#### FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

OFFICE OF ADMINISTRATIVE LAW JUDGES 2 SKYLINE, 10th FLOOR 5203 LEESBURG PIKE FALLS CHURCH, VIRGINIA 22041

December 12, 1996

SECRETARY OF LABOR,	:	CIVIL PENALTY PROCEEDING
MINE SAFETY AND HEALTH	:	
ADMINISTRATION (MSHA),	:	Docket No. PENN 93-445
Petitioner	:	A. C. No. 36-02374-03875
v.	:	
	:	Warwick Mine
NEW WARWICK MINING COMPANY,	:	
Respondent	:	

#### REMAND DECISION

Before: Judge Koutras

## Statement of the Case

This case concerns five section 104(a) "S&S" citations issued by MSHA Inspector Frank Terrett on May 19, 1993, during the course of his inspection of six belt transfer stations along the respondent's overland conveyor belt at the subject mine. The transfer stations are two-story buildings housing drive motors providing power to the conveyor. In five of these transfer stations the inspector observed accumulations of coal dust and cited the respondent with five violations of mandatory safety standard 30 C.F.R. 77.202. The citations state as follows:

An accumulation of coal dust 1/8" to 2 ½" was being allowed to exist in dangerous amounts on the surfaces of structures, enclosures, motors, of the bottom and top floors of the #1 Belt station. (Citation No. 3659083).

An accumulation of coal dust 1/8" to 3" inches was being allowed to exist in dangerous amounts on the surfaces of structures, enclosures, motors of the bottom and top floors of the #2 belt station. (Citation No. 3659084).

An accumulation of coal dust 1/8" to 3" inches was being allowed to exist in dangerous amounts on the surfaces of structures, enclosures, motors, of the bottom and top floors of the #3 belt station. (Citation No. 3659085).

An accumulation of coal dust 1/8" to 4" inches was being allowed to exist in dangerous amounts on the surfaces of structures, enclosures, motors, of the bottom and top floors of the #4 belt station. (Citation No. 3659086). An accumulation of coal dust 1/2" to 2" inches in depth was being allowed to exist in a dangerous amount on the surface of structures, enclosures, motors, of the bottom and top floors of the #5 belt station. (Citation No. 3659087).

The cited standard, 30 C.F.R. 77.202, provides as follows:

Coal dust in the air of, or in, or on the surfaces of, structures, enclosures, or other facilities shall not be allowed to exist or accumulate in dangerous amounts.

Following an evidentiary hearing, former Commission Judge Arthur J. Amchan rejected the inspector's initial "S&S" findings and affirmed each of the citations as non-"S&S" violations. (16 FMSHRC 2451, 2461, 2464-2465, December 1994).

The petitioner filed an appeal of Judge Amchan's decision and asserted that his non-"S&S" findings are not supported by substantial evidence, and that he ignored testimony that an explosion, rather than a fire alone, was reasonably likely to occur and result in serious injury. The Commission agreed that the judge failed to address the explosion hazard and failed to evaluate the evidence or make findings and conclusions in this regard. Under the circumstances, the Commission vacated the judge's non-"S&S" determinations and remanded the matter for further consideration. (18 FMSHRC 1568, 1576-1577, September 16, 1996). The case was reassigned to me for further adjudication.

In response to my order of September 25, 1996, the parties filed additional remand briefs in support of their respective positions with regard to the "S&S" issue addressed by the Commission in its decision and remand order. I have considered these arguments, as well as the existing record, in my remand adjudication of this matter.

## <u>Issue</u>

The "S&S" issue presented on remand is whether or not the cited conditions were reasonably likely to result in an explosion.

# Discussion

### Significant and Substantial Violations

A "significant and substantial" (S&S) violation is described in section 104(d)(1) of the Act as a violation "of such nature as could significantly and substantially contributed to the cause and effect of a coal or other mine safety or health hazard." 30 C.F.R. § 814(d)(1). A violation is properly designated S&S "if, based upon the particular facts surrounding the violation there exists a reasonable likelihood that the hazard contributed to will result in an injury or illness of a reasonable serious

nature." <u>Cement Division, National Gypsum Co.</u> 3 FMSHRC 822, 825 (April 1981).

In <u>Mathies Coal Co.</u>, 6 FMSHRC 3-4 (January 1984), the Commission explained its interpretation of the term "S&S" as follows:

In order to establish that a violation of a mandatory safety standard is significant and substantial under <u>National Gypsum</u> the Secretary of Labor 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, Inc. V. Secretary, 861 F.2d 99, 103-04 (5<sup>th</sup> Cir. 1988), <u>aff'q</u> 9 FMSHRC 2015, 2021 (December 1987) (approving <u>Mathies</u> criteria).

The question of whether any particular violation is S&S must be based on the particular facts surrounding the violation, including the nature of the mine involved, <u>Secretary of Labor</u> v. <u>Texasgulf, Inc.</u>, 10 FMSHRC 498 (April 1988); <u>Youghiogheny & Ohio</u> <u>Coal Company</u>, 9 FMSHRC 2007 (December 1987). Further, any determination of the significant nature of a violation must be made in the context of continued normal mining operations. <u>National Gypsum</u>, <u>supra</u>, 3 FMSHRC 327, 329 (March 1985). <u>Halfway,</u> <u>Incorporated</u>, 8 FMSHRC 8 (January 1986).

In <u>United States Mining Company, Inc.</u>, 7 FMSHRC 1125, 1129 (August 1985), the Commission stated further as follows:

We have explained that the third element of the <u>Mathies</u> formula  $\langle$  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>U.S. Steel Mining Co.</u>, 6 FMSHRC 1834, 1836 (August 1984). We have emphasized that, in accordance with the language of section 104(d)(1), it is the <u>contribution</u> of a violation to the cause and effect of a hazard that must be significant and substantial. <u>U.S. Steel</u> <u>Mining Company, Inc.</u>, 6 FMSHRC 1866, 1868 (August 1984).

The Commission reasserted its prior determinations that as part of his "S&S" finding, the Secretary must prove the reasonable likelihood of an injury occurring as a result of the hazard contributed to by the cited violative condition or

practice. <u>Peabody Coal Company</u>, 17 FMSHRC 508 (April 1995); <u>Jim</u> <u>Walter Resources, Inc.</u>, 18 FMSHRC 508 (April 1996).

Although the inspector testified that the electrical power boxes at all of the cited transfer stations were open, Judge Amchan found that the petitioner only established that the box at transfer station #4 was open. In support of this finding, the judge relied on the fact that the inspector issued a citation for the electrical box at station #4, but not any of the others, and that his field notes indicated that the station #4 box was open, but do not mention the same condition at the other transfer stations. (16 FMSHRC 2460).

With respect to his "S&S" findings, Judge Amchan noted that the inspector assumed that in the event of a fire resulting from the violations, employees would have to jump from the second floor of the transfer house to escape. However, the judge credited the testimony of the respondent's safety director that there was no likelihood of an employee being trapped in the transfer house, and that each house had 2-3 exits on the upper level as well as 3 on the bottom level and that an employee would not have to jump from the second floor to escape a fire. The judge then made the following "S&S" findings at 16 FMSHRC 2461:

I find that the Secretary has not established these violations to be significant and substantial. Step 3 in the Commission's test for a significant and substantial violation is whether there is a reasonable likelihood that the hazard contributed to will result in an injury. Step 4 is whether there is a reasonable likelihood that the injury will be of reasonably serious nature, <u>Mathies Coal Co.</u>, 6 FMSHRC 1 (January 1984). Since the Secretary's theory of "S & S" is based largely on the need for an employee to jump from the second story to escape a fire resulting from the coal dust accumulations in the transfer house, I conclude these violations were not "S & S."

## Petitioner's Arguments

In support of its position that the citations were "S&S," the petitioner cites in some detail the testimony of Inspector Terrett describing potential ignition sources that were present in the cited transfer stations, float coal dust observed by the inspector, potential fire hazards, all of which the petitioner believes support the inspector's conclusion about the likelihood of an explosion and its serious consequences.

### Respondent's Arguments

In support of its position that it was not reasonably likely that the cited coal dust conditions would result in an explosion in the course of continued mining operations, the respondent maintains that there is nothing to support the inspector's "bald

allegations" that an explosion could occur or was reasonably likely to occur. In support of its argument, the respondent asserts that a similar issue was raised in <u>Pittsburgh and Midway</u> <u>Coal Mining Co.</u>, 7 FMSHRC 2072 (December 1985), and that I vacated an alleged violation of section 77.202, after finding as follows at 7 FMSHRC 2104:

> [I]n order to establish that such accumulations are in fact dangerous, MSHA must establish that they present a realistic fire hazard, or that they are susceptible of being placed in suspension in close proximity to a readily available ignition source capable of placing them in suspension, thereby fueling or propagating an explosion.

The respondent also relies on the <u>Pittsburgh and Midway Coal</u> <u>Mining Co.</u>, decision, at 7 FMSHRC 2103, in support of its argument that a coal dust explosion can only occur if there is a fire, and that in the instant case there is no evidence that a fire was likely to occur. The respondent asserts that although the inspector cited "several inches of coal dust in several instances," he did not indicate that they were anywhere near an ignition source, and the respondent concludes that "in all likelihood, they were on the concrete floor where there was no likelihood that they would be the source of a fire."

The respondent further argues that the inspector cited accumulations "on" electrical boxes, and not "in" electrical boxes, thereby significantly decreasing or eliminating the possibility of a fire. Although the inspector testified at the hearing before Judge Amchan that accumulations were "in" electrical boxes, the respondent points out that none of the citations indicated the existence of accumulations "in" or "on" electrical boxes.

Even if the accumulations existed in the electrical boxes, the respondent argues that there is no indication that they posed a fire hazard, and there is no indication as to what those amounts might have been. Respondent maintains that a small deposit of coal dust, even in proximity to an ignition source, is not sufficient to cause a fire, citing <u>Pittsburgh and Midway</u>, at 7 FMSHRC 2103. Further, the respondent points out that the inspector did not cite any electrical defects when he issued the citations, and although he indicated that a belt running out of alignment could result in a fire, and that this was likely to occur, there is no evidence of any belts running out of alignment or that this was likely to occur in an area where the accumulations existed.

With regard to a fire that occurred at a mine transfer station in 1991, the respondent believes that the only relevance in that incident is that the fire was caused by a massive coal spill and it did not result in an explosion.

With regard to the Commission's conclusion at 18 FMSHRC 1576, that the fact that no explosion has ever occurred in a transfer station is not dispositive of an S&S finding, the respondent nonetheless believes that the absence of any prior explosions permits the judge to discount an inspector's unfounded speculation that a dust explosion was likely to occur. In this regard, the respondent argues that if the physical factors present would not permit an explosion to occur then obviously there is no likelihood of an explosion. Even if a remote possibility of an explosion existed, the respondent concludes the fact that there is no evidence of an explosion ever having occurred in a transfer station reduces the likelihood of an explosion occurring in this instance to far less than a reasonable likelihood.

# Findings and Conclusions

In the <u>Pittsburgh & Midway Coal Mining Company</u> case, the principal issue was whether or not the cited transfer building float coal dust accumulations, some of which were not measured, and some of which were estimated at approximately 1/8 to 3/16 of an inch, or "paper thin" or 1/16 of an inch, constituted <u>dangerous</u> accumulations within the meaning of section 77.202. I concluded that the evidence adduced by MSHA did not establish that the cited accumulations were <u>dangerous</u>, a condition precedent to establishing a violation of section 77.202. The citation was vacated, and the S&S issue was never reached.

I find that the facts presented in <u>Pittsburgh and Midway</u>, are distinguishable from the facts in the case at hand. The cited accumulations in the instant case are far greater and more extensive; ranging from 1/8" to 4" in all five of the cited transfer stations, and the respondent's argument that section 77.202, was not violated because the petitioner failed to establish that coal dust existed or accumulated in <u>dangerous</u> amounts was rejected by Judge Amchan when he found that company safety director Rodavich's admission that the dust accumulations needed to be cleaned up constituted a concession that coal dust existed in dangerous amounts. (16 FMSHRC 2460, fn 9). I have reviewed the trial transcript testimony of Inspector Terrett and it reflects a serious concern by the inspector that the cited coal accumulations presented a fire and explosion hazard. The record reflects that the inspector has served as a Federal mine inspector for 2 ½ years, a state inspector for 3 ½ years, and had 20 prior years of experience in the mining industry, including 13 years as a supervisor. He also conducted state training courses in mine fires and coal accumulations, and indicated that he "was involved" in four different mine fires (Tr. 183). Under the circumstances I find that he was knowledgeable and qualified to express opinions on the fire and explosion hazards posed by the cited accumulations in question.

Inspector Terrett testified that each of the belt transfer stations housed a belt electrical drive motor, electrical motors,

and belt rollers, and that during normal mining operations the belts are moving. He stated that in each of the stations he observed "accumulations of coal, fine coal dust all over everything, just laying on top of motors" (Tr. 187-188).

The inspector confirmed that he observed all of the coal dust accumulations described in the citations, and I take particular note of the fact that the electrical motors were covered with coal dust which he described as dry (Tr. 188-191). He further testified that "almost every station had electrical violations with it" and he referred to a citation dated May 19, 1993 (Exhibit G-24), for a control box that was not secured in a closed position and had coal dust inside (Tr. 192).

The inspector believed that the electrical drive motors and turning belt rollers were ignition sources that would reasonably likely cause an ignition. He also described the stationary belt rollers and take-up rollers and indicated that coal dust that builds up at the take-up rollers could cause friction as the roller rubs against the coal dust and commented that "you could get friction and very likely get a fire" (Tr. 193). Since the inspector believed that it would have taken "quite a few days" for the cited coal dust to accumulate, I cannot conclude that the inspector's concern about coal dust building up at the take-up rollers was unreasonable.

The inspector further testified to his notes (Exhibit G-22) which reflected coal build-up at the #2 station where the belt drive was running in coal and coal dust accumulations and coal dust laying around the belt drives (Tr. 194). He further referred to his notes reflecting coal dust accumulations around belt rollers in all of the cited stations, and he was concerned that in the event a belt "went out of line in the slightest bit" it could strike the sides of the belt frames and get hot. Coupled with the friction caused by the belt rollers where they were turning in the coal dust, he believed a fire or ignition would occur and that it was reasonably likely that two miners who were in one of the stations "could have got killed right there" (Tr. 194-195).

Although the inspector conceded that the cited coal dust accumulations were deposited, rather than airborne float coal dust, he nonetheless believed that the deposited dust could be placed in suspension by air breezes through the many station openings or by the action of the moving belt rollers. He further indicated that dust movement was taking place as he was making his inspection "just by moving around and shutting the doors" In view of the quantities of coal dust he (Tr. 222-223). observed, he believed that "it was dangerous either way" (Tr. Further, assuming that coal dust was present inside the 211). electrical boxes, the inspector believed that an arc caused by vibrations of the circuit breaker blades inside the boxes would ignite the coal dust, and if it were in suspension, it could cause an explosion (Tr. 214-215). He further explained as follows at (Tr. 219-220):

Q. What is the danger presented by what was called deposited coal dust?

A. If you did get an explosion or a fire that coal dust will explode. And it's been showed many times in demonstrations through the Bureau of Mines at their experimental lab in Pittsburgh where a fire would blow clear out just by putting coal dust on the top of the roof support inside.

Q. What is the danger, if any, of dust deposited on rollers or near rollers?

A. Friction can ignite it.

Q. And what is the danger with float coal dust? You said you thought those were dangerous?

A. Float coal dust, it's just a fine coal and it's powdery and it will accumulate on top of any ledge or whatever, on top of motors and it will just lay all over top of everything. Once you get a fire it really helps feed it.

Q. Could the opening and closing of doors to a transfer house put float coal dust in suspension?

A. Definitely. A little breeze.

The respondent did not rebut the existence of the cited coal dust accumulations, which I conclude and find were rather extensive throughout all of the cited transfer stations which housed belts, belt rollers, and other electrical components. Indeed, as noted earlier, in affirming the violations of section 77.202, Judge Amchan found that the cited coal dust accumulations existed in dangerous amounts.

The respondent's assertion that the inspector did not indicate that the cited accumulations were anywhere near any ignition sources is not well taken and it is rejected. As noted earlier, the inspector specifically cited at least one open control box with coal dust inside, the electrical drive motors, turning belt rollers, and belt drives, and take-up rollers where he observed coal dust accumulations building up as potential ignition sources that would likely ignite a frictional fire fueled by the coal dust.

The Commission has held that "coal is, by its nature, combustible." <u>Mid-Continent Resources, Inc.</u>, 16 FMSHRC 1218, 1222 (June 1994). I believe the same can be said for dangerous accumulations of coal dust. Accordingly, I conclude and find that the cited dry coal dust accumulations, some of which were in contact with, or in close proximity to the aforementioned ignition sources, presented a fire hazard, and that it was

reasonably likely that in the course of continued normal mining operations a serious potential for a fire existed in the cited transfer stations at the time of the May 19, 1993, inspection.

With regard to any coal dust in suspension, although the inspector testified at one point at the hearing that he cited float coal dust, he later conceded that he cited deposited coal dust. However, he testified credibly that the coal dust could easily be put in suspension by the air circulating through the many station openings and the movement of the belt rollers, and he observed such air movement in the course of his inspection. Given the extent of the coal dust accumulations throughout all of the stations, I believe it is reasonable to conclude that in the normal course of mining operations, the deposited coal dust would be placed in suspension by the opening of doors causing air circulation, and the movement of the belts and belt rollers. Ιf this were to occur in close proximity to the potential ignition sources that were present, and in the face of a fire, I believe it was reasonably likely that a serious potential for propagating an explosion existed at the cited transfer stations.

The inspector observed two miners working in one of the transfer stations, and he indicated that their job was to service all of the stations. He also indicated that he observed them working the stations, on the top and bottom floors, when he returned for his re-inspection. (Tr. 192, 195, 209). In the event of an instant fire or explosion, he believed a person would have difficulty in escaping from the station (Tr. 223). I conclude and find that in the event of a fire or explosion, it would be reasonably likely that anyone inside a transfer station would be at risk and exposed to injuries of a reasonably serious

nature or death.

Based on the foregoing findings and conclusions, I conclude and find that all of the cited violations were significant and substantial (S&S), and the inspector's initial findings in this regard ARE REINSTATED AND AFFIRMED.

I take note of the fact that the original proposed assessments of \$267, for each of the Citation Nos. 3659083, 3659084, and 3659085, were reduced to \$100 each by Judge Amchan based on his non-"S&S" findings. Although the Commission's remand order did not specifically include instructions for reconsideration of the penalty assessments for the violations, I would reinstate the original proposed penalty assessments of \$267 for each violation, and order the respondent to pay those amounts.

#### ORDER

In view of the foregoing, IT IS ORDERED as follows:

1. Section 104(a) Citation Nos. 3659083, 3659084, 3659085, 3659086, and 3659087, are all AFFIRMED as significant and substantial (S&S) citations.

2. The respondent shall pay civil penalty assessments of \$267, for each of the aforementioned citations, and \$750 each for the citations and orders previously affirmed and assessed by Judge Amchan in his decision of December 9, 1994, at 16 FMSHRC 2465. Payment is to be made to MSHA within thirty (30) days of the date of my decision and order, and upon receipt of payment, this matter IS DISMISSED.

> George A. Koutras Administrative Law Judge

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