, Esq., U.S. Department of Labor, Office of the Solicitor, Arlington, Virginia, for Petitioner; Walter J. Scheller III, Esq., Consolidation Coal Company, Pittsburgh, Pennsylvania, for Respondent.

Before: Judge Weisberger

Statement of the Case

This case is before me based on a petition for assessment of civil penalty filed by the Secretary of Labor (Petitioner) requesting the imposition of a civil penalty for an alleged violation of 30 C.F.R. 75.517. The Operator (Respondent) filed an answer, and pursuant to notice, the case was heard in Morgantown, West Virginia on August 28, 1991. Lynn Arthur Workley, and Michael J. Kalich, testified for Petitioner. Harold W. Moore, Jr., and Kevin D. Dolinar, testified for Respondent. The parties waived their right to submit a written brief, and in lieu thereof, at the conclusion of the hearing, presented closing arguments.

Findings of Fact and Discussion

On January 17, 1991, while inspecting the 1-R section at Respondent's Arkwright No. 1 Mine, Lynn Arthur Workley, an MSHA inspector who is also a certified underground electrician in Ohio, observed a split outer jacket on a cable that supplies power to a continuous mining machine ("miner"). At the hearing, Respondent indicated that it stipulates to the violation. Based upon the stipulation as well as the evidence presented at the hearing, I find that Respondent herein did violate Section 75.517 supra as alleged.

The cable at issue contains three phase conductors, 2 ground wires, and a pilot wire. It supplies approximately 1000 volts from the power center to a miner. The cable is protected by a jacket, approximately a quarter of an inch thick, which completely envelopes the cable. In addition to physically protecting the conductors, ground, and, pilot inside the cable, the jacket also serves to keep out water, dust, and oil. The only defect to the cable in question when observed by Workley, was that it had a longitudinal gash or split a few inches long. Workley, was able to see the conductor shield below the jacket but could not estimate the width of the split. Harold W. Moore, Jr., Respondent's safety escort who accompanied Workley testified that the width of the split was less than an inch. Inasmuch as his testimony in this regard was not impeached or rebutted it is accepted.

Each of the phase conductors in the cable is covered with insulation and physically protected by a shield made up of braided copper and cotton. When observed by Workley, there was no evidence of other damage to the jacket aside from the split, and there was no evidence of damage to the conductor shield. The condition was abated by sealing the jacket with tape. Essentially, it is the opinion of both Workley and Michael G. Kalich, an MSHA electrical inspector who has taught courses in electricity, and is a certified electrician for medium high and low voltage, that the violation herein is significant and substantial since, there was a reasonable likelihood of a serious injury with continued mining operations. For the reasons that follow, I conclude that it has not been established that the violation herein is significant and substantial.

In analyzing whether the facts herein establish that the violation is significant and substantial, I take note of the recent Decision of the Commission in Southern Ohio Coal Company, 13 FMSHRC 912, (1991), wherein the Commission reiterated the elements required to establish a significant and substantial violation as follows:

We also affirm the judge's conclusion that the violation was of a significant and substantial nature. A violation is properly designated as significant and substantial "if, based on the particular facts surrounding that violation, there exists a reasonable likelihood that the hazard contributed to will result in an injury or illness of a reasonably serious nature." Cement Division, National Gypsum Co., 3 FMSHRC 822, 825 (April 1981). In Mathies Coal Co., 6 FMSHRC 1, 3-4 (January 1984), the Commission explained:

In order to establish that a violation of a mandatory standard is significant and substantial under National Gypsum the

Secretary must prove: (1) the underlying violation of a mandatory safety standard; (2) a discrete safety hazard -- that is, a measure of danger to safety -- contributed to by the violation; (3) a reasonable likelihood that the hazard contributed to will result in an injury; and (4) a reasonable likelihood that the injury in question will be of a reasonably serious nature.

See also Austin Power Co. v. Secretary, 861 F.2d 99, 103-04 (5th Cir. 1988), aff'g, 9 FMSHRC 2015, 2021 (December 1987) (approving Mathies criteria). The third element of the Mathies formula "requires that the Secretary establish a reasonable likelihood that the hazard contributed to will result in an event in which there is an injury" (U.S. Steel Mining Co., 6 FMSHRC 1834, 1836 (August 1984)), and also that the likelihood of injury be evaluated in terms of continued normal mining operations (U.S. Steel Mining Co., Inc. 6 FMSHRC 1573, 1574 (July 1984); see also Halfway, Inc., 8 FMSHRC 8, 12 (January 1986)." (Southern Ohio, supra at 916-917).

The record establishes, as discussed infra, a violation of a mandatory safety standard, and that the violation herein, i.e. the split in the jacket, did contribute somewhat to the hazard of exposure to abrasion of the inner shield and insulation. Such abrasion could destroy the integrity of the shield and insulation which could possibly lead to a ground fault or leakage of voltage. This could possibly cause injury, should one come in contact with the exposed portions of the cable or equipment, which could be affected by the ground fault. Accordingly, the record establishes the first two elements of the Mathies formula.

However, the record fails to establish the third element i.e. a reasonable likelihood that the hazard contributed to will result in an injury, which requires that the Secretary establish "a reasonable likelihood that the hazard contribute to would result in an event in which there is injury" (U.S. Steel Mining Co., 6 FMSHRC 1834, 1836 (August 1984).

Essentially, according to Workley, inasmuch as the integrity of the cable jacket has been breached by the split in question, continued normal use of the heavy cable by dragging it around corners and against edges of equipment, will cause abrasion, which, over time, will damage the insulation of the conductors. However, such damage is possible only in the event that the split in question would not have been found and corrected. There is nothing in the record to support such a conclusion. To the contrary, Respondent had provided its miner operators with instructions to look for "cuts, breaks, bare wires, and bad

splices in cable" (sic) and to notify a foreman or mechanic if any damage is found (Exhibit 0-1).

Kalich opined that since the jacket was subject to sufficient stress to create a split in it, it is reasonably likely that some damage occurred to the wires inside the cable, inasmuch as the insulation material of the conductors is not as strong as the jacket. However, there is no evidence that such did occur. Workley in this regard indicated that there was no evidence of damage aside from the split in the jacket.

According to Kalich, even though the insulation on the conductors is intact, if a conductor's shield is not intact, a person touching it could be subject to up to 600 volts as a result of a coronal which normally is grounded. Kalich was asked how a break in the shield would occur in normal mining. He said that ". . . it could be an improperly repaired place in the cable . . . And that would be normally what you would expect, you know, if you would find that condition, that's what would happen" (Tr.56). He was asked if this is a comon occurrence and he said that he had found a "few" cables that had not been properly repaired, and the shield had not been replaced (Tr. 56). There is nothing in the record to indicate there was any likelihood a splice would not be properly repaired. Due to Dolinar's work experience and education, having a Bachelor's degree in electrical engineering, I place more weight upon his opinion that a corona is of concern only if 4,000 to 5,000 volts are present. In contrast, in the instant case, the voltage supplied by the cable is only approximately 1,000 volts.2

Kalich testified to a hazard of leakage of electricity to the shields, and that contact with 0.05 amps could cause shock, and contact with 0.1 amps would cause death. He indicated if a person touches a shield to which electricity had leaked, an injury could occur, as the person may suffer burns. He also opined that due to electrical shock, a peson might jump or fall onto moving equipment. However, any hazard created is mitigated by the fact that the electrical system in question is protected by circuit breakers that cut off power at 4 to 5 amps. Also, due to the grounding system present, the amount of leakage is limited to 40 volts which is the maximum allowed by MSHA. It is Respondent's position, as testified to by Kalich, that if the breakers were not set or did not function properly, their protection would be nullified and a hazard would result. There is no evidence that the breakers were in any way defective.

Kalich indicated essentially that defects to breakers could occur in normal mining, and that in his expereince "probably" five out of 100 breaken tested do not work properly (Tr. 52). This evidence is insufficient to establish that there was a reasonable likelihood that the breakers herein would fail with continued mining.

Kalich also testified that since the breakers were set for 4 to 5 amps, a leakage of a lesser amount could result. He indicated that, in such an event, should a person contact equipment attached to the electical system at issue, an injury could result, especially if the person is wet, as his resistance would be less. In this connection, Kalich indicated that in normal mining conditions the environment would be wet, as the continuous miner would normally be sprayed with water.

According to Dolinar, even a leakage of up to 4 amps would not create any danger to a person coming in contact with an exposed shield. He indicated that the grounding system insures that no more than 40 volts would he present in exposed equipment or shields. As such, according to Dolinar, there would be insufficinet force to push a current of 4 Amps into a person considering the person's resistance. In this connection he indicated that a ground path with only 1 ohm of resistance is available. In contrast, the resistance to electricity of an average dry person is measured in the range of 50,000 to 75,000 ohms. He testified that even soaking wet and standing in a puddle of water the resistance of a human body would be at least 1,000 ohms.

I accept this testimony of Dolinar, inasmuch as in the main it was not rebutted or impeached. Also mitigating any hazard is the fact that the conductors are tied to the ground wire, and are grounded together providing further protection. Although, as indicated by Dolinar on cross examination, if the jacket becomes loose it will affect the connection between the ground and the conductors in the area of looseness, there is no evidence that it is reasonably likely that the jacket will become loose. Also, although the system could break down if the breakers are set improperly, if the ground wire breaks, or if the breakers do not trip, there is insufficient evidence to conclude that these events are reasonably likely to occur.

For all these reasons, I conclude that it has not been established that there was a reasonable likelihood that the hazard of an electrical shock contributed to by the violation herein would result an event in which there is an injury. Accordingly, I conclude that it has not been established that the violation herein is significant and substantial.

Petitioner has not adduced any evidence with regard to Respondent's negligence. Taking this into account, as well as

the gravity of the violation, and the remaining statutory factors, I conclude that a violation of \$50 is appropriate for the violation found herein.

ORDER

It is ORDERED that Citation No. 3315922 be amended to reflect the fact that the violation cited therein was not significant and substantial. It is further ORDERED that Respondent shall, within 30 days of this decision, pay \$50 as a civil penalty for the violation found herein.

> Avram Weisberger Administrative Law Judge

Footnotes start here:-

1. Current which is induced.

2. According to Dolinar, the shielding "attempts" to distribute the voltage equally among the three conductors. (Tr. 123)