CCASE: SOL (MSHA) V. BETHENERGY MINES DDATE: 19940606 TTEXT: FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

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

| SECRETARY OF LABOR,    | : CIVIL PENALTY PROCEEDING  |
|------------------------|-----------------------------|
| MINE SAFETY AND HEALTH | :                           |
| ADMINISTRATION (MSHA)  | : Docket No. PENN 93-205    |
| Petitioner             | : A.C. No. 36-00840-03882   |
| v.                     | :                           |
|                        | : Cambria Slope Mine No. 33 |
| BETHENERGY MINES INC., | :                           |
| Respondent             | :                           |

## DECISION

Appearances: Nancy Koppelman, Esq., Office of the Solicitor, U.S. Department of Labor, Philadelphia, Pennsylvania, for the Petitioner; R. Henry Moore, Esq., Buchanan Ingersoll Professional Corporation, Pittsburgh, Pennsylvania, for the Respondent.

Before: Judge Fauver

This is an action for a civil penalty under 105(d) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. 801 et seq.

Having considered the hearing evidence and the record as a whole, I find that a preponderance of the substantial, reliable, and probative evidence establishes the following Findings of Fact and further findings in the Discussion below:

## FINDINGS OF FACT

 On December 2, 1992, Federal Mine Inspector Nevin Davis issued Citation No. 3708698 at BethEnergy's Cambria Slope Mine No. 33. The citation alleged a violation of 30 C.F.R. 75.370(a)(1) as follows

> The approved ventilation plan in effect for this mine, in order to control methane, was not being completely complied with at one location. The air current off bleeder evaluation point (CO #54), approved in lieu of traveling the old 3 left of D-East L.W. pillared area, was found to contain methane levels of 2.4 percent to 3.1 percent exiting from this gob area, thereby exceeding the maximum allowable level of 2.0 percent methane. Three air bottle samples were collected by this writer of this air current at this time (G-1).

2. The citation initially alleged a violation of BethEnergy's ventilation plan, but the Secretary moved to amend the citation to allege a violation of 30 C.F.R. 75.323(e). The motion was unopposed, and granted.

3. Inspector Davis was accompanied by Denny Zeanchock, one of BethEnergy's supervisors.

4. Bleeder evaluation point (BEP) 54 is at a concrete block regulator in a bleeder connector that leads from the gob of a mined-out longwall panel to a return entry. The regulator has an opening about 3 feet by 3-1/2 feet with a board across the top. A screen was placed over the opening of the regulator to prevent travel into the gob area. The regulator is 14 to 15 feet from the rib line of the return entry. The BEP is regularly examined by company mine examiners who normally take methane measurements at a location indicated on a board in the mine roof, about 4 to 5 feet from the rib line of the return entry.

5. Inspector Davis measured methane with a hand-held detector, recording methane findings in his notes as follows:

| 4:30 | p.m. | 1.4 | to | 2.6 | percent |
|------|------|-----|----|-----|---------|
| 4:40 | p.m. | 1.4 | to | 2.9 | percent |
| 4:50 | p.m. | 1.4 | to | 1.5 | percent |
| 4:55 | p.m. | 1.8 | to | 2.9 | percent |
| 5:05 | p.m. | 2.4 | to | 3.1 | percent |
| 5:10 | p.m. | 2.2 | to | 2.5 | percent |
|      |      |     |    |     |         |

He took the readings about 4 inches in front of the screen and 12 inches from the roof.

6. Inspector Davis also recorded 3 air velocity measurements in his notes (between 4:30 and 5:10 p.m.).

7. During the 40 minutes in which he took hand-detector measurements, Inspector Davis observed that the methane level was slowly starting to rise. To check whether there was compliance with the 2 percent methane limit, he conducted chemical smoke tests to find observe the mixing of the air currents in the bleeder and return entry, in order to find a place to take bottle samples.

8. Inspector Davis began puffing the chemical smoke in the return entry and saw it move into the bleeder connector. Using an approved method of slowly releasing a puff of smoke, following it, and then releasing another puff of smoke, he proceeded into the bleeder connector towards the regulator. In this manner, he located the point where the return air and bleeder air current mixed. Inspector Davis then used chemical smoke to establish a point near the mixture point. There he took three air bottle

 ${\sim}1253$  samples, about 5:05 p.m., at three locations about 4 inches in front of the screen, and 12 inches from the roof.

9. The three bottle samples were analyzed by the MSHA laboratory in Mt. Hope, West Virginia, and showed methane concentrations of 1.860 percent, 2.850 percent, and 3.450 percent.

10. In addition to his observations and measurements, Inspector Davis made notes of the methane readings taken with the hand-held monitor, and drew a sketch of the air flow patterns in the vicinity of the mixing point he observed through chemical smoke tests.

11. On June 29, 1993, Inspector Davis prepared a memorandum for his District Manager (MSHA District 2) describing in detail the circumstances surrounding the issuance of Citation No. 3708698.

12. A week before the citation on December 2, 1992, Inspector Davis had observed an air reversal problem in the same bleeder. On December 2, he concluded that the air reversal problem could be recurring and causing a methane build-up in the gob area.

13. In investigating the rising methane levels, Inspector Davis checked the mine records and determined that the surface borehole in the area of the bleeder was not in operation at the time the rising methane levels were observed.

14. In assessing the violation alleged in Citation No. 3708698 as significant and substantial, Inspector Davis considered the documented rising levels of methane in the bleeder, the possibility that methane was building up in the gob area due to an air reversal malfunction, and the possibility that roof falls in the gob area, and the snapping of roof bolts in that area, could create methane ignition sources. He also considered that a flame from a safety lamp or a faulty methane detector carried by a mine examiner could be ignition sources.

15. On December 3, 1992, the day after Inspector Davis' citation, Mr. Zeanchock told Robert DuBreucq, Superintendent at Mine No. 33, that Mr. Davis had not taken methane readings just before the "mixing point" where the bleeder air joined the return air. Mr. DuBreucq sent Mr. Zeanchock and James Pablic, another foreman at Mine No. 33, to BEP 54 to establish the mixing point and take readings. They released smoke in the return entry against the right rib, and saw the smoke flowing along the rib and into the bleeder entry along the rib for about 4 to 5 feet. In their opinion, this was the "mixing point." The roof had previously been marked at that point to indicate the place where company mine examiners regularly took methane readings. This ~1254 point was about 8 feet from the place where Inspector Davis took the bottle samples.

16. The roof in No. 33 Mine is composed of sandrock and shale. Sandrock is highly prone to sparking.

17. The mine liberates over 11 million CFM of methane in a 24-hour period.

18. Sparking can occur in a gob area from pieces of roof striking against one another or striking against roof bolts or other metal objects.

DISCUSSION WITH FURTHER FINDINGS, CONCLUSIONS

Section 75.323(e), which was promulgated in 1992, provides:

Bleeders and other return air courses. The concentration of methane in a bleeder split of air immediately before the air in the split joins another split of air, or in a return air course other than as described in paragraphs (c) and (d) of this section, shall not exceed 2.0 percent.

When the new standard was promulgated, the Preamble to Safety Standards for Underground Ventilation stated the following as to 75.323(e):

> Paragraph (e) permits no more than 2.0 percent methane to be present in a bleeder split of air at a point just before the air in that split enters another split of air. Also, for return air courses, other than those addressed in paragraphs (c) and (d), paragraph (e) permits no more than 2.0 percent methane to be present. Thus the final rule retains the maximum permissible methane limits established in existing 75.329 and makes mandatory the existing 75.316-2 criteria concerning the methane limit in return air courses. [57 Fed. Reg. 20879 (1992).]

Section 75.323(e) replaced 30 C.F.R 75.329 and 75.316-2(h). Section 75.329 read as follows in relevant part:

Air coursed through underground areas from which pillars have been wholly or partially extracted which enters another split of air shall not contain more than 2.0 volume per centum of methane, when tested at the point it enters another split. Section 75.316-2(h) read as follows:

The methane content of the air current in a bleeder split at the point where such split enters any other air split should not exceed 2.0 volume per centum.

As discussed below, I construe the phrase "immediately before" in 75.323(e) as clarifying the requirement that bleeder air be measured as close as reasonably possible to the point where it joins another split of air. The substitution of "joins" 75.323(e) for "enters" in the predecessor standards does not in indicate any material change. The Preamble's use of "enters" in discussing the new standard suggests that the drafters intended "joins" to be synonymous with "enters." Also, the Preamble states that "the final rule retains the maximum permissible methane limits established in existing 75.329 and makes mandatory the existing 75.316-2 criteria concerning the methane limit in return air courses" -- with no indication that case law for the predecessor standards was intended to be modified.

In Christopher Coal Company, 1 FMSHRC 1 (1978), the Commission affirmed a withdrawal order based upon a violation of 75.329, which placed a 2 percent methane limit on the ai coursed through a bleeder connector "when tested at the point it enters" another split of air.

The facts of Christopher Coal Company are strikingly similar to the present case. The inspector took methane readings and a bottle sample in front of a cement block regulator 30 feet from the intersection of the bleeder connector and the main air return. The bottle sample established a methane content of 5.38 percent. The operator contended that the bottle sample was not at the proper location because 75.329 did not intend that the methane test be taken before the bleeder air left the bleeder split and joined the air return. The Commission affirmed the decision of Administrative Law Judge Cook, who ruled that "the regulation requires that the test be made before the bleeder air actually leaves the bleeder split of air and joins with the main return split." Christopher Coal Company (Docket No. MORG 76-8-P; unpublished opinion by Judge John Cook; October 18, 1976).

The Commission affirmed Judge Cook's holding that the inspector had performed the methane test in a proper location even though his sample was taken directly in front of the cement block regulator and 30 feet from the intersection of the bleeder connector and the main return. This holding was based upon Judge Cook's finding that, due to turbulence caused by the intersection of the main entry split of air with the bleeder split of air, and turbulence caused by the regulator itself, the location of the inspector's measurement was "as close as was reasonably possible to the place where the two splits of air join but before the

bleeder air entered the main entry." Thus, the Christopher Coal Company decision stands for the proposition that "at the point [where bleeder air] enters" a return split of air means "as close

as reasonably possible" to the point where the two splits of air join and before the bleeder air is diluted by return air.

I conclude that 75.323(e) requires (1) that the methane reading be taken in the bleeder split as close as reasonably possible to the point where the air in the bleeder split joins the return split of air and (2) that the reading be taken at a point where the bleeder air is not diluted by return air.

The testimony of Inspector Davis concerning his use of chemical smoke tests, and his explanation of the diagrams he prepared depicting the air currents, reasonably establish that air current from the return entry was being pulled into the bleeder connector and mixing with bleeder air. Based upon these observations, he took bottle samples about 4 inches in front of the screen device in the regulator, 14 or 15 feet inby the intersection of the bleeder connector and the return entry.

Edward Miller, MSHA's Chief of the Ventilation Division, stated that the configuration of air currents described by Inspector Davis and illustrated in his diagrams constituted a "venturi effect." Mr. Miller explained a venturi effect to mean that a high velocity of air flowing through the regulator and out of the bleeder connector was "pulling some air in from the return and actually having that turn around and go back the other direction." (Tr. pp. 126 and 130.)

The venturi effect explains why Inspector Davis, relying upon chemical smoke tests, took bottle samples near the screen of the regulator rather than closer to the intersection of the bleeder connector and the return entry. Under the reasoning of Christopher, Inspector Davis performed methane tests at "the nearest point where he could get an accurate measurement of the methane content in the air current coming out of the bleeder" (at 1689).

Mr. Zeanchock, the company supervisor who accompanied Inspector Davis, testified that he disagreed with Inspector Davis' determination of the proper place to take the air bottle samples. However, Mr. Zeanchock did not raise such concerns with the inspector or attempt to establish the proper test point himself until he returned to the bleeder connector approximately 7 days later. Mr. Zeanchock testified that when he and the mine shift foreman returned the following week, their smoke tests established the mixing point to be "4 or 5 feet off of the room neck" which is about 8 feet from where Inspector Davis took his air bottle samples. (Tr. 139.)

Considering the changes in air velocities and turbulence that can occur over time and affect the proper location to take methane tests, I find Inspector Davis' testimony and tests to be more reliable in determining the conditions that existed at the time of the citation. Also, I credit the testimony of the Secretary's ventilation expert, Mr. Miller, who gave the following opinion as to Inspector Davis' methodology and test location:

> Q. Now, you heard the testimony of Inspector Davis with regard to how he took the bottle samples which are the basis for the violation at issue today. Do you have an opinion within a reasonable degree of certainty as a ventilation specialist as to whether or not Mr. Davis was in a proper location when he took the air bottle samples?

A. It's my opinion that Inspector Davis took the sample at the only location he could take it and be assured that it was not mixing with return air. [Tr. p. 118.]

I find that a preponderance of the reliable evidence establishes that Respondent violated 75.323(e) by permitting an accumulation of methane in excess of 2 percent in the bleeder connector, at a point immediately before the bleeder split of air joined the return split of air.

Under the Commission's test for a significant and substantial violation (Mathis Coal Company, 6 FMSHRC 1, 3-4 (1984), et al), I find that the violation was reasonably likely to result in serious injury.(Footnote 1) In finding an S&S violation, Inspector Davis considered the documented rising levels of methane in the bleeder, the possibility that methane was building up in the gob area due to an air reversal malfunction at that site, and the possibility that roof falls and the snapping of roof bolts in the gob area could create methane ignition sources. He also considered that a flame from a safety lamp or a faulty methane detector carried by a mine examiner could be ignition sources. Taken as a whole, I find that the reliable evidence supports the inspector's finding that the violation was significant and substantial.

Considering all of the criteria for civil penalties in 110(i) of the Act, I find that a civil penalty of \$288 i appropriate.

<sup>1</sup> In Mathies the Commission held that an S&S violation exists if the violation is reasonably likely to result in an injury of a reasonably serious nature.

CONCLUSIONS OF LAW

1. The judge has jurisdiction.

2. Respondent violated 30 C.F.R. 75.323(e) as alleged in amended Citation No. 3708698.

ORDER

WHEREFORE IT IS ORDERED that:

1. Citation No. 3708698 as amended is AFFIRMED.

2. Respondent shall pay a civil penalty of \$288 within 30 days of the date of this Decision.

William Fauver Administrative Law Judge

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