CCASE:

MSHA V. U.S. STEEL MINING

DDATE: 19850805 TTEXT:

> FMSHRC-WDC AUG 5, 1985

SECRETARY OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION (MSHA)

Docket No. PENN 83-129

v.

UNITED STATES STEEL MINING CO., INC.

BEFORE: Backley, Acting Chairman; Lastowka and Nelson, Commissioners

## **DECISION**

## BY THE COMMISSION:

This consolidated proceeding arising under the Federal Mine Safety and Health Act of 1977, 30 U.S.C. \$801 et seq. (1982)("Mine Act") presents two issues: (1) whether substantial evidence supports a Commission administrative law judge's findings that United States Steel Mining Company's ("U.S. Steel") violation of its ventilation and methane and dust control plan was not "significant and substantial," and (2) whether substantial evidence supports the judge's finding that U.S. Steel violated 30 C.F.R. \$75.200, the mandatory standard governing roof control and roof control plans. 1/ For the reasons that follow, we

1/30 C.F.R. \$ 75.200, which is identical to section 302(a) of the Mine Act, provides:

Each operator shall undertake to carry out on a continuing basis a program to improve the roof control system of each coal mine and the means and measures to accomplish such system. The roof and ribs of all active

underground roadways, travelways, and working places shall be supported or otherwise controlled adequately to protect persona from falls of the roof or ribs. A roof control plan and revisions thereof suitable to the roof conditions and mining system of each coal mine and approved by the Secretary shall be adopted and set out in printed form on or before May 29, 1970. The plan shall show the type of support and spacing approved by the Secretary. Such plan shall be reviewed periodically, at least every 6 months by the Secretary, taking into consideration any falls of roof or ribs or inadequacy of support of roof or ribs. No

(footnote 1 continued)

reverse the judge's finding that the violation of the ventilation and methane and dust control plan was not significant and substantial, vacate the judge's conclusion that U.S. Steel violated section 75.200, and remand for further proceedings consistent with this decision.

On January 24, 1983, an inspector of the Department of Labor's Mine Safety and Health Administration ("MSHA") issued a citation to U.S. Steel pursuant to section 104(a) of the Mine Act, 30 U.S.C. \$814(a), during an inspection of U.S. Steel's Maple Creek No. 2 Mine. The citation charged U.S. Steel with a violation of 30 C.F.R. \$75.316, a mandatory safety standard requiring an operator to have an MSHA approved ventilation and methane and dust control plan for its mine. 2/ During the inspection, the inspector calculated the volume of air in the face area of a section where mining was about to begin to be 3,600 cubic feet per minute ("cfm"). He reminded U.S. Steel's section foreman that once mining started U.S. Steel's ventilation plan required an air volume of 5,000 cfm and he left the area.

When the inspector returned to the section, mining had commenced. He noticed dust "rolling back" over the operator of the continuous miner. The inspector calculated the volume of air in the face area to be 2,400 cfm. He also found a methane concentration of .1%. The inspector issued a citation alleging a violation of 30 C.F.R. \$ 75.316. The citation alleged that U.S. Steel was not complying with its ventilation

## Footnote 1 end.

person shall proceed beyond the last permanent support unless adequate temporary support is provided or unless such temporary support is not required under the approved roof control plan and the absence of such support will not pose a hazard to the miners. A copy of the plan shall be furnished to the Secretary or his authorized representative and shall be available to the miners and their representatives.

2/ 30 C.F.R. \$ 75.316, which repeats section 303(o) of the Mine Act, 30 U.S.C. \$ 863(o), provides:

A ventilation system and methane and dust control plan and revisions thereof suitable to the conditions and the mining system of the coal mine and approved by the Secretary shall be adopted by the operator and set out in printed form on or before June 28, 1970. The plan shall

show the type and location of mechanical ventilation equipment installed and operated in the mine, such additional or improved equipment as the Secretary may require, the quantity and velocity of air reaching each working face, and such other information as the Secretary may require. Such plan shall be reviewed by the operator and the Secretary at least every 6 months.

plan in that "only 2,400 cfm of air was reaching the end of the line curtain [at the face] ... while coal was being mined with a continuous mining machine..." The inspector checked the "significant and substantial" block on the citation form. 3/ The violation was abated after repairs to the line curtain were made and the air volume in the face area was elevated to 5,700 cfm.

At the hearing the inspector explained why he found U.S. Steel's violation of its ventilation plan to be "significant and substantial." He noted that the mine is considered a "gassy" mine because it liberates over one million cubic feet of methane in a 24 hour period. 4/ He testified that he was concerned that improper ventilation would cause methane, which is naturally liberated in the mine, particularly when coal is cut, to accumulate to dangerous levels. He stated that the arcing and sparking of the continuous miner bits as they cut coal at the face could ignite the methane. He also testified that he believed an ignition or fire was reasonably likely to occur. Further, the inspector

3/ Section 104(d)(1) of the Mine Act, 30 U.S.C. \$814(d)(1) provides in part:

If, upon any inspection of a coal or other mine, an authorized representative of the Secretary finds that there has been a violation of any mandatory health or safety standard, and if he also finds that, while the conditions created by such violation do not cause imminent danger, such violation is of such nature as could significantly and substantially contribute to the cause and effect of a coal or other mine safety & health hazard. and if he finds such violation to be caused by an unwarrantable failure of such operator to comply with such mandatory health or safety standards, he shall include such finding in any citation given to the operator under this Act....

(Emphasis added).

4/ Pursuant to section 103(i) of the Mine Act, 30 U.S.C. \$ 813(i), the mine is subject to a spot inspection every five days. Section 103(i) of the Mine Act provides in part:

Whenever the Secretary finds that a coal or other mine liberates excessive quantities of methane ... during its operations, ... he shall provide a minimum of one spot inspection by his authorized representative of all or part

of such mine during every five working days at irregular intervals. For purposes of this subsection, "liberation of excessive quantities of methane or other explosive gases" shall mean liberation of more than one million cubic feet of methane or other explosive gases during a 24-hour period....

noted in the subject citation that if methane ignition or fire occurred, any miner in the area could be permanently disabled. The inspector acknowledged that it would take a minimum methane accumulation of 5% for an ignition or an explosion to occur and that he had detected a methane level of .1% when he cited the violation. However, he stated that with the reduction of air quantity from the required 5,000 cfm to 2,400 cfm, the chance of a methane accumulation on the section had increased and, as a result, the exposure of miners to ignition and fire hazards increased.

The administrative law judge affirmed the violation of the ventilation plan but vacated the inspector's significant and substantial finding. The judge found that the violation was caused by a collapse of a part of the line curtain on the section. He noted that the resulting interruption of the air flow was not detected by miners in the work area. The judge also noted that when the foreman was advised by the inspector of the insufficient quantity of air, the foreman immediately determined the cause of the violation and corrected it. The judge therefore concluded, "given these circumstances, I fail to understand how the inspector could conclude that an injury or accident was likely to occur. Here, both the inspector and the foreman were both aware of the problem from the outset, and steps were quickly taken to correct the problem." 6 FMSHRC at 1711-12. The judge determined that the inspector's finding must have been based on the inspector's belief that all violations of a mine's ventilation plan are significant and substantial.

On review, the Secretary challenges the judge's conclusion that U.S. Steel's violation of its ventilation plan was not significant and substantial. The Secretary argues that the violation contributed to a hazard because if the concentration of methane gas had increased to explosive quantities, the inadequate ventilation combined with the ignition source could have caused a methane ignition or a fire at the face. Further, the Secretary argues that given these conditions an ignition or fire was reasonably likely to occur and that the resulting injuries would have been serious.

We have held previously that a violation is properly designated 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), we explained:

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

We have explained further that 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). We have emphasized that, in accordance with the language of section 104(d)(1), it is the contribution of a violation to the cause and effect of a hazard that must be significant and substantial. U.S. Steel Mining Co. Inc., 6 FMSHRC 1866, 1868 (August 1984); U.S. Steel Mining Co., Inc., 6 FMSHRC 1573, 1574-75 (July 1984). Applying these principles to the instant case, we conclude that the judge erred in holding that U.S. Steel's violation of 30 C.F.R. \$ 75.316 was not significant and substantial.

Neither party disputes that U.S. Steel violated 30 C.F.R. \$75.316. Indeed, the violation--a measured air quantity of 2,400 cfm--represented a major departure from the minimum air quantity of 5,000 cfm required under U.S. Steel's ventilation plan.

With respect to the discrete hazard contributed to by the violations we have recently emphasized that the hazards associated with inadequate ventilation, especially at working faces, are among the most serious in mining. Monterey Coal Co., Inc., 7 FMSHRC , FMSHRC Docket No. LAKE 83-61, slip op. at 5 (July 2, 1985). In enacting the ventilation requirements of the Mine Act, Congress mandated that in all active workings of a coal mine, "the volume and velocity of the current air shall be sufficient to dilute, render harmless, and to carry away, flammable, explosive, noxious, and harmful gases, and dust, and smoke and explosive fumes" and that "[t]he minimum quantity of air in any coal mine reaching each working face shall be three thousand cubic feet a minute." Section 303(b) of the Mine Act, 30 U.S.C. \$ 863(b). 5/ As stated in Monterey Coal Company:

A basic reason for this requirement is the grave danger that, if there is not adequate ventilation, ignitions or explosions can result from concentrations of explosive gases like methane, either alone or mixed with coal dust, liberated during mining operations. Moreover, we note that when coal is freshly cut, methane can be liberated in dangerous amounts in short periods of time. Although methane itself becomes explosive at a 5% concentration, even a smaller percentage concentration of the gas mixed with fine coal dust can generate an explosion.

Monterey Coal Co., supra, slip op. at 5.

5/ We note that the minimum volume of air required under U.S. Steel's plan, 5,000 cfm, is substantially more than the minimum volume required under the Act. Because a coal mine's ventilation plan must be "suitable to the conditions" of the mine, the particular conditions at Maple Creek No. 2 mine apparently require the greater volume of air specified in U.S. Steel's plan.

The Maple Creek No. 2 mine liberates more than one million cubic feet of methane during a 24-hour period. The mine is under the spot inspection cycle mandated by section 103(i) of the Mine Act. 30 U.S.C. \$ 813(i). The citation was issued at the face where coal was being cut with a continuous miner. The continuous miner, the operation of which may cause arcing and sparking, was a possible ignition source. Thus, the record clearly sets forth a discrete safety hazard contributed to by the violation -- the possible accumulation of methane in the Presence of a potential ignition source.

Although the judge "fail[ed] to understand how the inspector could conclude that an injury or accident was likely to occur," we find that the inspector's conclusion was valid. U.S. Steel contends that at the time the citation was issued there was no chance of a methane ignition or explosion because methane ignites when it reaches a concentration of 5% to 15% of the mine's atmosphere, and that here the methane level was well below 5%. While it is true that methane measured in the section rev+al+d a nonhazardous accumulation at the time the citation was issued, an evaluation of the reasonable likelihood of injury should be made "in terms of continued normal mining operations." U.S. Steel Mining Co. Inc., 6 FMSHRC at 1574. The fact that the methane was low when the violation was cited is not fatal per se to the establishment of "reasonable likelihood." If normal mining operations were to continue, a rapid buildup of methane could reasonably be expected. As we have noted, when coal is being cut it can liberate dangerous levels of methane in a relatively short period. Here coal was being cut and the velocity of air was well below the required level.

We likewise believe that given the ignition source provided by the operation of the continuous miner, ignition of methane could reasonably be expected to occur. We note in particular the testimony of U.S. Steel's section foreman that the mine had experienced "a few" methane ignitions in the past. Thus, in terms of continued normal mining operations, we conclude that the evidence supports a finding that there was a reasonable likelihood that the hazard contributed to -- the accumulation of methane -- could result in the occurrence of an ignition and a fire. If a methane ignition or fire occurred, the injuries produced could be of a reasonably serious nature.

Regarding the judge's expressed belief that the inspector's significant and substantial finding was predetermined, regardless of whether the inspector's finding was based on his belief that all ventilation plan violations are significant and substantial, the

question must be resolved on the basis of the circumstances as they existed at the time the violation was cited and as they might have existed had normal mining operations continued. Further, the fact that upon being told of a deficiency by an MSHA inspector an operator proceeds to make necessary corrections, does not obviate the need for determining whether an injury would have been reasonably likely to occur if mining operations had continued without the inspector's intervention. U.S. Steel Mining Co., supra.

Therefore, we conclude that on the facts presented the violation was properly designated significant and substantial by the inspector. Accordingly, the judge's contrary finding is reversed and the citation is remanded for the reconsideration and assessment of an appropriate civil penalty.

We now turn to the alleged violation of 30 C.F.R. \$ 75.200. On January 12, 1983, during an inspection of the Maple Creek No. 2 Mine, an MSHA inspector noticed that in one of the working sections a short cut of approximately 12 feet had been mined out and that, in accordance with U.S. Steel's roof control plan, three ventilation jacks, (A, B, and C on Exh. R-3, page 2), had been set along the left rib in preparation for roof bolting. The inspector then observed miners install a hydraulic roof jack (No. 2 on Exh. R-3, page 2) in the center of the entry, seven and one half feet from the second ventilation jack and five and one half feet from the last row of permanent supports. U.S. Steel's roof control plan states that the maximum allowable spacing between jacks is five feet.

After jack No. 2 was installed, the inspector testified that he witnessed two miners each pick up a hydraulic jack and proceed inby under unsupported roof for four feet and begin to simultaneously install the jacks. (Nos. 4 and 6, Exh. R-3, page 2). U.S. Steel's section foreman, who also witnessed the event, agreed that the two miners proceeded past jack No. 2, but testified that they proceeded under unsupported roof for only six inches to one foot. Neither the inspector nor the section foreman measured the distance.

The inspector immediately ordered the two miners out of the section. The inspector reviewed with them the requirements of the mine's roof control plan. He explained that the plan requires that after the ventilation jacks are in place, temporary jacks are to be installed from left to right, across the entry of the mine, one at a time. Then, the inspector explained, the plan requires the second row of temporary jacks to be installed exactly like the first, from left to right, one jack at a time. The inspector then issued a citation alleging a violation of 30 C.F.R. \$ 75.200. The citation stated in part:

The approved roof control plan was not being complied with ... as temporary roof supports (jacks) were not installed according to the roof control plan as center jack was installed first and installed two jacks a[t] same time. [Sic.]

The inspector further found that the violation was significant and substantial. The citation was abated when the miners set a jack on the left of jack No. 2 and a jack on the right side of jack No. 2, and then installed the second row of jacks in accordance with the inspector's instructions.

At the hearing the inspector testified that he determined that U.S. Steel was out of compliance with its roof control plan for three reasons: (1) the jacks were set out of sequence; (2) two jacks were set simultaneously; and (3) the miners attempting to install jacks No. 4 and No. 6 were under unsupported roof. The inspector admitted that the citation in question did not explicitly describe the miners' presence under unsupported roof. He explained, however, that the citation's statement that the "approved roof control plan was not being complied with" encompassed the fact that the two miners were under unsupported roof.

In his decision, the judge described the issue before him as "whether [U.S. Steel] has violated any specific portion of its approved roof control plan, and ... absent a violation of the plan, was there a violation of section 75.200, when the two miners proceeded to install the two jacks in question 6 FMSHRC at 1682. The judge concluded that the Secretary had not proven that U.S. Steel had violated its roof control plan. He found that although the citation states that two jacks were not installed in sequence, that practice was not prohibited by the approved roof control plan. 6 FMSHRC at 1683. He also found, however, that although the miner who installed jack No. 4 was protected by the rib jacks and the permanent roof supports, and hence was under supported roof, the miner who "walked out with the intent to install roof jack No. 6 ... was in fact under unsupported roof," and therefore in violation of 30 C.F.R. \$ 75.200. 6 FMSHRC at 1683-84.

The judge further concluded that this violation was not "significant and substantial" He took into consideration the fact that the adjacent roof area was bolted, that additional support was provided along the left rib by means of roof jacks, that the miner was under unsupported roof for "at most a few seconds," and that "given the fact that MSHA itself conceded that miners must go under unsupported roof to install roof supports" the inspector's significant and substantial finding was made "simply because it involved roof support." 6 FMSHRC at 1711.

On review, U.S. Steel asserts that the judge erred in affirming a violation of 30 C.F.R. \$ 75.200 after ruling that it had not violated its roof control plan. The company argues that the citation in question was issued for a violation of its roof control plan, not, as the judge found, for violation of section 75.200's general prohibition against persons proceeding beyond the last row of permanent roof supports unless adequate temporary support is provided.

The Secretary argues that U.S. Steel violated the roof control plan as alleged in the citation in that the roof control plan requires that the jacks be installed sequentially and the evidence supports a finding that the jacks were not being so installed. The Secretary also contends that the record establishes that both miners were under unsupported roof. Further, the Secretary argues, the administrative law judge erred in concluding that the violation of the plan was not "significant and substantial."

The citation issued by the inspector asserted that the roof control plan was violated in that the temporary jacks were not installed in accordance with the approved plan. According to the inspector, the plan was violated when temporary jacks were set out of sequence and two temporary jacks were set simultaneously. The inspector testified that the roof control plan requires that temporary jacks be set from rib to rib, one jack at a time. On the other hand, U.S. Steel's chief mine inspector, who participated in the roof control plan adoption/approval process, testified that the plan requires that the temporary jacks be set by rows, but does not require that they be set sequentially.

The judge's decision does not resolve this conflict as to the meaning of the roof control plan. Instead, after setting forth the conflicting evidence in great detail, the judge simply labelled it "confusing" and summarily concluded that a violation of the plan had not been established.

The statute and the standard require the parties to agree on a roof control plan. Once the operator has adopted and MSHA has approved the plan, its provisions are enforceable as though they were mandatory standards. Zeigler Coal Co. v. Kleppe, 536 F.2d 398, 409 (D.C. Cir. 1976). Thus, a question concerning the parties' intent and understanding as expressed in an approved plan is an important one. Before we can undertake to determine whether a plan was violated, we first need findings as to what the plan requires. Shamrock Coal Co., 5 FMSHRC 845, 848-52 (May 1983); Penn Allegh Coal Co., 3 FMSHRC 2757, 2769-70 (December 1981). Only after this is determined can those requirements be applied to particular facts to resolve whether a violation of the plan has occurred. Id.

We therefore vacate the judge's conclusion that section 75.200 was violated even though the roof control plan was not. We remand this citation so that the judge may make the necessary further findings regarding whether the roof control plan imposes specific requirements as to the sequence in which temporary jacks must be set and, if so, whether such requirements were violated here.

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In sum, we reverse the judge's conclusion that U.S. Steel's violation of its ventilation plan was not "significant and substantial" and remand for assessment of an appropriate penalty. We vacate the judge's finding that 30 C.F.R. \$ 75.200 was violated and remand for further findings consistent with this decision. 6/

Richard V. Backley, Acting Chairman

James A. Lastowka, Commissioner

L. Clair Nelson, Commissioner

<sup>6/</sup> Pursuant to section 113(c) of the Mine Act, 30 U.S.C. \$823(c), we have designated ourselves as a panel of three members to exercise the powers of the Commission.

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