CCASE:

SOL (MSHA) V. CYPRUS EMERALD RESOURCES

DDATE: 19891121 TTEXT: Federal Mine Safety and Health Review Commission (F.M.S.H.R.C.)

Office of Administrative Law Judges

SECRETARY OF LABOR,
MINE SAFETY AND HEALTH
ADMINISTRATION (MSHA),
PETITIONER

CIVIL PENALTY PROCEEDING

Docket No. PENN 88-287 A.C. No. 36-05466-03654

Emerald No. 1 Mine

CYPRUS EMERALD RESOURCES CORPORATION,

v.

RESPONDENT

## DECISION

Appearances: Susan M. Jordan, Esq., Office of the Solicitor,

U.S. Department of Labor, Philadelphia,

Pennsylvania, for the Petitioner;

R. Henry Moore, Esq., Buchanan Ingersoll, Pittsburgh, Pennsylvania, for the Respondent.

Before: Judge Koutras

## Statement of the Case

This proceeding concerns a proposal for assessment of civil penalty filed by the petitioner against the respondent pursuant to section 110(a) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. 820(a), seeking a civil penalty assessment of \$105 for an alleged violation of mandatory safety standard 30 C.F.R. 75.517, as stated in a section 104(a) "S&S" Citation No. 3096605, issued on May 27, 1988. The respondent filed a timely answer and notice of contest, and a hearing was held in Washington, Pennsylvania. The parties filed posthearing briefs, and I have considered their arguments in the course of my adjudication of this matter.

#### Issues

The issues presented in this proceeding are (1) whether the condition or practice cited by the inspector who issued the citation constitutes a violation of the cited mandatory safety standard, (2) the appropriate civil penalty assessment for the violation, taking into account the civil penalty criteria found

in section 110(i) of the Act, and (3) whether the violation was "significant and substantial" (S&S). An additional issue of interpretation raised by the respondent concerns the meaning of the phrase "shall be insulated adequately and fully protected" as stated in the cited standard section 30 C.F.R. 75.517. Applicable Statutory and Regulatory Provisions

- 1. The Federal Mine Safety and Health Act of 1977; Pub. L. 95-164, 30 U.S.C. 801 et seq.
  - 2. Section 110(i) of the 1977 Act, 30 U.S.C. 820(i).
  - 3. 30 C.F.R. 75.517.
  - 4. Commission Rules, 29 C.F.R. 2700.1 et seq.

#### Stipulations

The parties stipulated to the following (Tr. 4-7):

- 1. The subject mine is owned and operated by the respondent, and it is subject to MSHA's jurisdiction.
- 2. The presiding judge has jurisdiction to hear and decide this matter.
- 3. The citation was properly served on the respondent by a duly authorized MSHA representative.
- 4. The respondent's annual coal production is approximately 1.8 million tons, and the respondent is a large mine operator.
- 5. The respondent's history of prior violations is stated in an MSHA computer print-out, (exhibit G-5).
- 6. The proposed civil penalty assessment for the alleged violation will not adversely affect the respondent's ability to continue in business.
- 7. The alleged violation was timely abated in good faith by the respondent within 5 minutes of the issuance of the citation.

# Petitioner's Testimony and Evidence

MSHA Inspector Charles Pogue confirmed that he inspected the mine on May 27, 1988, and issued the citation citing a violation of section 75.517, because the power cable for the light switch block indicator was not protected at the point where the power cable crossed over the trolley wire. Mr. Pogue explained that

the respondent had put a piece of conduit over the cable where it crossed the trolley wire, but for some unexplained reason the conduit had slipped down the cable away from the trolley wire, thus resulting in a lack of protection for the cable at the location where it crossed over the trolley wire.

Mr. Pogue stated that the cable in question was located on the main track haulage used to transport crews into the mine working sections, and that supply trips, the safety department, and maintenance and ventilation jeeps also used the haulageway. The cable in question was used to supply power to the signal lights used to control vehicle traffic using the haulageway (Tr. 13-16).

Mr. Pogue described the cable as a four-conductor cable approximately one-half inch in diameter which was hung on insulators as it exited the non-metallic switch box and crossed over the trolley wire to the coal rib. He confirmed that the cable was protected by an outer insulating jacket, and that each power conductor inside the cable was individually insulated. The outer insulating jacket was approximately one-sixteenth of an inch thick (Tr. 17).

Mr. Pogue stated that he cited a violation of section 75.517 because the conduit placed over the insulated cable was away from the point where the cable crossed over the trolley wire. He confirmed that the cable met MSHA's insulation specifications, but since the conduit which served as a guarding device had slipped away, he did not consider the cable to be "fully protected" as required by section 75.517. The citation was abated by simply rotating the conduit guarding so that it covered the cable where it crossed over the trolley wire (Tr. 18).

Mr. Pogue described the conduit guarding as plastic insulating material approximately 3 inches in diameter, and stated that it slid down the cable for a distance of 6 to 12 inches away from the point where the cable crossed the trolley wire (Tr. 19).

Mr. Pogue stated that section 75.517 requires the cable to be fully protected, and that MSHA's policy manuals require that power cables crossing a trolley wire has to have additional guarding over the cable to prevent damage to the outer jacket (Tr. 19, exhibits G-2 through G-4). He confirmed that the policy requirement has been in effect since he began inspecting mines in 1975, and probably earlier (Tr. 21). The purpose of this requirement is to provide additional protection to the cable and to prevent damage from equipment passing under it (Tr. 22).

Mr. Pogue stated that he was concerned over a possible electric shock or electrocution hazard presented by contact with the energized power cable, and that these are the type of accidents or injuries that he would expect from the cited condition

(Tr. 22). This could occur if a trolley pole on a piece of haulage equipment such as a transportation jeep passing under the cable came off the trolley wire and struck the cable and possibly cutting the outer cable insulation or conductors. If this occurred, and the damaged cable fell on the energized trolley wire, it could cause the electrical light block circuit to become energized. Even though the light block had short circuit protection, if someone were performing maintenance work on the circuit control box he could come in contact with energized power wires as a result of the cable touching the trolley wire (Tr. 23-24).

Mr. Pogue stated that the likelihood of an accident such as the one he described would be increased because the main haulage-way is a highly traveled area, and the frequency of trolley poles hitting the cable would be increased. Mr. Pogue explained the various ways that a trolley pole could come off the wire and strike the cable. He described the equipment using the haulage-way, and indicated that 7 out of 10 vehicles passing under the power cable in question would be equipped with trolley poles. Based on his experience, trolley poles frequently come off the trolley wire, and this could be caused by excessive vehicle speed, a bend in the trolley wire, or inadequate spring pressure on the pole. He confirmed that the trolley wire and power cable in question were both energized at the time he observed the cited condition (Tr. 25-29).

On cross-examination, Mr. Pogue stated that the power cable crossed straight across the trolley wire, and that one would normally slow down in order to reach up and turn the light on or off. He confirmed that the distance from the mine floor to the roof was 8 feet, and that abatement was simply achieved by sliding the protective conduit back over the cable. The power cable was an MSHA approved cable, and there was no damage to the outer sheath (Tr. 31-32).

Mr. Pogue stated that MSHA's policy only requires that a power cable be guarded above the trolley wire, and there is no policy guideline as to the distance that such a power cable must be protected on either side of the trolley wire (Tr. 34). He confirmed that the cable in question was provided with fuse protection, and that the outer cable insulated jacket, as well as the insulating material around the four interior cable conductors, would have to be damaged in order to present a shock hazard. Further, if this damage were to occur, someone would have to reach up and over the trolley wire and grab the cable in order to be exposed to a shock hazard. If someone were working on the light, they may be able to see if the cable is touching the trolley wire (Tr. 34-35).

In response to a question as to whether the policy language which states "in some locations metal or non-metallic conduit may be necessary for additional protection against damage," indicates

some discretion rather than an absolute requirement, Mr. Pogue responded "not on my part" (Tr. 40).

Mr. Pogue confirmed that the conduit did not cover the entire length of the power cable from the trolley wire to the electrical light, and even though a trolley pole coming off the trolley wire could damage the cable between the electrical light box and the end of the protective conduit, he nonetheless in his judgment believed that the conduit which was on the cable sufficiently protected it (Tr. 41).

Mr. Pogue stated that the hazards he described assumes that anyone working on the signal light will not notice the power cable in contact with the trolley wire, and that while working on the energized circuit, the person doing the work will not turn on the light switch to see whether it was energized or not (Tr. 42). He also confirmed that it is possible that a trolley pole will never come off the trolley wire while equipment is travelling along the entire haulageways, and that the area where the light was located was reasonably flat (Tr. 44).

In response to further questions, Mr. Pogue stated that the power cable was approximately 6 inches above the trolley wire at the point where it crossed over the wire, and that the power cable voltage was 12 volts, and the trolley wire 300 volts (Tr. 45).

Mr. Pogue believed that each of the examples stated in MSHA's policy with respect to protection for power cables crossing over trolley wires are mandatory and that he has no discretion to make individual judgments to determine whether or not any particular circumstances would require such additional guarding (Tr. 48-49).

Mr. Pogue surmised that the conduit slipped down the power cable because of equipment vibration or equipment striking the cable. He conceded that the cable was protected before the conduit slipped, and that the respondent made an effort to guard the cable (Tr. 54-56).

Respondent's Testimony and Evidence

Gary W. Bochna, respondent's safety representative, confirmed that he accompanied Inspector Pogue during his inspection. He stated that the distance from the mine floor to the roof at the cited location was 7-1/2 to 8 feet, and that the trolley wire was approximately 12 inches below the roof. He confirmed that he observed no damage or abrasions to the cable, and that the track haulage area in question was mostly level (Tr. 57-59).

Mr. Bochna explained the function of the signal light and located it on the mine map. He also explained the direction of

the haulageways, and the haulage equipment passing through the location of the cited cable (exhibit R-1, Tr. 60-63).

Mr. Bochna stated that it would be impossible for someone to contact the power cable "unless you reached up to it," and that someone would likely contact the trolley wire before reaching the power cable. He conceded that trolley poles occasionally come off the trolley wire, but believed that the pole would have to strike the cable "almost straight on" with a considerable amount of force in order to damage it to such an extent that the insulating wires inside the outer sheath would be penetrated. He did not believe that the pole would damage the cable by simply rolling over it (Tr. 64-65).

On cross-examination, Mr. Bochna agreed that a trolley pole could cause an abrasion or minor damage to a cable, and that it was possible for a trolley pole to pull a power cable down if it jumped the trolley wire. He also agreed that if a power cable was damaged to the extent that the outer jacket and inner insulation were damaged, the cable could become energized through the live trolley wire if the cable were laying on the wire (Tr. 67-68). He confirmed that the mine has a practice of providing additional protective conduit in the places where the cable passes over the trolley wire "because we've been cited on it before" and "to keep from getting citations" (Tr. 68).

In response to further questions, Mr. Bochna stated that if a trolley pole came off the trolley wire it could just as well strike the protective conduit guarding, and the pole could also hook the guarding as well as the cable. He stated that in his driving experience "I don't have that much problem of them coming off for me" (Tr. 71).

Terry W. Coss, electrical engineer, stated that he has worked for the respondent in this capacity for 11 years, and that he is a certified electrician, and has a degree in electrical engineering from Ohio University, as well as MSHA certifications as a qualified electrician and electrical instructor. He also serves on an advisory committee for the Pennsylvania State Department of Environmental Resources, which includes the director of MSHA's Bruceton Research Center, an MSHA District Manager, and a representative from Penn State University, Consolidation Coal Company, the UMWA, and the Pennsylvania director of the Bureau of Deep Mine Safety. The purpose of the committee is to advise this bureau on electrical and non-electrical problems (Tr. 78-80).

Mr. Coss confirmed that he was familiar with the citation issued by Mr. Pogue, as well as the power cable in question, and he described the cable, its insulation features, and its functions. He confirmed that the cable is rated for 600 volts, and since it was only handling 300 volts, it was designed to handle

more voltage than it was actually being used for. He also confirmed that the insulation on each of the individual cable conductors is rated for 600 volts, and that the outer cable jacket is approximately three-sixteenths of an inch thick. The jacket provides protection for the insulated conductors and it is constructed of a tough neoprene rubber compound (Tr. 80-83).

Mr. Coss stated that the light switch in question has a 3 amp fuse short circuit protection which provides more protection than MSHA's 20 amp fuse protection requirement. He confirmed that the power cable is located 7 feet above the mine floor, and that one would have to reach up to contact it (Tr. 84).

Mr. Coss stated that if the outer cable sheath were damaged and the individual inner wire conductor insulation was not, there would be no shock hazard to someone contacting the cable. Similarly, if the cable contacted the trolley wire, nothing would happen because the conductors are rated at 600 volts and the trolley wire is only 300 volts (Tr. 84-85).

Mr. Coss confirmed that he has operated trolley vehicles underground, and that the height of the trolley wire would affect the force exerted on the pole striking the cable. If the cable is high, the trolley pole would strike it with lesser force than if it were lower (Tr. 86). He did not believe that it was likely that anyone on the ground would contact the cable above the trolley wire, and based on his experience, the outer cable sheath provides adequate protection for the power wires within the cable where it crosses over the trolley wire because it is a tough compound, and the likelihood of striking it is remote (Tr. 88).

Mr. Coss stated that the additional conduit is not required to provide full protection to the cable where it crosses over the trolley wire, and that the reason conduit is provided at the mine is "to keep from getting wrote up" (Tr. 88). He confirmed that he has observed a conduit protected cable which was struck by a trolley pole, and that it pulled out the wires at the switch rather than cutting the cable (Tr. 89).

Mr. Coss stated that the power cable safety ground wire is tied to the haulage track and the frame of the light switch. If any of the other wires were to touch the switch frame, it will ground and remove the power or blow the fuse (Tr. 89-90).

On cross-examination, Mr. Coss stated that the trolley poles are 5-1/2 to 6 feet long and are mounted on different places on the track equipment (Tr. 90). With respect to MSHA's position in this case, Mr. Coss stated as follows (Tr. 96):

THE WITNESS: If you put conduit on here, there's less a chance of it getting damaged. Now, if you put a

four-inch I-beam across there, there's even less of a chance of getting damaged. But, you know, to what point do you go, and I don't feel that the extra protection that the conduit gives you is necessary, weighing the fact of the jacket and the possibility of it happening.

JUDGE KOUTRAS: Do you think that particular jacket that's inherently a part of that cable as manufactured, protects it against physical damage that conceivably could happen where it's hung in the mine?

THE WITNESS: Yes, sir.

## Discussion

The contested section 104(a) "S&S" Citation No. 3096605, issued by Inspector Pogue on May 27, 1988, citing an alleged violation of 30 C.F.R. 75.517, states as follows (Exhibit G-1): "The light switch power cable was not adequately protected where such cable passed over the energized trolley wire at the No. 1 haulage Bohan Blvd. light switch."

Mandatory safety standard 30 C.F.R. 75.517, provides as follows: "Power wires and cables, except trolley wires, trolley feeder wires, and bare signal wires, shall be insulated adequately and fully protected."

MSHA's policy interpretation and application for the insulation and protection of power wires and cables is stated in pertinent part in its underground manuals of March 9, 1978, June 1, 1983, and July 1, 1988, (exhibits G-2 through G-4), as follows:

Any ungrounded power conductor extending from the track entry for any purpose shall be insulated. In addition, power wires and cables shall be installed under well supported roof and far enough away from any moving equipment to prevent damage; however, in some locations, metal or nonmetallic conduit may be necessary for additional protection against damage. Examples of these locations include: where power wires or cables other than trolley feeder wires cross the trolley wire; where power wires or cables pass through doors or stoppings; where power wires or cables are installed along supply storage areas; where power wires or cables are installed on tight corners with insufficient clearance; or other areas where power wires or cables cannot be isolated sufficiently to afford protection. (Emphasis added).

The facts in this case establish that the cited light switch power cable was provided with an additional protective conduit

which was installed over the outer jacket of the cable where it passed over the trolley wire. The conduit had slipped off to one side, and the citation was abated within 5 minutes when the conduit was rotated back and over the cable.

# Respondent's Arguments

Respondent disputes the petitioner's contention that mandatory standard 30 C.F.R. 75.517 requires additional power cable protection, such as a conduit, beyond that provided by the outer jacket of the cable. Respondent takes the position that on the facts of this case, no protection beyond that afforded by the outer jacket of the power cable is necessary. Respondent points out that section 75.517, does not specify the meaning of the term "fully protected," and that section 75.517-1 and 75.517-2, which help to define the term "adequate insulation," provide no quidance as to the meaning of "full protection." Respondent takes the position that since it is unclear whether a different level of protection is to be provided because of the use of the adjective "full" as opposed to "adequate, it may rely on the principle of statutory construction that one term may be defined by terms it is associated with, and that the use of "full"is equivalent to the use of "adequate." Respondent notes that if a different meaning of "full" is determined to be intended, it clearly would mean protection of the cable over its full length. In such an instance, respondent suggests that no violation would exist because there is no dispute that the cited power cable was protected along its entire length by the outer cable jacket provided by the manufacturer.

In support of its case, the respondent cites the Commission's decisions in Homestake Mining Co., 4 FMSHRC 146 (February 1982), and Climax Molybdenum, 4 FMSHRC 159 (February 1982). The Homestake Mining case concerned an issue as to whether a metal/non-metal standard (57.12-82), could be construed to require additional insulation beyond that provided by the manufacturer. The standard required that "power lines shall be well separated or insulated from waterlines, telephone lines, and air lines." Despite the fact that an MSHA interpretative memo had interpreted the standard to require insulation beyond the jacket provided by the manufacturer, the Commission held that a blanket requirement of additional insulation was not appropriate, and it stated as follows at 4 FMSHRC 148-149:

We recognize that enforcement of the standard would be simpler if an inspector merely has to visually determine whether extra insulation has been added where power cables and pipelines meet. We fail to see, however, how this superficial examination bears any relationship to the purpose of the standard. Rather, in order to make a bona fide determination that insulation adequate to prevent the transmission of current to

adjacent pipelines is present, the adequacy of the added insulation must be evaluated, and this determination must be based on the objectively determinable character of the powerline and the existing insulation. In order to achieve the purpose of the standard, enforcement should not turn on the subjective evaluation of an inspector, without the objective evaluation of whether a hazard is or may be present. Further, section 57.12-82 does not state that "additional insulation" must be placed between "powerlines" and pipelines; it merely requires separation or insulation.

In the instant case, the respondent points out that Inspector Pogue issued the citation based solely upon his observation that the conduit previously installed over the power cable where it passes over the trolley wire had slipped off to one side of the trolley wire and upon his belief that MSHA's policy manuals imposed a mandatory duty on operators to provide additional protection against physical damage to power lines which pass over trolley wires in all circumstances. Respondent maintains that the inspector's interpretation of the MSHA manuals as imposing a mandatory obligation to provide additional protection when power cables cross over trolley wires is incorrect. In support of its argument, respondent cites the following language found in MSHA's manual policy: "[I]n some locations metal or nonmetal conduit may be necessary for additional protection against damage." (Emphasis added).

Respondent argues that the cited policy language clearly does not describe a mandatory duty to have the additional protection of a conduit in all cases since the policy states that conduits may be necessary in some locations. Thus, respondent concludes that MSHA's official policy interpretation would appear to be similar to that expressed by the Commission in Homestake Mining and Climax Molybdenum.

Respondent takes the position that there is no mandatory requirement under the Act that conduit be used in all cases, and since MSHA's policy manuals do not impose such a mandatory obligation, respondent argues that it was incumbent upon MSHA in this case to prove that the power cable was not fully or adequately protected. Respondent asserts that MSHA failed to put on any evidence to establish that the power cable was not adequately protected from physical damage. Instead, it relied solely upon Inspector Pogue's interpretation that the policy manuals require additional protection in all cases. Respondent notes that the inspector was not an electrical inspector and offered no testimony of a particular expertise or training in this area.

Respondent maintains that it presented credible and unrebutted testimony that the cited power cable is adequately protected from physical damage by the manufacturer. It points

out that the cable is enclosed in a Neoprene rubber outer jacket approximately three-sixteenths of an inch thick, and that Neoprene rubber is a tough compound. Respondent also cites the testimony of its electrical engineer, who has 11 years experience at the mine, who testified that the Neoprene outer jacket of the cable, as manufactured, protects the cable against physical damage that conceivably could occur where it is used in the mine.

The respondent argues that in this case, because of the remote possibility that a trolley pole will come off the trolley wire where the power cable crosses it and cause some damage to the cable, there is no need for any additional cable protection other than the manufacturer's outer cable jacket. Respondent states that damage to the power cable by a trolley pole is unlikely because vehicles traveling on the tracks in this area must move slowly or stop in order to operate the light switch connected to the power cable making it less likely that the pole would come off the wire, the floor of the mine is relatively flat in this area, and trolley poles are less likely to come off the trolley wire in flat areas. Respondent further points out that there are no bends in the trolley track in this area, which again reduces the possibility of the trolley pole coming off the trolley wire, the roof is high in the area, which means there would be less tension on the trolley pole, which would result in a less severe impact if the pole were to jump off the trolley wire and strike the roof or the power cable. Respondent also points out that since the end of the trolley pole is blunt, it is unlikely that it would cut the neoprene outer jacket of the power cable if the pole should strike the cable.

Additionally, respondent points out that the track in question does not lead to active areas of the mine, and that traffic past the power cable is relatively light. Considering all of the aforementioned factors, including the fact that the outer jacket of the cable is designed by the manufacturer to provide protection from physical damage, the respondent concludes that it is obvious that additional protection from physical damage to the cable is not necessary.

Respondent argues further that its position that the cable outer jacket is adequate to provide protection from physical damage is also supported by MSHA's policy manuals, which provide as follows: "The outer jacket of a cable is intended to protect the internal conductors from cuts, abrasion moisture, etc., and must be intact for the cable to be fully protected as required by Section 75.517." (G-3, p. 3, G-4, p. 4; Emphasis added.)

Respondent concludes that the cited policy statement evidences MSHA's own interpretation that the "fully protected" requirement of section 75.517 can be satisfied by an undamaged outer jacket, and it points out that the outer jacket of the power cable in question was not damaged.

Respondent finds further support for its position that the undamaged outer jacket of the power cable satisfies the requirement of full protection in MSHA's Underground Electrical Inspections Manual (Exhibit G-4), which explains when a violation should be cited under section 75.517. The manual states as follows:

The outer jacket of a cable is intended to protect the internal conductors from cuts, abrasion, moisture, etc., and must be intact for the cable to be fully protected as required by Section 75.517. Therefore, if an inspector observes a cable with a damaged outer jacket, even though the insulation on the conductors has not been damaged, he should take appropriate action under Section 75.517 stating that the cable was not fully protected.

\* \* \* \* \* \* \*

When Section 75.517 is cited, the inspector should specify one of the following in the citation:

- 1. The insulation was not adequate (i.e., the insulation on the conductor is either damaged or missing);
- 2. The cable was not fully protected (i.e., the outer jacket on the cable is either damaged or missing); or
- 3. Both conditions exist on the cable.

Respondent maintains that the quoted manual policy statement clearly indicates that MSHA considers a power cable to be fully protected by the manufacturer's outer jacket if it is undamaged. Although recognizing the fact that MSHA's policy manuals do provide that additional protection may be required in some cases, the respondent argues that in this case the petitioner has failed to present evidence sufficient to establish that additional protection was required for the cited cable in question, and has therefore failed to establish a violation of section 75.517.

## Petitioner's Arguments

Petitioner concedes that the cited light switch power cable was adequately insulated. However, it takes the position that the cable was not "fully protected" as required by the cited mandatory standard, 30 C.F.R. 75.517, and MSHA's policy interpretations of this standard.

Petitioner argues that it has consistently interpreted section 75.517, to require protective conduit or guarding on power cables where it passes over trolley wires because cables in this position are subject to abuse from the different kinds of equipment travelling down the haulageway. Petitioner asserts that its primary concern is the prevention of damage from the trolley poles of equipment using the haulageway, and that the additional guarding requirement prevents damage to the cable from trolley poles which are known to jump off the trolley wire because of the spring tension on the pole. The guarding also provides protection against cable abuse which occurs over time through abrasions or the striking of the cable by trolley poles and other large pieces of equipment.

Recognizing the fact that the express language of a promulgated regulation would control over its inspection manual, petitioner nonetheless argues that its manual interpretation of "fully protected" is consistent with the broad language found in section 75.517, and absent other available guidance regarding the term "fully protected," it takes the position that its policy interpretation should be accorded deference and legal effect.

Petitioner finds no merit in the respondent's argument that section 75.517, applies only to electrical and not physical protection. Petitioner argues that the obvious purpose of the standard is to protect miners against shock, electrocution, and fire that could result from inadequate insulation or protection of the power cable, and that in order to protect against these hazards, a cable must be protected electrically and physically. Petitioner points out that since the standard does not distinguish between electrical and physical protection, and since no other standard specifically addresses physical protection, it applies to protection in general, including both physical and electrical protection.

Recognizing the fact that the "may be necessary" language contained in its policy statements suggests discretion as to the location where additional conduit protection should be provided, and that Inspector Poque testified that he believed he had no discretion insofar as the location examples listed in the policy are concerned, petitioner submits that the examples listed would also fall within the locations where "metal or nonmetallic conduit may be necessary." Petitioner concludes that the listed examples are clearly locations where power cables are more likely to be subject to abuse, and they are therefore strong statements that extra care needs to be taken in these locations to quard against cable damage and injuries to miners. Given the fact that the cited cable passed over trolley wire in a highly travelled haulageway used by miners and equipment going into and out of the working sections, petitioner submits that the cited location is one where cable conduit protection is necessary, rather than one where it "may be necessary."

## Fact of Violation

Inspector Poque confirmed that the cited power cable was adequately insulated, met the requirements of MSHA's standards for such cables, and that it complied with the "adequate insulation" requirement found in section 75.517. The parties are in agreement that this was the case. However, in view of the fact that the additional protective plastic conduit placed over the cable had slipped down and away from the cable at the point where it crossed over the track trolley wire, the inspector found that the cable was not "fully protected" as required by section 75.517. Although the inspector's original description of the cited condition on the face of the citation stated that the cable was not "adequately protected," I find that his explanation as to why he issued the citation provides sufficient notice to the respondent to enable it to defend the citation, and the respondent has not suggested that the citation is deficient or otherwise unclear.

The cited mandatory section 75.517, which is a statutory standard, does not explicitly require the use of any additional conduit protection over the protective outer cable jacket provided by the cable manufacturer. This additional requirement has been imposed by MSHA through its policy interpretations published in a general policy manual, as well as in the instructional policy guidelines found in the inspection manuals (Exhibits G-2, G-3, and G-4). Although the mandatory standards that follow section 75.517, sections 75.517-1 and 75.517-2, help to define the term "adequate insulation," they provide no guidance with respect to the meaning of "fully protected, and MSHA's policy guidelines are likewise devoid of any meaningful quidance.

The respondent's assertion during the hearing that the requirement that power cables be "fully protected" refers only to electrical protection rather than protection from physical damage is rejected. I take note of the fact that section 75.517, does not distinguish between electrical and physical protection. It simply requires that power cables be adequately insulated and fully protected. In my view, the intent of the standard is to require protection for power cables in order to preclude those electrical hazards normally associated with inadequate cable insulation, i.e., shock, electrocution, and fires, as well as protection from these same hazards which may result from the exposure of such cables to potential physical damage or abuse by virtue of the location where such cables may be installed and used. In my view, although an adequately insulated power cable may afford protection against such hazards, and be in compliance with the "adequate insulation" requirement found in section 75.517, if it is located in a mine area, or installed and used in such a manner as to expose it to potential damage and abuse from equipment, thereby destroying its insulating qualities, it may not be in compliance with the "fully protected" requirement found in section 75.517.

I conclude and find that section 75.517, applies to power cable protection in general, including both electrical and physical protection. I further conclude and find that the standard imposes two requirements for the protection of power cables. The first requirement is that the cable be "adequately insulated" as that term is defined in sections 75.517-1, 75.517-2, or as required by any other applicable power cable insulation standard. The second requirement is that a power cable be "fully protected" against any physical damage which may result in the course of the use of the cable at the particular location where it may be installed.

If MSHA believes that additional cable protection is required at certain specified locations in an underground mine where the cable may be exposed to physical damage by equipment, it should promulgate an appropriate mandatory standard clearly defining those areas. In my view, the "examples" noted in the policy are intended to make an inspector aware of certain restricted and confined mine areas where the location of a power cable would most likely expose it to potential damage and abuse by being struck by a piece of equipment. The policy also includes a statement which implies that additional conduit protection would not be necessary if the power cable were sufficiently isolated to afford it protection. Although the policy contains no explanation as to why the particular examples in question are cited, I assume that a power cable passing through doors or stoppings may expose the cable to chaffing or cutting, that a cable installed along supply storage areas will expose it to damage from the materials stored in such areas, and that cables installed on tight corners with insufficient clearance will expose it to damage passing through such areas. However, in each of these instances, I believe it is incumbent on MSHA to establish through credible and probative evidence that a cited power cable located in any of these locations is in fact exposed to physical damage and is not fully protected against such damage.

I take note of the fact that MSHA's policy declarations found in the March 9, 1978, inspection manual, exhibit G-2, contain no explanation as to why a trolley wire location was included among the locations cited as examples where additional conduit protection may be required. The stated policy indicates that such additional conduit protection is required where a power cable crosses a trolley wire or where a power cable is installed within 12 inches of a trolley wire. The "12 inches" policy interpretation does not appear in MSHA's policy manual of July 1, 1988, or in the inspection manual of June 1, 1983, exhibits G-3

and G-4, and the interpretation simply refers to a power cable crossing a trolley wire. Although the inspection manuals contain rather detailed instructions to an inspector as to how to go about issuing citations for violations of section 75.517, because of inadequate insulated power cables, they contain no guidance concerning the question of "fully protected," and simply cite examples of locations where additional conduit protection may be required, with no explanations.

Insofar as trolley wire locations are concerned, I find nothing unreasonable in MSHA's desire to insure that a power cable located in close proximity to a trolley wire is protected against any physical damage which may result from a trolley pole coming off the trolley wire and striking the cable. As a matter of fact, respondent's safety representative Bochna conceded that depending on the force exerted by a trolley pole in striking a power cable, it was possible to penetrate the outer protective sheath of the cable. He also confirmed that a trolley pole striking a cable could cause cable abrasions or "minor damage," and that in the event the cable was damaged to the extent that the outer jacket and inner insulation were damaged, the cable could become energized through the live trolley wire if the cable was in contact with the trolley wire. He also confirmed that a trolley pole could pull a power cable down if it jumped the trolley pole. Respondent's electrical engineer Coss confirmed that with the additional conduit protection, the chances of cable damage would be lessened, and he stated that he was aware of an incident where a power cable protected by conduit was struck by a trolley pole, and although the cable was not cut, the wires at the switch box were pulled out by the striking action of the pole against the cable.

Although it may be true that a properly insulated power cable provided with a tough neoprene outer protective jacket may provide adequate protection against normal "wear and tear" and physical contact with equipment or other objects in an underground mining environment, it is not unusual for such cables to be subjected to cuts, scuffing, abrasions, etc., which may or may not be readily visible, or to internal damage which may not be readily observable by a cursory inspection. If such damage were to occur over time, and remained undetected, it could conceivably damage the integrity of the cable and render the insulation qualities of the outer neoprene protection jacket useless, thereby presenting a potential electrical hazard. In such a situation, I believe that one may reasonably conclude that the cable was not fully protected. However, in order to support a violation of section 75.517, it would be incumbent on MSHA to advance some credible and probative evidence to support such a finding, and it may not simply rely on the fact that an inspector found a power cable crossing over a trolley wire.

Although I agree with the respondent's analytical analysis of the Commission's holdings in the cited Homestake Mining Company and Climax Molybdenum Company, decisions, supra, I take note of the fact that in the Homestake Mining Company case, the policy interpretation relied on by MSHA imposed a blanket mandatory requirement that additional powerline insulation other than that required by the cited standard in question be used. The policy included a finding by MSHA that the protective powerline jacket provided by the manufacturer was inadequate per se, and it also included MSHA's own policy definition of the additional insulation required for compliance, which the Commission found to be essentially meaningless. In the instant case, MSHA's policy statements are a veiled attempt to impose a mandatory blanket requirement for additional protective conduit in all cases where a power cable crosses over a trolley wire, and the inspector obviously construed the policy as a mandate to issue a citation for a violation of section 75.517, in all instances where he may find a power cable crossing over a trolley wire. I agree with the respondent's assertion that MSHA's policy statements that additional conduit may be necessary in some locations does not impose a mandatory obligation or duty to have the additional conduit protection in all cases. I find that this language is discretionary and permissive, rather than mandatory, and that the prevailing circumstances should dictate whether or not additional cable protection may be necessary to satisfy the "fully protected" requirement found in section 75.517.

I conclude and find that in order to support any finding that a power cable is not fully protected in violation of section 75.517, an inspector must, on a case-by-case basis, make an objective evaluation of all of the circumstances presented, including the use to which the power cable is being put, its condition, the location and distance from equipment or other physical objects which may reasonably expose it to physical damage, its proximity to miners who are required to work or travel in the area, and any other relevant factors which may support a reasonable conclusion that the cable is located and utilized in such a manner as to expose it to physical damage. Reliance by an inspector on the mere location of the cable listed among unexplained policy "location examples" is insufficient, in my view, to establish a violation. If an inspector followed the literal language of MSHA's policy, as the inspector did in this case, without any evaluation of all of the circumstances presented, he could issue a citation simply because the power cable crossed over a trolley wire, even though the cable passed any number of feet over the trolley wire and could never conceivably come into contact with the trolley wire. Such an interpretation and application does little to foster mine safety, and simply encourages litigation.

The respondent is correct in its assertions that MSHA's own section 75.517 policy statements and interpretive guidance for

its inspectors to follow clearly indicates that MSHA considers an undamaged power cable to be "fully protected" pursuant to this standard. However, the respondent's suggestion that a power cable is inherently fully protected by the manufacturer's outer protective tough neoprene jacket and meets the "fully protected" requirement of section 75.517, in all cases and in all circumstances where the cable may be located is rejected. As noted earlier, I have concluded that such cables are subject to damage and that any determination as to whether or not they are fully protected must be made on the basis of all of the facts presented and not simply the location of the cable.

The petitioner takes the position that the cable at issue in this case passed over a trolley wire at a highly travelled haulageway used by miners and equipment going into and out of working sections, and that this fact makes the location one where conduit is necessary for additional protection, rather than a location where conduit may be necessary. Respondent takes the position that the inspector based the citation on his observation of the power cable passing over the trolley wire, and his belief that MSHA's policy manuals imposed a mandatory duty on him to issue a citation in all cases where such a cable is not protected by additional conduit. Respondent also takes the position that it has presented credible evidence that the facts and circumstances presented in this case support a finding that the cable was fully protected against any possible physical damage, and that MSHA's own policy interpretations of "fully protected" have been satisfied.

The evidence in this case establishes that the inspector issued the citation because he believed he was compelled to do by MSHA's policy directives. He admitted that he believed that each of the location examples stated in the policy with respect to power cables passing over trolley wires were mandatory requirements obligating an operator to provide additional conduit protection in all cases at such locations in the mine and that he had no discretion to determine whether or not any particular circumstances would require such additional guarding.

The inspector conceded that the power cable in question was in good condition and undamaged, and that it met all of MSHA's cable insulation requirements. He also agreed that the cable was hung on an insulator, and that the exterior of the cable was protected by an insulating jacket, and that each power conductor inside the cable was individually insulated. He agreed that the cable was provided with short circuit and fuse protection, that the outer and inner portions of the cable would have to be damaged in order to present any shock hazard, and that in the event such damage was present, a person would have to reach up and over the trolley wire and grab the cable in order to be exposed to a shock hazard. He also agreed that in the event the cable was dislodged and lying across the trolley wire, anyone

performing work on the light switch would be able to observe the cable in that position.

The inspector expressed concern that a possible shock hazard would exist if a trolley pole from one of the vehicles passing under the cable came off the trolley wire and struck and damaged the cable. If such damage were to occur, and the cable were to fall on the energized trolley wire, the inspector believed that the electrical light block circuit would become energized and pose a shock hazard to anyone contacting the wire or cable. The evidence establishes that the inspector was not an electrical inspector and had no particular expertise in such matters. Although he confirmed that the conduit which was in place, but had slipped away from the cable location immediately over the trolley cable, would not protect the cable from damage if the trolley pole were to strike it in the unprotected area between the light switch box and the end of the protective conduit, he nonetheless concluded that the conduit in place over the cable would sufficiently protect the cable if it had not slipped.

The inspector's belief that a trolley pole would likely come off the trolley wire and strike the cable in question was based on "his experience" that trolley poles frequently come off the trolley wire, and that the likelihood of this occurring would be increased by the fact that the haulageway in question was a highly traveled area which would increase the frequency of a trolley pole striking the cable. The inspector agreed that it was possible that a trolley pole would never come off the wire while travelling the haulageway and that the haulageway area in question was a reasonably flat area. Although the inspector believed that the reasons for a trolley pole "frequently" coming off the trolley wire included excessive vehicle speed, a bend in the trolley wire, or inadequate spring pressure on the pole, there is no evidence in this case that these conditions existed. The inspector confirmed that he did not visually inspect the cable in question, and he could not recall specifically looking for any cable damage. He also confirmed that he observed no bends in the trolley wire (Tr. 32, 42, 45).

The inspector confirmed that a vehicle approaching the area where the cable in question was located would have to slow down in order to activate the light switch (Tr. 30). Respondent's witness Bochna, who was familiar with the area, agreed that the area in question was congested, but he stated that the traffic is not heavy, and that a vehicle approaching the location of the light switch cable would have to slow down or stop in order to activate the traffic light switch in question before proceeding further, and that in his driving experience he has had no problem with a trolley pole coming off a trolley wire (Tr. 60-63, 71).

The testimony in this case establishes that the height of the mine roof off the floor was approximately 8 feet. Mr. Bochna

testified that the trolley wire was located approximately 12 inches from the mine roof, and the inspector testified that the power cable was located approximately 6 inches above the trolley wire. Respondent's witness Coss, who is an electrical engineer and a qualified MSHA certified electrician and electrical instructor, and who regularly observed the equipment operating underground and has operated the equipment himself, testified that the trolley poles are approximately 5-1/2 to 6 feet long, and that they are mounted at different locations on the equipment, at heights varying from 3 to 4 feet. He confirmed that there would be less tension on a trolley pole in a high roof area, and that in the event the pole came off the trolley wire in such an area, there would be less of an impact on the cable if the pole were to strike it (Tr. 85-86). Conceding that a trolley pole does occasionally come off the trolley wire in the mine, in view of the fact that the mine has approximately 10 miles of trolley wire, and the fact that a vehicle must slow down to activate the signal switch, he believed that the likelihood of a trolley pole coming off a trolley wire at the location of the cited cable would be remote. Even if this occurred, he further believed that a blunt trolley pole would not damage the cable by striking it while it was hanging up (Tr. 88).

I conclude and find that there is no evidence in this case to establish the existence of any of the factors or conditions alluded to by the inspector to support his belief that trolley poles frequently come off a trolley wire. There is no evidence in this case of excessive vehicular speed, bends in the trolley cable, inadequate spring pressure or any of the trolley poles, or unusual haulage road conditions. Further, there is no evidence that the respondent has experienced any problems in the mine with trolley poles coming off a trolley wire and striking or damaging power cables. During the course of the hearing, and in response to my bench questions concerning 10 prior citations for violations of section 75.517, the respondent's counsel confirmed that three of the citations were issued for lack of adequate insulation or protection for power cables passing through stoppings, one of the locations listed in MSHA's policy "examples" where additional cable protection is required. Counsel confirmed that he "settled" these citations after the petitioner's solicitor who was handling the cases agreed to vacate the citations. The parties could offer no further information with respect to the facts and circumstances surrounding these violations, and they did not know whether or not the remaining citations concerned power cable crossing over trolley wires (Tr. 71-77). The respective posthearing briefs filed by the parties do not further address my bench inquiries concerning these prior citations.

While it may be true that the petitioner has established that it is undisputed that MSHA has consistently interpreted section 75.517 to require protective conduit or guarding on power cables where they pass over trolley wires, I have rejected the

petitioner's position that such a policy may impose a mandatory blanket requirement that additional protective conduit be provided at all such locations "across the board" without any objective consideration of the prevailing facts and circumstances. I also reject any notion that MSHA may make such a broad sweeping unsupported policy determination that the lack of such additional conduit protection constitutes something less than the "fully protected" language found in section 75.517.

On the facts of this case, and after careful consideration of all of the evidence presented, I conclude and find that the petitioner has failed to establish that the cited power cable in question was not fully protected as required by the cited mandatory safety standard 30 C.F.R. 75.517. Accordingly, the contested citation IS VACATED.

#### ORDER

On the basis of the foregoing findings and conclusions, section 104(a) "S&S" Citation No. 3096605, issued on May 27, 1988, citing an alleged violation of 30 C.F.R. 75.517, IS VACATED, and the petitioner's proposal for assessment of a civil penalty for the alleged violation IS DENIED AND DISMISSED.

George A. Koutras Administrative Law Judge