

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

OFFICE OF ADMINISTRATIVE LAW JUDGES

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FALLS CHURCH, VIRGINIA 22041

June 19, 1995

BRUSHY CREEK COAL COMPANY, : CONTEST PROCEEDINGS
Contestant :
v. : Docket No. LAKE 94-168-R
: Citation No. 4260292; 3/29/94
SECRETARY OF LABOR, :
MINE SAFETY AND HEALTH : Docket No. LAKE 94-171-R
ADMINISTRATION (MSHA), : Citation No. 4260295; 3/29/94
Respondent :
: Docket No. LAKE 94-172-R
: Citation No. 4266730; 3/29/94
: :
: Docket No. LAKE 94-173-R
: Citation No. 4266732; 3/29/94
: :
: Docket No. LAKE 94-174-R
: Citation No. 4266773; 3/29/94
: :
: Docket No. LAKE 94-175-R
: Citation No. 4260297; 3/29/94
: :
: Docket No. LAKE 94-176-R
: Citation No. 4261610; 3/29/94
: :
: Brushy Creek Mine
: Mine I.D. No. 11-02636
: :
SECRETARY OF LABOR, : CIVIL PENALTY PROCEEDINGS
MINE SAFETY AND HEALTH :
ADMINISTRATION (MSHA) : Docket No. LAKE 94-250
Petitioner : A.C. No. 11-02636-03864
v. :
: Docket No. LAKE 94-251
BRUSHY CREEK COAL CO., INC., : A.C. No. 11-02636-03865
Respondent :
: Docket No. LAKE 94-459
: A.C. No. 11-02636-03866
: :
: Brushy Creek Mine

DECISIONS

Appearances: Christine M. Kassak, Esq., Office of the
Solicitor, U.S. Department of Labor,
Chicago, Illinois, for Petitioner\Respondent;
Karl F. Anuta, Esq., Boulder, Colorado,

for Respondent/Contestant.

Before: Judge Koutras

Statement of the Proceedings

These consolidated proceedings concern notices of contest filed by Brushy Creek Coal Company (Brushy Creek), pursuant to Section 105(d) of the Federal Mine Safety and Health Act of 1977, challenging the legality of seven (7) section 104(a) citations issued at the mine on March 29 and 30, 1994, in the course of a MSHA ventilation inspection. The civil penalty cases concern proposed assessments filed by the Secretary against Brushy Creek for the alleged violations. Consolidated hearings were held in Evansville, Indiana, and the parties filed post-hearing arguments that I have considered in the course of my adjudication of these matters.

Issues

The issues presented in these proceedings are whether the cited conditions or practices constituted violations of the cited safety standards, whether the alleged violations were "significant and substantial" ("S&S"), and the appropriate civil penalties to be imposed for the violations, taking into account the penalty criteria found in section 110(i) of the Act. Additional issues raised by the parties are identified and disposed of in the course of these decisions.

Applicable Statutory and Regulatory Provisions

1. The Federal Mine Safety and Health Act of 1977, 30 U.S.C. ' 301, et seq.
2. Sections 104(d), 105(d) and 110(a) and (i) of the Act.
3. 30 C.F.R. "' 75.332(a)(1), 75.334(a)(1), 75.370(a)(1), 75.380(f)(1), 75.503, and 75.507-1.
4. Commission Rules, 29 C.F.R. ' 2700.1, et seq.

Stipulations

The parties stipulated to the following (Joint Exhibit-1; Tr. 10-12):

1. The Federal Mine Safety and Health Review Commission
2. Brushy Creek and its mines are subject to the Mine Act.
3. At all relevant times to these proceedings, Brushy Creek owned and operated the Brushy Creek Mine,

a bituminous coal mine located in Galatia, Illinois.

4. Brushy Creek's operation affects interstate commerce
5. The subject mine produced 1,123,941 tons of bituminous coal
6. Brushy Creek produced 2,614,239 tons of bituminous coal at all of its mines from January 1, 1993 through December 31, 1993.
7. The subject citations were properly served by duly authorized representatives of the Secretary of Labor upon agents of Brushy Creek on the dates indicated therein.
8. The subject citations may be admitted into evidence for establishing their issuance, and not for the truthfulness or relevancy of any statements asserted therein.
9. The exhibits to be offered by Brushy Creek and the Secretary are stipulated to be authentic but no stipulation is made as to their relevance or the truth of the matters asserted therein.
10. The proposed penalties for each citation will not effect Brushy Creek's ability to continue in business.
11. Brushy Creek demonstrated good faith by abating the cited violations.
12. The certified copy of the MSHA Assessed Violations History (Joint Exhibit 3) accurately reflects the history of the subject mine for two years prior to March 29, 1994.

Discussion

Docket Nos. LAKE 94-168-R and LAKE 94-250

Section 104(a) "S&S" Citation No. 4260292, issued on March 29, 1994, by MSHA Staff Engineer Jeffery Wirth, cites an alleged violation of 30 C.F.R. 75.332(a)(1), and the cited condition or practice states as follows:

Return air is flowing out of the old 5-B worked out panels/rooms and is traveling inby to the #5 unit producing continuous miner section, MMU-005. This air is flowing into the old

5-B worked out panels and continues on inby after exiting the worked out area to the producing section. This is the same split of air and is not intake air.

Docket Nos. LAKE 94-171-R and LAKE 94-251

Section 104(a) "S&S" Citation No. 4260295, issued on March 29, 1994, by Mr. Wirth, cites an alleged violation of 30 C.F.R. 75.507-1, and the cited condition or practice states as follows:

The old 5-B worked out panel (return air) is being traveled with non-permissible equipment - golf carts, etc. Golf carts are present in the worked out area at the time of inspection. Air quality in this worked out area was found to be as follows: methane 1.9% and oxygen at 18.8% in an area 4 entries wide and 23 X C long.

Docket Nos. LAKE 94-173-R and LAKE 94-250

Section 104(a) "S&S" Citation No. 4266732, issued on March 29, 1994, by MSHA Inspector James Holland, cites an alleged violation of 30 C.F.R. ' 75.334(a)(1), and the cited condition or practice states as follows:

A worked out area was not ventilated to move methane into a return air course or to the surface. Evidence of 1.9% CH₄ and 18.8% O₂ was present.

Docket Nos. Lake 94-174-R and LAKE 94-459

Section 104(a) non-"S&S" Citation No. 4266733, issued on March 29, 1994, by Mr. Holland, cites an alleged violation of 30 C.F.R. ' 75.380(f)(1), and the cited condition or practice states as follows:

The current of air used to ventilate the primary escapeway for the No. 5 unit located in Southwest Mains was not ventilated with intake air.

Docket Nos. LAKE 94-175-R and LAKE 94-250

Section 104(a) "S&S" Citation No. 4260297, issued on March 30, 1994, by Mr. Wirth, as a section 104(d)(1) citation, and subsequently modified on April 28, 1994, to a section 104(a)

citation, cites an alleged violation of 30 C.F.R. ' 75.370(a)(1), and the cited condition or practice states as follows:

The continuous miner was observed cutting/loading coal from the working face with very little air movement behind the line curtain. The anemometer would not turn in all the area behind the line curtain indicating that the velocity was less than 50 feet per minute (fpm) in much of the area behind the line curtain. A velocity of 50 fpm would result in a volume of about 1,000 cubic feet per minute at the end of the line curtain. With the machine mounted scrubber not in operation the blades on the anemometer would not turn at all. A methane test taken in this working place when mining ceased indicated methane present at a level of 0.4%. This producing section has been back in this area since 3/28/94. The operator pulled out of this producing section during April, 1993 due to large amounts of methane migrating through the bottoms from an abandoned mine located approximately 90 feet to 120 feet directly below this area. The ventilation plan approved by the district manager on 6/18/93 requires 6,500 cfm of air to be maintained at the end of the line curtain at all times the machine is cutting or loading coal on long cuts using remote control.

Docket Nos. LAKE 94-176-R and LAKE 94-250

Section 104(a) "S&S" Citation No. 4261610, issued on March 30, 1994, by MSHA Mining Engineer Michael A. Bird, as a section 104(d)(1) order, and subsequently modified on April 28, 1994, to a section 104(a) citation, cites an alleged violation of 30 C.F.R. ' 75.370(a)(1), and the cited condition or practice states as follows:

The approved ventilation plan was not being complied with on the #5 unit (MMU-005). The ventilation plan states that on long cuts using remote control miners the line curtain will be maintained to within 40 feet of the deepest penetration of the face. The line curtain measured sixth-six feet from the deepest penetration in the number six entry were [sic] coal was being cut and loaded. When the miner operator was asked he stated that the maximum

curtain was 40 feet. This producing section has been back in this area since 3/28/94. The operator pulled out of this producing section during April, 1993 due to large amounts of methane migrating through the bottoms from an abandoned mine located approximately 90 to 120 feet directly below this area.

MSHA's Testimony and Evidence

Jeffery Wirth testified that he has worked for MSHA for two years and seven months as a district staff mining engineer. He received a B.S. degree in mining engineering in 1982 from Southern Illinois University, Carbondale, and started working in mines upon graduation. He attended MSHA's 13-week training program at the Mine Academy in Beckley, West Virginia, attended additional classes in ventilation, and has had on-the-job training with MSHA. He is a member of the Society of Mining Engineers, has served as a district instructor in mine disasters, holds Kentucky mine foreman and shot firers papers, Illinois mine manager's papers, and has 10 years of mining experience (Tr. 34-40).

Mr. Wirth stated that his MSHA duties include assisting mine operators with ventilation plans, reviewing such plans, and conducting ventilation reviews. He also conducts mine site inspections on the average of two days a week and the inspections are usually ventilation oriented.

Mr. Wirth identified Citation No. 4260292, and explained that it was issued during a "ventilation saturation inspection" conducted by six MSHA inspectors (Tr. 45). He stated that there was a methane problem at the mine and that methane was liberating from the mine floor from an old sealed and abandoned Peabody No. 47 mine located 90 feet below and migrating through the Brushy Creek Mine (Tr. 46-47).

Mr. Wirth confirmed that the conditions described in the citation area were accurate, and he believed that it was reasonably likely that an injury or illness would occur for the following reasons (Tr. 48):

A. Basically, because the air was entering an extensive worked-out area, and it wasn't being properly examined, and there was an area in this worked-out area that was approximately a third of a mile long, a body of methane present that we found upon walking this area that was hanging in there, and there was no air movement in that air area. It would be very easy for the contaminated

air in this worked-out area to enter the producing section.

Q. So, what hazard did you identify as being reasonably likely to contribute to an accident or an illness?

A. The fact that the Number 5 unit was not being ventilated with a separate split of fresh or intake air. In fact, the Number 5 unit was being ventilated with contaminated return air that was exiting the old 5-B worked-out panels.

Mr. Wirth explained that the gist of the violation is that air that was used to ventilate the old worked-out panels was then coursed out of those areas and was used to ventilate the coal producing faces on the section before going into the return air course and exiting the mine (Tr. 49-50). He further explained that clean ventilation air on a separate split should have been used to ventilate the producing section, rather than using the air that had swept over the old worked-out area (Tr. 50).

Mr. Wirth stated that he based his "S&S" determination on the fact that methane was being liberated from the old Peabody Mine and migrating through the respondent's mine, and the worked-out area was not being properly pre-shifted or examined weekly (Tr. 53-54).

Mr. Wirth stated that he made a finding of moderate negligence because the respondent was in the process of sealing up the worked-out area and knew that it was a worked-out area and not an air course. He stated that an air course is not sealed and a worked-out area is sealed because "you're pulling out of or have pulled out of that you have no intention of going back into" (Tr. 54). He defined a "worked-out area" as "an area where mining has been completed, whether pillared or nonpillared, and it does not include an intake or return air course," and also referred to the definition found in section 75.301 (Tr. 55-56).

Referring to a mine map of the cited area, referred to as the 5-b panel (Exhibit G-2), Mr. Wirth explained that an "active area," as opposed a worked-out area, "is where you're either setting up mining equipment for a mechanized mining unit, you're recovering mining equipment, you're pulling out of the area, you still have the equipment you're recovering, or its a mechanized mining unit" (Tr. 59). He stated that when he traveled the cited area there was no coal production in progress, no coal producing

equipment, no power, and no continuous mining unit in operation (Tr. 59-60).

Mr. Wirth pointed out the location where the seals were being constructed, and he stated that when he entered the area two seal forms had been constructed and were ready for pouring, and five men were working constructing additional forms to close off the entire area permanently (Tr. 61). He further explained as follows (Tr. 62):

JUDGE KOUTRAS: If those seals had been completed before you got there, would we have this case?

THE WITNESS: No.

BY MS. KASSAK:

Q. Why is that?

A. Because this area would have been sealed up, and there is no access. Once an area like this is sealed up, there is no access to get back in here. The intake air would have flowed down this air course here, past thee seals which would have been required to be pre-shifted, then continuing on to the producing section right down here.

Mr. Wirth confirmed that coal was being produced on the No. 5 Unit. He confirmed that he walked the perimeter of the worked-out area to the areas of deepest penetration and found no dates, times, or initials, or evidence that a weekly examination was being conducted pursuant to section 75.364 and he issued a citation for that (Tr. 64).

Mr. Wirth stated that stoppings were present along the worked-out area where the panels had been roomed, and he observed a low area where permanent ventilation control devices were in the process of crushing out. When the inspection party passed through a personnel door in a stopping, all of their methane and air monitoring testing instrument alarms went off indicating that there was a problem with low oxygen and high methane, and this was substantiated with bottle samples. Smoke tube tests indicated no air movement, with oxygen levels at 18.8 percent and methane levels up to 1.8 percent, and he marked these areas on the mine map (Tr. 66-67). The oxygen level was below normal and the methane level was higher than the 1.0 percent allowed in an active working section. There is no specific methane limit in a worked-out area, "until you get close to an explosive range, and

then there is a problem with imminent danger" (Tr. 68). He would not have expected 1.8 methane if the area were properly ventilated (Tr. 70). He confirmed that it took approximately four and one-half hours to walk the worked-out area in question (Tr.73). He also confirmed that the respondent was required to examine the worked-out area weekly to the furthest point of mining in each area, and that would be in the corners. An intake air course is required to be pre-shifted pursuant to section 75.360 (Tr. 76).

Mr. Wirth defined "return air" as "air that has ventilated a worked-out area or has ventilated the last place in a working section" (Tr. 83). He confirmed that return air was flowing out of the old 5-B worked-out panels and rooms and was traveling inby to the No. 5 Unit producing continuous miner section MMU-005, and ventilating that area (Tr. 83-84). In his opinion, a separate split of intake air should have been used to ventilate the coal producing area, and the return air coming out of the worked-out panel should have been coursed out through an overcast across the intake entry (Tr. 84-85).

In further explanation of why he believed section 75.332(a)(1) was violated, Mr. Wirth stated as follows (Tr. 86-88):

THE WITNESS: This is the case because the air that is entering the worked-out area is traversing through the worked-out area and is continuing on to the producing section. The producing section does not have a separate split of fresh intake air. It's being ventilated with return air that's coming out of the worked-out area.

JUDGE KOUTRAS: If that seal had been in place, then the working section and that working area and producing section would have been ventilated by the intake air coming in, correct?

THE WITNESS: Correct. If that had been sealed off --

JUDGE KOUTRAS: But since it was diverted and went through that area where they were constructing the seal was being used to ventilate that area, your position or MSHA's position is that that became return air.

THE WITNESS: Correct.

JUDGE KOUTRAS: And when it got back down and back coursed down in the working face, it was still return

air.

THE WITNESS: That's right.

BY MS. KASSAK:

Q. Can return air ever become intake air?

A. No. Intake can become return but return can't become intake. It doesn't work that way.

* * * * *

Q. And the only air to that working section was that coming out of the worked-out area?

A. The only air to ventilate those working faces on that unit was coming out of that worked-out area.

Q. You saw no split to provide for fresh intake air?

A. There were no splits present.

Mr. Wirth believed the cited condition was hazardous because in an area that is not examined, "you don't know what's going on," and oxygen may drop and methane may rise, which was in fact the case. Also, a roof fall would cause permanent ventilation control devices to fail, and the air containing the methane would migrate to the coal producing faces where miners are working (Tr. 89). He confirmed that the methane levels he found would not result in a citation if the area were considered a worked-out area, but if it is considered an intake air course, methane in excess of 1.0 percent would be a violation (Tr. 94). He confirmed that a golf cart he observed in the work-out area was an ignition source, and he issued a citation for this (Tr. 95).

On cross-examination, Mr. Wirth confirmed that he was not aware that the cited 5-B area was there prior to the day of his inspection. He was told how the 5-B area was being ventilated while he was on the mine surface and was shown the mine map as it was that day and he knew where the area was when he arrived underground (Tr. 103-104). He explained his route of travel and confirmed that he was accompanied by company representative Gene Culpepper who was riding a golf cart. Mr. Culpepper was on one side of the permanent ventilation devices, and Mr. Wirth and the union walkaround representative were on the other side (Tr. 106).

Mr. Wirth stated that his methane detector did not go off while walking the area prior to going through the personnel door (Tr. 108-109). He confirmed that a stopping line ran through the area in question, even though it is not shown on map Exhibit G-2 (Tr. 111). Mr. Wirth confirmed that he has Illinois state mine manager papers, but was not current on the requirements of state law, and believed that an intake air course and return seals need to be examined 24 hours prior to a shift under state law (Tr. 112). He confirmed that there were no seals in the cited 5-B area, but they were being constructed at the mouth, and once completed, they were required to be pre-shifted prior to any work in that area (Tr. 113).

Mr. Wirth stated that as he entered the cited area with Mr. Culpepper, they passed through a pair of open air lock equipment doors. A scoop was being pulled through the doors and both sets were open because the scoop was too long, and Mr. Wirth commented to Mr. Culpepper, "aren't those doors supposed to be closed?" (Tr. 115). Mr. Culpepper replied, "yes," and closed the doors after the scoop passed through (Tr. 16).

Mr. Wirth stated that he noticed red reflectors while walking the area with Mr. Culpepper, and Mr. Culpepper told him that red reflectors indicated "return air," but stated that he did not know why they were in the area. Mr. Wirth observed no one changing any markers (Tr. 123). He further stated that Mr. Culpepper took the position that the cited area was an intake air course (Tr. 130).

MSHA Supervisory Mining Engineer Mark Eslinger testified that he reviewed Mr. Wirth's "S&S" findings in connection with Citation No. 4260292, and that he agreed with them (Tr. 135). He stated that he was in the mine nine months earlier in a different area and was concerned with the methane coming through the floor. When he was there with Mr. Wirth, it was only the second day of mining, and he was concerned that once mining started up again, methane would again come up through the floor. He also confirmed that he found methane in the worked-out 5-B floor area, and it could travel to the working section at any time (Tr. 134-137).

Mr. Eslinger stated that in approximately April, 1993, mining ceased in the 5-A active working area and the equipment was pulled back in order to mine the presently worked-out 5-B area. Mining then stopped in that area, the seal construction was started, and mining resumed in the 5-A area that was mined earlier in 1993 (Tr. 141).

Mr. Eslinger stated that .4 and .5 percent methane was

found at the faces of the active coal producing area and there was sufficient air quantity sweeping those faces. The oxygen was sufficient and there was no evidence of any carbon monoxide (Tr. 145-146). He agreed that all of the air sweeping the working faces "was up to snuff," and even though the air was within legal limits, once it ventilates the worked-out area it is return air, and it can not be used to ventilate the working faces (Tr. 147).

On cross-examination, Mr. Eslinger could not recall if the mine was placed on a 5-day spot inspection schedule after January, 1994, and he stated that such scheduling is done by the MSHA field office (Tr. 152). He confirmed that his methane detector was set to go off at 2.5 percent methane, and when he went through the permanent stopping doors in the 5-B area, it sounded, but it did not do so prior to that time (Tr. 154). He confirmed that the highest methane reading at the working face was five tenths (Tr. 155).

Mr. Eslinger stated that all of the air leaving the worked-out area would be return air that would be coursed out of the mine. Since the air had entered and ventilated the worked-out area, and was then used to ventilate the faces where mining was taking place, it was return air (Tr. 158). He stated that there was nothing in the mine ventilation plan that would allow the respondent to do what it was doing and that the mandatory sections of the regulations, and not the ventilation plan, are applicable in this case (Tr. 159).

Inspector Wirth confirmed that he issued Citation No. 4260295 (Tr. 162). He stated that the exceptions noted in section 75.507-1, paragraphs (b) and (c), do not apply to the cited conditions.

Mr. Wirth confirmed his gravity finding of "reasonably likely," and identified the hazard as the non-permissible golf cart driving through the worked-out area that was not being properly ventilated in that there was no air movement, and where a body of methane was present. Based on these conditions, he concluded that if work had been allowed to progress, it was very likely that an explosion would occur because the golf cart was an ignition source, and it would be driven into the methane, which constituted an odorless and tasteless fuel for an explosion. He identified the driver as Gene Culpepper, the respondent's representative who was accompanying him during his inspection.

Mr. Wirth confirmed that once he determined that the area was a worked-out area, he took action to keep the golf cart

out (Tr. 165-166). He confirmed that the location of the golf cart when he observed it was outby the last open crosscut and he marked the location with a circled "GC" on the mine map (Exhibit 0-2). He confirmed that the golf cart area was being ventilated by return air, and stated that the golf cart is non-permissible per se and the respondent's counsel conceded that this was the case (Tr. 170). Mr. Wirth confirmed that he did not inspect the golf cart (Tr. 171).

On cross-examination, Mr. Wirth stated that in the course of his inspection, he observed two golf carts in the worked-out area at two different times, and he observed Mr. Culpepper on one of them at the end of the evening. He did not observe the vehicle serial number and did not know if Mr. Culpepper drove more than one cart (Tr. 174).

Mr. Wirth believe that Mr. Culpepper drove the golf cart out and he allowed him to do it after the cart was pushed out of the edge of the body of methane. Mr. Wirth tested the methane before the cart was started, and it was below the permissible limit (Tr. 177). He had not yet written the citation at that time and the golf cart was not taken out of service (Tr. 180).

Mr. Eslinger testified that he is employed by MSHA as a ventilation supervisor. He holds a college degree in civil engineering and is a registered engineer in the State of Indiana. His duties include the supervision of five ventilation inspectors and evaluating and approving mine ventilation plans. He also served on an MSHA committee that rewrote the ventilation regulations, including the ones in issue in these proceedings (Tr. 195-197).

Mr. Eslinger confirmed that he supervised a saturation and ventilation inspection of the mine and five inspectors were underground inspecting different mine areas. He accompanied Inspector James Holland during the evening shift inspection on March 29, 1994, and he identified a copy of Citation No. 4266732, issued by Mr. Holland. The citation reflects that there was 1.9 percent methane and 18.8 percent oxygen present in the cited worked-out 5-B area (Tr. 199). Mr. Eslinger stated that as he and Mr. Holland were leaving the 5-B area they went through a personnel door and their methane and air instrument CMX 270 detectors sounded and recorded the readings reflected in the citation. In addition, Mr. Eslinger used smoke tubes, and Inspector Wirth took bottle samples, to confirm their findings (Exhibit G-3; Tr. 200-201).

Mr. Eslinger confirmed that Mr. Holland cited a violation of section 75.334(a)(1), which requires worked-out areas to be ventilated so that methane air mixtures and other gases and dust fumes are continuously diluted and routed into a return air course or to the mine surface. He explained that "continuously diluted" means that there is air movement that takes out gases to a return air course and to the mine surface. He confirmed that he could find no air movement in the area in question and when he used a smoke tube, "the smoke mushroomed up into the air and just stayed there; did not move" (Tr. 202). He further confirmed that he personally observed the conditions in question (Tr. 203).

Mr. Eslinger believed that the cited conditions presented a hazard because the lack of air movement indicated that the area was not being ventilated and the methane was building up and the oxygen was being depleted. The methane could rise to an explosive level and could be ignited, and it would also move towards the working section where mining was taking place. He agreed with Mr. Holland's "S&S" finding (Tr. 204-205).

Mr. Eslinger agreed with Mr. Holland's "moderate" negligence finding and he confirmed that he discussed the citation with Mr. Holland and agreed that it accurately reflects the conditions that he (Eslinger) personally observed (Exhibit G-5; Tr. 207).

On cross-examination, Mr. Eslinger explained what was done to terminate the cited conditions and indicated that certain man doors were opened up to allow air to circulate through the area in order to dilute the methane. He marked the locations of the doors on map Exhibit 0-2, as part of his explanation, and believed that more than five doors were opened (Tr. 214-220).

Mr. Eslinger described the ventilation in place as "a very unusual ventilation arrangement" in that when he initially saw it on a map he remarked that "we've got a worked-out area that's being ventilated and the air is going to the faces" and he also found that the neutral area was not ventilated (Tr. 222).

Mr. Eslinger confirmed that he found the poor quality of air in the area between the stoppings in the worked-out 5-B area. Since he detected no air movement there, he concluded that there was no continuous dilution and routing of the air into a return air course (Tr. 229-232).

Mr. Eslinger confirmed that he did not test the air in the bottom "bottle" shaped area surrounded by red stopping lines, as shown on Map Exhibit 0-2. However, after walking through the area and passing "the neck of the bottle," he found that the air quality improved (Tr. 235-36).

Mr. Eslinger stated that the cited standard requires the air to be "continuously diluted," meaning "all of the time" in a worked-out area so as to continuously move the methane. He further stated (Tr. 241):

Q. So, as long as you found one place, where there was no movement, as you've testified with the smoke tube and the cloud of smoke just hangs there, that's one place in the worked-out area where you know there was no air movement?

A. Yes. We determined that throughout this one bottle, as I'm calling it, there was no air movement.

Q. How much of an area is that bottle?

A. Mr. Wirth alluded to it before, it's about one-third of a mile by 240 feet, 250 feet; whatever.

Mr. Eslinger confirmed that he took no anemometer readings because "it would not turn in that low velocity" (Tr. 243). He confirmed that the air exiting in the worked-out area in question has to pass by the working section to get out to the return air course and out of the mine (Tr. 244).

Mr. Eslinger confirmed that Citation No. 4266733 was issued by Inspector James Holland because the cited primary escapeway was ventilated with return air rather than intake air. (Mr. Holland was unavailable for the hearing because of a "severe back problem.") Mr. Eslinger accompanied him during his inspection (Tr. 9). Mr. Eslinger stated that the cited condition violated section 75.308(f)(1), and although there was another escapeway that was ventilated with intake air, since there was a belt in it, it could not be the primary escapeway.

Mr. Eslinger stated that mine management designates the primary and alternate escapeways and marks them with reflectors. He confirmed that he was with Mr. Holland and observed the primary escapeway area and agreed that it was being ventilated with return air. He determined that the air was return air by walking the air course that was bringing air to the unit back to the point where it entered the worked-out area where the previous citations were issued, and "the air that was what the operator wishes to call intake was under our determination return air" (Tr. 258). Referring to a mine map, Exhibit G-2, he identified and located the "primary escapeway" as the "air course here on the right side of the main southeast main was designated as their intake escapeway, *** or I call it the intake; it's the primary escapeway" (Tr. 258).

Mr. Eslinger stated that the primary escapeway was designated with colored reflectors, it was required to be shown on the map of the unit, and employees should be instructed on the escape route (Tr. 259). He explained that he and Mr. Holland walked down the escapeway in the opposite direction from where mining was advancing and when they reached the old 5-B worked-out area,

they turned into it. The markings in the worked-out area were a different color, but he could not recall the color (Tr. 261).

Mr. Eslinger believed that management intended to remove some stoppings once the seals at the worked-out area were completed, and this would allow travel "straight right out of the mine" (Tr. 261). However, at the time of the inspection, the seals were not installed and the stoppings were in place. Under the circumstances, the men would have to travel a circuitous three-and-one half mile route around the stoppings to get out of the mine (Tr. 262-265).

Mr. Eslinger agreed with Mr. Holland's "moderate" negligence finding. He also agreed with the non-"S&S" gravity finding (Tr. 265-266).

On cross-examination, Mr. Eslinger stated as follows (Tr. 269):

Q. Thank you. You've heard the discussions here with respect to whether this is an intake air course or whether it's a worked-out area?

A. Yes.

Q. If it's an intake air course, then this citation wouldn't stand; is that correct? Then, the primary escapeway would have been ventilated with intake air?

A. That's correct.

Q. But, if it's a worked-out area, I guess it would have to stand in your opinion?

A. That's correct, because they did not have an escapeway ventilated with intake air that didn't have a belt. The other one was intake air, but it had a belt.

Mr. Eslinger confirmed that after the seals were completed, the cited escapeway air course became intake air and the citation was terminated. Prior to the sealing, however, the escapeway was being ventilated with return air and this did not meet the definition of primary escapeway (Tr. 270).

Mr. Eslinger stated that he did not review the mine file and that the mine map he had on file in his office did not show the ventilation arrangement shown on the exhibit and the escapeways were not marked. He was not certain about the reflector colors,

and stated that management was hoping to complete the seal work in two weeks and "we wouldn't catch it" (Tr. 274).

Mr. Eslinger stated that if anyone working at the face wanted to leave the mine by using the primary designated escape-way up one of the two entries shown on the map, they would have encountered the concrete block stopping walls and would have had to turn into the worked-out area and gone through several man doors to end up in the intake escapeway (Tr. 277).

Mr. Eslinger characterized the ventilated worked-out area as "a classic worked-out area." He stated that mining was completed (Tr. 282, 285). He confirmed that management did not submit a ventilation plan showing the method of ventilating the worked-out area as shown on the maps in question (Tr. 285). He reviewed the ventilation mine map at the time of the inspection and it showed mining taking place in the worked-out area and the ventilation scheme on that map was sufficient because it showed that mining was going on (Tr. 286). He further explained as follows (Tr. 287):

JUDGE KOUTRAS: Do you think by starting construction on that seal that it was the intent of the operator here to permanently seal that area and abandon it and never go back to mining there again?

THE WITNESS: Right. They were never going to go back. And you only seal a worked-out area. It says a worked-out area has to be either sealed or ventilated. By their own admission, to me, when they built seals, they were admitting this is worked up, we're done, we're complete.

Inspector Wirth confirmed that he issued Citation No. 4260297, citing a violation of section 75.370(a)(1), and he explained as follows (Tr. 292-293):

Q. Can you tell us the gist of the citation without reading the exact words of it, please?

A. Sure. The gist of the citation is that the operator is required to have a certain quantity of air at the end of the line curtain at all times if they're producing, cutting, loading coal on the sections, and they did not have that required amount of air at the end of the line curtain.

In fact, the vanes on the anemometer whenever I put the anemometer behind the line curtain in

between the line curtain and rib, the vanes on the anemometer would not even turn.

Referring to two sketches depicting the conditions that he observed (Exhibits G-8 and G-9), Mr. Wirth further explained that the approved ventilation plan requires that 6,500 cubic feet of air per minute be maintained at the end of the line curtain at all times while coal is being cut and loaded (Joint Exhibit-2; Tr. 296). The specific ventilation plan requirement is found at page 1, Item C-2 (Tr. 298).

Mr. Wirth confirmed that he personally observed coal being cut and loaded, and also saw a coal hauler leaving the No. 6 entry fully loaded. He also observed the machine cutting at the face and the coal hauler pulled in and loaded another car. He then informed the machine operator that there was a violation. He took a methane reading at the last row of roof bolts and it was .4 percent and within the allowable limits (Tr. 300-301). He estimated that the air at the end of the line curtain was 1,000 cubic feet per minute (Tr. 302).

Mr. Wirth confirmed his "S&S" gravity finding, and stated that he based it on the presence of methane 100 feet below the cited area at the old Peabody works, a gap in the line curtain at the floor level, and the curtain was not maintained to within 40 feet of the face. He conceded the methane level he found was "way below" the allowable limit (Tr. 304). However, he believed that it was reasonably likely that the lack of air would result in a build-up of undiluted methane and present an explosion hazard (Tr. 306). He confirmed that mining in the cited area had discontinued for ten months because of excessive methane and had only resumed for 2 days prior to the inspection (Tr. 307-308).

Mr. Wirth confirmed that the respondent drilled bore holes to bleed out the methane and MSHA was aware of the fact that mining had started up again (Tr. 310). He confirmed that the respondent's prior experience with methane in the old Peabody works "very much so" influenced his "S&S" finding because management "is aware of the methane problems that they had in that area, and they are aware that the mine is still below them" (Tr. 311). He also considered the presence of some methane, no air, and the presence of operating equipment (Tr. 313).

Mr. Wirth confirmed that the mining machine was taking "long cuts" and that it was a remote controlled machine, and he believed the violation was "very obvious." The section foreman or mine operator should check the air at the end of the line curtain, and when the amount of air is less than that specified in the ventilation plan, production should cease until the air is restored (Tr. 312).

On cross-examination, Mr. Wirth explained his sketches, and he could not recall the crosscut number, but did remember the entry (Tr. 315). His notes reflect the location as the No. 6 entry, and the crosscut is not identified (Tr. 317). He confirmed that Mr. Eslinger and Mr. Bird were with him in that entry (Tr. 319). He also stated that company representative Ed Hatcher came to the section with them "but refused to go to the

face because he told us that he did not want to be responsible for what we might see" (Tr. 323).

In response to further questions, Mr. Wirth stated that he observed no evidence that the line curtain was ripped or partially torn down, and there was no line curtain lying on the mine floor in the entry. Although there was a gap at the bottom of the curtain and it did not go all the way to the floor, this would make no difference as long as the air was maintained at 6,500 cfm (Tr. 326).

MSHA Mining Engineer Michael Bird testified that he received a B.S. Degree in mining engineering from the University of Missouri in December, 1985, and after working in private industry became employed with MSHA in April, 1992. He holds State of Alabama mine foreman papers, and his present duties include the review and approval of mine maps and ventilation plans and conducting ventilation inspections (Tr. 337-339).

Mr. Bird confirmed that he issued Citation No. 4261610 and that Mr. Wirth was with him during the inspection. He explained that he observed that the line curtain was set back more than the required 40 feet, and that he measured the distance as 66 feet from the deepest penetration to the end of the curtain. Section C-2, page 1, of the ventilation plan concerning long cuts states that "using remote control miners, the line curtain will be maintained to within 40 feet of the deepest penetration of the face" (Tr. 340-341).

Mr. Bird stated that when he and Mr. Wirth walked into the No. 6 entry, he saw a loaded coal car leaving, and saw coal being loaded. He identified the operator of the remote control miner as Steve Burgess. He confirmed that the miner measured 36 feet from the bits to the tail, and the distance from the curtain to the last row of roof bolts was 30 feet. The point of "deepest penetration" would be at the coal face where the miner bits are cutting. The curtain must be up while coal is being cut or loaded (Tr. 342-344). He explained his "S&S" finding, and confirmed that three miners were exposed to an ignition hazard (Tr. 345).

Mr. Bird stated that he based his "high negligence" finding on the fact that the cited condition was obvious. He explained that the miner operator knows that he can cut with the curtain within 40 feet of the face, and it was obvious in this case, where the miner "is sunk all the way into the last row of bolts, you're over 40 feet" (Tr. 346).

Mr. Bird stated he did not observe any line curtain on the ground or a shuttle car dragging a curtain away (Tr. 352). When asked why he initially determined that the violation was unwarrantable, Mr. Bird replied, "at the time I looked at that, know or should have known. It was right there," and coal was being continuously loaded (Tr. 354-355). He would not have issued a citation if the curtain had been dragged off and loading had stopped in order to hang it back up. However, he saw no evidence that this was the case (Tr. 355).

On cross-examination, Mr. Bird explained how he measured the curtain distance and what he observed in connection with the equipment operating and traveling through the entry in question, and the cutting and loading of the coal (Tr. 356-360). His notes reflected that the "remote control miner was cutting and loading coal in the number 6 entry" (Tr. 362). His notes also stated that "after the order was abated, the miner loaded one more ram car of coal to complete the cut" (Tr. 373).

Mr. Eslinger was recalled, and he stated that he arrived at the location in question before Mr. Bird and Mr. Wirth and as he walked up the entry a loaded shuttle car came through the curtain. As he watched it, another one came by and pulled in and he watched as it was being loaded. After it left, a third shuttle car pulled under the miner tail and loading started. He then pointed to it, and Mr. Wirth and Mr. Bird proceeded to make their measurements and mining was stopped (Tr. 375-376). Mr. Eslinger did not observe a ripped curtain or any curtain being dragged off by a shuttle car. The curtain was being hung off the floor and there were no nails in the roof header boards to indicate that it was hung up to the last full roof bolts (Tr. 378).

Mr. Wirth was recalled, and stated that as he walked through the curtain in the No. 6 entry, he observed a fully loaded ram car leaving the entry away from the miner outby to the feeder. He also observed another car come out of the crosscut and it was waiting for the car that was fully loaded. The empty car pulled in under the miner and it was in the process of starting to load when he walked in. He then "went to the end of the line curtain, attempted to take an air reading, informed the operator that there was a problem, there was a violation and they shut the machine off" (Tr. 380).

Mr. Wirth stated that he did not observe any torn curtain being dragged off by a shuttle car and observed no rips in the curtain or nails or nail holes in the header boards where a curtain could have been hung, and saw no evidence that there ever was a proper amount of curtain. He confirmed that after the miner was shut down, the face boss, Roy Wiggins, brought in a brand new line curtain, and it was not dirty, ripped or torn, and it was obvious that it was a new curtain that "had just come off a new roll" (Tr. 384).

Respondent's Testimony and Evidence

Paul Smock, respondent's superintendent of underground operations, testified that he has 28 years of mining experience and has worked for the respondent since 1980. He is a high school graduate and has conducted mine training and rescue classes at a local community college and vocational school. He confirmed that the mine is located above an old mine that liberates methane and which "has posed a problem for us for years." He confirmed that the active mine is on an exhaust ventilation system and that air is drawn in to the mine and pulled out. He identified Exhibit 0-2 as a mine map showing the mine workings as of March 29, 1994, and confirmed that it was prepared for the hearing in these matters. He explained the map markings and the air directions, including the intake and return air, and stated that once the air crosses the active working faces it becomes return air as shown by the map arrows with a dot on the shaft (Tr. 394-405).

Mr. Smock stated that the entire 5-B area up to the 5-A face area, as shown on the map, is an intake air course and not a worked-out area. He defined a "worked out" area as follows (Tr. 406):

A. A worked-out area is an area where mining has been completed. There is more to mining than just cutting coal. Rock dusting is mining, building stoppings is mining, making belt moves is mining.

We have finished cutting coal in this area, but mining wasn't done because I had to get out of there. I had a building seals in there.

Mr. Smock stated that sometime previous to March, 1993, the 5-A face area was abandoned because of the methane and the unit was pulled back to the 5-B area. On or about March 25, 1993, coal removal was completed in the 5-B area, and the move back to the 5-A area would take two to three days. At the same time, work was in progress to reclaim and seal the 5-B area, and he stated that, "we wanted out of there as quickly as we could possibly get out of there" because of various gas bleeders and pillar squeezing (Tr. 408-411).

Mr. Smock stated that on March 29, he still had belt, framing drives, and power boxes in the room inby the area where the seals were being constructed in the 5-B area. He stated that, "this was my last room set up. That what is. When that was mined, I was through, and I was out" (Tr. 413). He further explained that the area was "troubled" before the inspection because the pillar squeezing "was messing up my ventilation system," and he still had to examine the entire 5-B area as an intake air course (Tr. 414).

Mr. Smock identified the red markings on map Exhibit 0-2, as permanent stoppings or permanent ventilation controls, and he characterized the areas between the markings as "neutral air." He explained how these areas were ventilated to keep the methane below the legal limit. He stated that the methane is blended with the air flowing through the neutral area and is diluted and is carried out of the mine (Tr. 416).

Mr. Smock stated that the seals were being constructed "just inby the 460 foot mark" as shown on Exhibit 0-2, and a stopping line was being established for an air course once the area was sealed. However, in order to travel in and out to remove the equipment, wooden doors were constructed to allow for travel and to establish the air course. In order to keep the neutral area free of methane while all of this work was being done, he personally opened up three man doors and he marked the locations on the map exhibit with orange circles. He opened the doors to clean out any methane. He believed this was sufficient to dissipate the methane and he tested the area with his "checker," but took no bottle samples (Tr. 416-423).

Mr. Smock stated that his project man, Melvin Winters, was told to keep the doors open in order to ventilate the 5-B neutral areas, but that Inspector Wirth ordered the doors closed and the flow of air stopped, and this caused the methane to build-up and

endangered everyone in the mine. Mr. Smock stated that "he had a fit" when he learned that the doors were closed by the inspector, but he was not present at the scene to discuss it with him (Tr. 424-426).

Mr. Smock stated that after pulling out of the 5-A area because of methane, and moving to the 5-B area, a bore hole was drilled and it took several months to bleed the methane out of the 5-A area. He confirmed that the violation was abated by opening the doors in the 5-B area to reduce the methane down below the one percent level. The doors were not the same ones that he had opened (Tr. 429-431).

Mr. Smock stated that the "old southeast" area of the mine is similar to the 5-B intake air course and both areas are inspected by mine examiners every shift as intake air courses (Tr. 436-438).

Mr. Smock stated that at no time did any methane in excess of one percent ever reach the working faces, and at no time were miners at the working face ever exposed to excessive methane (Tr. 443).

On cross-examination, Mr. Smock explained the steps taken to address the methane problem in the 5-A area, and he stated that the old mine below that area is not full of water, but "we still get periodic gas bleeders in that area but nothing like what we had" (Tr. 448).

Mr. Smock confirmed that he had finished cutting coal in the 5-B area and that it consisted of panels and rooms and that no more coal was going to be mined (Tr. 449). He agreed that the distance around the perimeter of the 5-B area was approximately two-and-one half to three miles, and confirmed that during March 29 or 30, 1994, he was in that area every day. In addition, mine examiners would have been there daily to examine the area of deepest penetration, the seal area where work was in progress, and the intakes for an air course (Tr. 452-453).

Mr. Smock confirmed that his mine examiners were required to walk the perimeter of the 5-B area weekly after all of the mining work was completed, and they were required to note this in a book and to place their initials on a date board (Tr. 456). Pre-shift examinations were conducted at the seal areas and the 5-B perimeter areas (Tr. 459).

Mr. Smock stated that when the seals were constructed, the only equipment left in the 5-B area was a belt line, a unit of equipment, high voltage, and a water line. He confirmed that he was in the process of building frames for the seven seals that

would have sealed the 5-B area and only a couple of seal forms had been constructed at the time of the inspection, and none had been completed at that time.

Mr. Smock did not believe that he needed overcasts to carry the air from the 5-B area to the return air course. He explained that he had no reason to split the air because he only had one unit mining coal during the period in question. He explained that the neutral air in the 5-B area was ventilating the area where the seals were being constructed and that the air leaving the 5-B area was ventilating the coal producing unit at the 5-A area. The coal producing unit consisted of a cutting machine, loading machine, roof bolters, and a scoop, and the equipment used at the seal area was "probably a scoop, jeep," but he did not consider that to be a unit. He confirmed that he had a crew in the 5-B area doing seal and reclaim work, and a crew in the 5-A area mining coal (Tr. 475-477).

Mr. Smock confirmed that the source of the air used to ventilate the 5-B area was the air coming down the belt haulage-way, and after sweeping the perimeter of the 5-B area, the air continued down the haulage entry and swept across the 5-A faces (Tr. 478-482).

Mr. Smock did not dispute the 1.8 percent methane found by the inspectors in the 5-B area and he stated that "there had to be methane in there when he closed those doors. It had to build up" (Tr. 482).

Mr. Smock stated that once the seals were completed, the doors behind the seal area would have been removed and replaced with a stopping because a stopping line and an air course would be needed to sweep the seals (Tr. 493).

In response to further questions, Mr. Smock stated that the MSHA inspector who was in the 5-B area prior to March 29 and 30, knew about the work in that area. He could not identify any inspector by name, nor could he recall any specific conversations with any inspector (Tr. 498). He confirmed that the manner in which the 5-B area was being ventilated at the time of the inspection was not covered or authorized by the ventilation plan approved on June 17, 1993 (Joint Exhibit-2) (Tr. 499).

General Mine Manager Edward Hatcher testified that he has worked for Brushy Creek for 15 years and that he has 25 and 1/2 years of mining experience. He explained his education and training, and stated that he holds dust control

and underground electrical certifications, mine manager, mine examiner and hoisting engineer's papers, and a coal mine EMT certificate from the State of Illinois (Tr. 508).

Mr. Hatcher stated that he visited the 5-B area on the morning of March 29, 1994, to check on the reclaiming work in progress. He stated that belt framing, belt lines, a piece of unhooked high voltage cable, and parts from a miner machine were in the area and were in the process of being removed, and he marked the mine map to show where the equipment was located (Tr. 510-511).

Mr. Hatcher stated that Illinois mining law prohibits any interference with air ventilation, including doors, without permission from the mine manager (Tr. 513). He stated that he found no methane in the 5-B area when he was there early on March 29, and believed that the methane found by the inspectors resulted from the closing of the doors at the mouth of 5-B, which shut off the air flow to the area where the methane was found (Tr. 515). He did not discuss this with the inspectors, and did not discuss with Mr. Wirth about his instructions to Mr. Culpepper to shut the doors (Tr. 516-517).

Mr. Hatcher stated that the pre-shift examiner's report for the 8:00 a.m. to 4:00 p.m. shift on March 29, 1994, reflects that except for the places noted, the No. 5-B intake air course area was safe "in its entirety from the faces out" (Exhibit 0-3; Tr. 519-520). He confirmed the excessive methane citation was abated by opening certain doors, and at 8:00 a.m. on March 30, the methane was below one percent (Tr. 521).

Mr. Hatcher stated that he accompanied Mr. Eslinger and Mr. Wirth on March 30, during the abatement of several citations in the 5-B area. They then proceeded to the 5-A area and Mr. Hatcher left to call Mr. Smock to inform him about the abatements "in the old works" and Mr. Eslinger proceeded to the face. Mr. Hatcher denied that he told Mr. Eslinger that he did not wish to go to the face because he did not want to see what was going on, and he explained that he told Mr. Eslinger he could not accompany him because he had to call Mr. Smock (Tr. 526).

Mr. Hatcher stated that the line curtain and air citations were abated before the inspectors left the area (Tr. 528). He did not conference these citations with MSHA, "because they were written and they were abated and as far as I was concerned, it was over with" (Tr. 531).

On cross-examination, Mr. Hatcher confirmed that there was no separate split of air from the air intake area going into

the 5-B area and a separate split of air going down to the 5-A working face (Tr. 534). He explained the use of doors for ventilation and stated that the doors in question were constructed to be used at a later date when a certain point was reached on the construction of the seals. The doors were built to be left open and were not to be used as part of the ventilation of the seal area (Tr. 538). He further indicated that the personnel doors were specifically opened in the area in question to dilute the methane (Tr. 540).

Mr. Hatcher stated that he was in the neutral 5-B area and not in the intake air course when he made his methane spotter tests. He stated that he entered both of the "bottle areas" and found no methane over one percent. He only activated a smoke tube when he found .9 percent methane and "saw that I had movement. No problem" (Tr. 562). He believed that the methane citation was the direct result of the inspector ordering the closing of the two wooden doors (Tr. 562).

Mr. Hatcher confirmed that he did not conference the line curtain citation and that he was not present when it was issued (Tr. 565-566). He also confirmed that he did not observe the cited conditions concerning the line curtain. He did, however, accompany Mr. Eslinger to the face after the citations were issued and after returning to the area after speaking to Mr. Smock. He did not see any haulage cars pass by because he was away from the feeder area where the cars were heading (Tr. 577-578).

Shift Mine Manager Steve Reynolds testified that he accompanied Inspectors Holland and Eslinger during the March 29, 1994, inspection of the 5-A face area and the 5-B air course. They walked around the perimeter going outby the intake air outside of the stoppings and he observed two locations where Richard Doty had initialed and dated the inspection boards for March 29, and he pointed these out to Mr. Eslinger (Tr. 584-589).

Assistant Safety Inspector Roy Gene Culpepper has worked for Brushy Creek for 13 years, and has 23 years of mining experience. He stated that he accompanied Mr. Wirth and a union representative during the inspection on March 29, 1994. He met Mr. Wirth at the 5-B seal area, and he observed newly constructed wooden air lock doors in that area. A crew supervised by Melvin Winters had constructed the doors and they were doing reclaiming work and working on the seals (Tr. 589-592).

Mr. Culpepper stated that the doors were 30 to 35 feet apart and opened and there was a scoop half way through the inby door. He did not know whether the doors were supposed to remain open

or closed, and Mr. Wirth instructed him to close the doors (Tr. 593). Mr. Culpepper stated that Mr. Wirth and the union representative walked along the outside perimeter of the intake area and he drove along the inside of the stoppings in the neutral area in a golf cart, and he would stop and speak with them periodically. He had his methane detector on the entire time and it never sounded (Tr. 595).

Mr. Culpepper explained his route of travel, and he stated that at one point Mr. Wirth told him that some areas were cut too deep, that the reflectors were going the wrong way, and that a citation would be issued because the 5-B unit was being ventilated by return air. Mr. Culpepper stated that he told Mr. Wirth that it was an intake air course and Mr. Wirth replied, "that's what I've been told to do, and that's what it is" (Tr. 596). Mr. Culpepper stated that his golf cart went dead and he left it on charge and he was picked up by walkaround Wendell Gary in his cart and they proceeded along the neutral area looking for the inspectors when he observed someone in the next entry flagging him. Mr. Culpepper got off the cart and started towards the individual and his methane detector started sounding. All of the inspectors, including Mr. Wirth, Mr. Holland, Mr. Bird, and Mr. Eslinger were there and the methane detector continued to sound. Mr. Culpepper was told that there was methane in the area and that he would be cited for having a non-permissible golf cart in the area (Tr. 598-603, Exhibit G-4). He offered to push the cart out of the area, and Mr. Eslinger advised him that he would check the methane and allowed him to drive the cart out and Inspector Holland went with him (Tr. 603).

Mr. Culpepper stated that he next traveled to the 5-A face area in a cart with Inspector Bird. He left Mr. Bird to find section foreman Roy Wiggins and found him at the back side of the feeder "cleaning up a pile of coal or something, I don't know. I didn't know he was back there working" (Tr. 605). Mr. Culpepper then proceeded to the face where he encountered Mr. Eslinger, Mr. Bird, and Mr. Wirth, and they informed him that they had issued a (d) citation and order for insufficient air at the face and a curtain that had been torn down (Tr. 606). Mr. Culpepper left to find Mr. Wiggins and found him coming from the feeder area dragging a piece of old curtain. He told Mr. Wiggins about the citation and order and returned to check on the abatements (Tr. 607).

Mr. Culpepper identified Exhibit 0-4 as a map or sketch of what he observed and the area where Mr. Steve Burgess stated Mr. Eslinger was standing (Tr. 609). Mr. Culpepper described what he observed, including the location of the curtain. He confirmed that he made a notation "curtain taken down by car"

on the sketch because "that's what I thought," but he did not see the car take the curtain, and he did not speak to the car operator (Tr. 611-613). He confirmed that he saw that a curtain was missing and down in the area, but did not know what happened (Tr. 614).

Mr. Culpepper stated that he was subsequently told by the miner operator Steve Burgess that he thought that a car had taken the curtain down (Tr. 615). Mr. Culpepper stated that the mining machine was shut off when he reached the face area, and he could not recall whether a buggy or ram car were there or coming out at that time (Tr. 617-618). Mr. Culpepper identified Exhibit 0-5 as a copy of the notes he made (Tr. 619).

On cross-examination, Mr. Culpepper stated that the reflectors in the 5-B area where he was riding while Mr. Wirth was walking were blue, and Mr. Wirth told them that the reflectors in the area that he was in were red, which "would have been significant for a return air course off the old unit down there" (Tr. 620).

Mr. Culpepper stated that he did not take an air reading at the end of the line curtain in question, and he confirmed that the sketches were made six months after the violations for use in this litigation and the information was taken from his notes (Tr. 621). He explained his sketches (Tr. 622-626). Mr. Culpepper took exception with the sketch of the location of the check curtain as drawn by the inspectors and his sketch and he stated as follows (Tr. 629-630):

JUDGE KOUTRAS: I want to know the difference between the way you claim it was and the difference in the way the inspectors claim it was. Now, what you're telling me now is, the only difference is the position of the curtain on their diagram and the position of the curtain on your diagram, right?

THE WITNESS: Yes, sir.

JUDGE KOUTRAS: Now, on your diagram, was that curtain more 40 feet from the working face?

THE WITNESS: Yes, sir.

JUDGE KOUTRAS: It was. Isn't it required to be to within 40 foot of the face when the machine is cutting and loading?

THE WITNESS: Yes, sir.

JUDGE KOUTRAS: If the machine was cutting and loading, that would be a violation, wouldn't it, even by your diagram?

THE WITNESS: Yes, sir.

David H. Pait, Safety and Human Resources Manager, testified that he has served in that position since December 1991. He has a B.S. degree, with a vocational education major, and a masters degree in business administration. He has all MSHA certifications, except electrical instructor, and has Kentucky mine and surface mine manager's papers, and Illinois mine manager papers (Tr. 662-663).

Mr. Pait stated that his duties include the writing of ventilation plans, and he confirmed that he wrote the plan that is Joint Exhibit-2 (Tr. 664). He stated as follows (Tr. 665):

A. On the night of the 29th when Mr. Eslinger was getting ready to leave 5-A section and walk the intakes, he informed me that he was going to walk the intakes and that if what he thought was true, I was going to get a bunch of violations. And I asked why and he said, 'Because you're airing this section with return air.'

Q. What did you tell him?

A. I couldn't believe it. I said, 'What do you mean, return air?' He said, 'Well, that's off of old works, so it's return air.' I said, 'Those are intake air courses.' That was my position.

Mr. Pait stated that the ventilation plan did not prohibit the ventilation configuration in use on the perimeter of the 5-B area on March 29, 1994. He stated that MSHA reviews such plans every six months and that the word "neutral" appears in the plan. He identified ventilation plan drawing AO715-1, titled "Typical Room and Pillar Mining Plan Evaluation Point," and he explained the legend and markings that appear on the drawing, including the designated evaluation points that are examined by the mine examiners. He further explained that the 5-B area did not have stated definite evaluation points and that the preshift examiners would initial "at the point of deepest penetration or somewhere within that area between the beginning and the end to indicate that they had, indeed, traveled -- made the route in

its entirety" (Tr. 670). He stated that Mr. Doty inspected the 5-B area on the second shift the day the inspectors were there, and he believed it was regularly inspected (Tr. 670-671).

Mr. Pait identified the area where the seals were being constructed, and where the two wooden ventilation air lock doors were located in the neutral travel road. The doors were approximately 20 feet wide and 5 feet high, constructed of plywood and timbers and coated with fire-proofing material, and they were made to open for machinery to pass through. It was also intended that air pass through the doors into the neutral area (Tr. 674).

Mr. Pait also identified the metal personnel doors that Mr. Smock testified about, and the purpose in opening all of these doors, including the wooden equipment doors, was to establish and pull the air down the neutrals to keep them clear. All that was required was some air movement or trickling through the neutrals around the perimeter of the 5-B area (Tr. 676).

Mr. Pait stated that the 5-B intake air perimeter area would have been a designated primary escapeway beginning on March 28, but Mr. Smock informed him that the unit had moved to the 5-A area, and Mr. Pait advised the second shift that the intake escapeway needed to be reestablished by changing the reflector colors, but only a portion of the work area was completed (Tr. 677-678).

Mr. Pait confirmed that he was familiar with the cited standard, section 30 C.F.R. ' 75.332(a)(1), and he stated as follows (Tr. 679):

A. Mr. Eslinger is of the opinion that's it's a worked-out area. I'm of the opinion that it was an intake, and the reason and the rationale I gave him at the time and that I still believe is, that in part 75.300, the definition of a worked-out area excludes returns, the belt and entries and intake air courses. And this was an intake air course after that unit moved back in the straights. From my perceptive, that's the way it is. He holds a different opinion.

Q. So, in your view, it's either intake air or return air, and if it's either of those, it's not a worked-out area?

A. Yes, sir.

Q. And in his view it's worked-out area and, therefore, it can't be intake?

A. Yes, sir.

Mr. Pait confirmed that map Exhibits G-2 and O-2 show the same approximate areas, but that G-2 was completed after April 11, 1994, and shows several "sealed" 5-B areas and does not include all of the relevant stoppings or permanent ventilation devices that existed on March 29, 1994 (Tr. 680-683). He explained the prior mining difficulties and methane problems encountered in early April, 1993, and the efforts made to address the problem. While the methane was being bled off the 5-A area, mining moved to the 5-B area, and when that was finished, it moved back to the 5-A face area (Tr. 687).

Mr. Pait stated that he had no personal knowledge or information about the ventilation curtain citations and he confirmed that he was on the surface when Mr. Culpepper called him and advised him that a (d) citation and (d) order were being issued because "the curtain is back 66 foot and there is no air on the miner" (Tr. 687).

Mr. Pait was not cross-examined by the petitioner. However, in response to certain bench questions, Mr. Pait stated that he saw nothing wrong with the intake air sweeping the perimeter of the 5-B area and then exiting down the entry, around the 5-A working faces, and out of the mine. He stated that there was 39,000 cubic feet of air flowing out and only .3 percent methane on the section. He confirmed that this was his first experience with the new regulation and that he and Mr. Eslinger had a difference of opinion (Tr. 691). Mr. Pait believed that it was management's prerogative to establish intake air and to designate where it would go when it writes its ventilation plan. He confirmed that if a designated area is a worked-out area it can not be an intake, and if it is determined that the 5-B area was worked-out on March 29, 1994, it would be a violation (Tr. 692).

Roof bolter operator Steve Burgess testified that he was operating the continuous miner machine at 5-A face on March 29, 1994. He stated that he was making a straight remote cut in the No. 6 entry, and he was standing on the right side of the entry away from the machine. He explained the cutting sequence, and stated that when he first saw the inspectors he was through cutting coal and was backing the machine up to clean the place up so that it could be roof bolted. He did not consider cleaning up coal to be cutting or loading coal because, "I'm not cutting any

coal. I'm just cleaning up loose coal on the ground where I have already made a cut" (Tr. 640-643).

Mr. Burgess stated that he checks the line curtain before starting the cuts, but does not take an air reading because he does not have an anemometer, and the face boss takes the reading. He stated that Roy Wiggins checked the air volume. When the inspectors appeared, Mr. Wirth checked the air "and there wasn't any air there because all of our curtain wasn't there" (Tr. 644).

Mr. Burgess explained that he had cut the left side of the entry when the car that was leaving hooked the curtain and took out the bottom skirting and "I knew he wouldn't have any air there," because the remaining curtain was four feet off the ground (Tr. 645). He stated that he saw the curtain come down and leave (Tr. 645). He further stated that approximately 30 feet of the 70 foot long curtain was torn down, and there was no skirting on the last five or six feet of the curtain toward the face (Tr. 646-647). He did not cut or load any coal after the curtain was torn down (Tr. 648).

On cross-examination, Mr. Burgess stated that when the inspectors arrived he was backing the cutting machine out and he was heading into the face area to clean it up. He stated that there was approximately three-quarters of a ram car of coal to be cleaned up, and that it is loaded into the car. When asked if he loaded the coal immediately prior to the arrival of the inspectors, he replied, "I didn't clean the place up, no. They stopped me" and "there wasn't a car there yet, but I wasn't ready to clean up yet whenever I saw them walking up" (Tr. 650). He further explained (Tr. 650-651):

A. I was still backing the machine out, ready to position it on the right side of the cut to clean up.

Q. Had you loaded any coal from this area from any prior clean-up?

A. I had just cut a 35-foot remote cut in that place.

Q. Where did the coal go from that cut?

A. I'm not sure what you're asking me.

JUDGE KOUTRAS: After you took that 35-foot cut, what happened to the coal?

THE WITNESS: It was dumped in the ram cars and

hauled out to the belt tail and dumped on the belt.

Mr. Burgess stated that approximately a year ago while he was preparing to clean up a place that he had cut, an inspector told him that he did not have to maintain the air while he was cleaning up and "since that time I was under the impression, right or wrong, that you evidently didn't have to have 6500 feet of air behind your line curtain to clean a place up" (Tr.655-656). Abatement was achieved by obtaining a curtain from a roof bolting machine nearby, and he stated that, "we had gotten the curtain off there earlier to hang in there to start with" (Tr. 657). He confirmed that the curtain was new and was not yet up to replace the missing curtain, and the old piece was used as skirting (Tr. 660). He stated that he told Mr. Wirth that the curtain had been torn down by a dump car. After the order was terminated, he cleaned up the place and loaded the coal out of the face (Tr. 661).

Mr. Eslinger was called in rebuttal by MSHA and he confirmed that the two escapeway citations referred to by Mr. Pait have been vacated by MSHA as part of a settlement. He stated that the only indication he had that management was treating the 5-B area as an intake air course were the statement by Mr. Smock, Mr. Pait, Mr. Hatcher, and Mr. Culpepper. He found no evidence of any preshift examinations being made as required by section 75.360(b)(6). He confirmed that his opinion that the 5-B area was a worked-out area and not an intake air course, is the position of MSHA in this matter. He explained that the new regulations had been in effect for less than two years, and in anticipation of litigation, he presented the facts in this case to a gathering of MSHA district ventilation supervisors and coordinators at a meeting in Beckley, West Virginia, in August and they all agreed that the 5-B area was a worked-out area and that "he should have no problem" in establishing this (Tr. 696-702).

Mr. Eslinger stated that he would consider the 5-B area to be an abandoned area "because they weren't mining it" (Tr. 704).

He stated that there was not much difference between an abandoned area and a worked-out area that is now defined in the new rule. With regard to the contention by management that they were still recovering equipment from the 5-B area, Mr. Eslinger pointed out that section 75.332(a)(1) requires a separate split of intake air where equipment is being removed and that the same air venti-lating such an area can not simultaneously be coursed through an active working section. It must be done separately. His position is that the air used to ventilate the 5-B area became return air and was used to ventilate the 5-A working faces (Tr. 705).

Mr. Eslinger agreed that the 5-B and 5-A ventilation methods in use at the time of the inspection were not a normal mining practice, and he explained as follows (Tr. 706):

THE WITNESS: This is not normal mining practice, right, and I agree with that when mining ceased here because of the gas in the 5-A area, that they had to go somewhere with the unit. So, they backed up and they went here. Like Mr. Smock said, to go off the intake side, they would have preferred to go out the return side.

I think the key thing here is that they should have made preparations for coming out of here and built overcasts to split the air or when they recovered this equipment, wait a period of time until this area was sealed and then go back in here. If they had waited until this was sealed and not started mining down here, we would not have written the citations that we did.

Mr. Smock alluded to the problems of ventilating this area. He talked about taking the belt area in here and dumping it into the air course so they were getting belt air to the face. There were ventilation problems that were occurring because of the sequence of events that happened, whether they called intake or worked-out. They set themselves up into a series of violations. We said that this is a worked-out and subsequently wrote the violations that we did.

Mr. Eslinger confirmed that when the 5-B area was being mined it was ventilated by intake air, and that "when the air passed the last working place on the unit, then it became return air" (Tr. 707). He agreed that interruption of mining at the 5-A face area because of the methane, and the withdrawal to the 5-B area presented a unique case (Tr. 709). He also agreed that there were no methane levels or lack of oxygen that would have endangered miners on March 29 and 30, 1994, and stated that, "I never saw any methane levels in the working section that were above the accepted levels" (Tr. 709).

Mr. Eslinger expressed concern about the curtain violations because of the prior methane problems that were addressed by the drilling, and his concern was that there was still a potential for encountering methane again. He did not believe the closing of any wooden doors in the 5-B area caused the methane buildup in that area (Tr. 711). He did not believe that the cited missing curtain was ever installed, and stated that he stood back in the crosscut watching the mining when Mr. Wirth took his air reading.

He also watched a full car load, and a second car starting to load, and there was no curtain reaching up to near the tail of the mining machine (Tr. 713).

On cross-examination, Mr. Eslinger stated that he saw no evidence that examiner Doty walked or drove the entire perimeter of the 5-B area. He confirmed that he did not check each of the 40 or 43 examination places, but looked at some of them and saw no examination dates, times, or initials (Tr. 715-717). Referring to a UMWA letter of March 21, 1994, that prompted the inspections in question (Exhibit ALJ-1), Mr. Eslinger stated that there is nothing illegal about ventilating sealed mine areas with intake air that is then used to ventilate a working section (Tr. 720). He confirmed that improvements were made in the mine ventilation and he "found more air per unit than I had ever seen in the history of Brushy Creek Mine" (Tr. 721).

Mr. Eslinger stated that on March 30, 1994, he found only .4 and .5 percent methane at the 5-A face area and improved ventilation, but he was still concerned about the fact that mining was taking place where the methane had come through the mine floor (Tr. 724). He confirmed that he could have anticipated that mining would take place in the 5-B area, but did not raise this with mine management (Exhibit 0-6; Tr. 726-728).

Findings and Conclusions

Citation No. 4266730 (LAKE 94-172-R; LAKE 94-251)

This citation was issued by Inspector Holland on March 29, 1994, and he cited a violation of 30 C.F.R. ' 75.503, after observing a non-permissible golf cart operating in the last open crosscut between the No. 5 and 6 entries. Section 75.503 requires that all electric face equipment taken into or used in by the last open crosscut be maintained in permissible condition.

The parties agreed to settle this violation and MSHA filed a motion pursuant to Commission Rule 31, 29 C.F.R. ' 2700.31, seeking approval of the proposed settlement. In support of the motion, MSHA's counsel stated that the initial negligence and gravity levels determined by the inspector remain unchanged, and counsel agreed that Brushy Creek demonstrated good faith in abating the cited condition. However, in view of the fact that the number of persons affected by the violation has been reduced from seven to three, counsel asserted that a reduction from the initial proposed penalty assessment of \$595 to \$310 in settlement of the violation was warranted (Tr. 16-18).

Pursuant to Commission Rule 31, 29 C.F.R. ' 2700.31, the proposed settlement was approved from the bench (Tr. 17-18). My decision in this regard is herein **AFFIRMED** and the settlement **IS APPROVED**.

Citation No. 4260292 (LAKE 94-168-R; LAKE 94-250)

Brushy Creek is charged with a violation of 30 C.F.R. 75.332(a)(1), because the inspector believed that the air leaving the 5-B "worked-out" area, after ventilating that area, was return air that continued traveling inby where it was used to ventilate the active 5-A working faces where coal was being mined before it exited the mine through the return. He concluded that both of these areas were being ventilated by the same split of return air, and that the active face area was not being ventilated by a separate split of intake air as required by the cited standard, which provides as follows:

- ' 75.332 Working sections and working places.
 - (a)(1) Each working section and each area where mechanized mining equipment is being installed or removed, shall be ventilated by a separate split of intake air directed by overcasts, undercasts or other permanent ventilation controls.

Citation No. 4260295 (LAKE 94-171-R; LAKE 94-251)

Brushy Creek is charged with a violation of 30 C.F.R. ' 75.507-1, because the inspector observed a non-permissible golf cart traveling in the 5-B "worked-out" area. The inspector concluded that this area was a return air course, and since the golf cart was non-permissible (this is not disputed), he cited a violation. The cited standard provides as follows:

- ' 75.507-1 Electric equipment other than power-connection points, outby the last open crosscut; return air; permissibility requirements.
 - (a) All electric equipment, other than power-connection points, used in return air outby the last open crosscut in any coal mine shall be permissible except as provided in paragraphs (b) and (c) of this section.

Citation No. 4266732 (LAKE 94-173-R; LAKE 94-250)

Brushy Creek is charged with a violation of 30 C.F.R. ' 75.334(a)(1), because the inspector found 1.9 percent methane and 18.8 percent oxygen levels in the 5-B "worked-out" area. He

concluded from this that the area was not ventilated so as to continuously dilute and route methane to a return air course. The cited regulation provides as follows:

- ' 75.334 Worked out areas and areas where pillars are being recovered.
 - (a) Worked-out areas where no pillars have been recovered shall be-
 - (1) Ventilated so that methane-air mixtures and other gases, dusts, and fumes from throughout the worked-out areas are continuously diluted and routed into a return air course or to the surface of the mine; or
 - (2) Sealed.

The parties agreed that the critical issues here are whether the cited area was in fact a worked-out area, and the interpretation and application of the regulatory words "continuously diluted" (Tr. 251). MSHA's position is that the intent of the regulation is to insure that all worked-out areas are ventilated so as to continuously dilute and move all methane into the return. Since the inspector found 1.9 percent methane and 18.8 percent oxygen levels in the cited worked-out "bottle" area that has been characterized by Brushy Creek as "neutral" air, MSHA concludes that the ventilation was not doing the job by continuously diluting methane and moving it out of the area. Even though the air that eventually found its way to the active 5-A mining faces was clear of methane, which indicates that it has been diluted at that point, MSHA nonetheless argues that the methane found at the cited location was not diluted and carried away, and if left undetected and unabated could continue to accumulate to hazardous levels (Tr. 245-247).

Citation No. 4266733 (LAKE 94-174-R; LAKE 94-459)

In this citation Brushy Creek is charged with a violation of 30 C.F.R. ' 75.308(f)(1), for failure to ventilate a primary escapeway with intake air. Section 75.380(f)(1) provides, in relevant part, as follows:

- ' 75.380 Escapeways; bituminous and ignite mines.
 - (a) Except in situations addressed in ' 75.381, ' 75.385 and ' 75.386, at least two separate and distinct travelable passageways shall be designated as escapeways and shall meet the requirements of this section.

* * * *

(f)(1) Primary escapeway. One escapeway that is ventilated with intake air shall be designated as the primary escapeway. In areas of mines developed after November 15, 1992, the primary escapeway shall not contain diesel equipment, electrical equipment described in ' 75.340(a) and ' 75.340(b)(1), or compressors described in ' 75.344, except-

(i) Equipment necessary to maintain the escapeway in safe, travelable condition; and

(ii) Haulage equipment other than belt and trolley haulage, necessary for the transportation of persons and materials. (Emphasis added)

Subsection (a) of ' 75.380 requires a mine operator to designate at least two separate and distinct travelable passages as escapeways that meet the requirements of the regulation.

Subsection (f)(1) requires that one of the escapeways be designated as the primary escapeway. The designation of the primary escapeway depends on how it is ventilated. In order to meet the requirements of the regulation, the designated primary escapeway must be ventilated by intake air. If it is ventilated by return air it may not serve as a designated primary escapeway.

The parties are in agreement that the controlling issue with respect to Citation Nos. 4260292, 4260295, 4266732, and 4266733 is the interpretation to be placed on the terms "worked-out area," "return air," and "intake air" pursuant to the newly promulgated ventilation regulations published in the May 15, 1992, Federal Register, Volume 57, No. 95, pages 20868-20929.

MSHA's ventilation regulations, Subpart D, 30 C.F.R. ' 75.301, provides the following relevant definitions:

Worked out area. An area where mining has been completed, whether pillared or non-pillared, excluding development entries, return air courses, and intake air courses.

Intake air. Air that has not yet ventilated the last working place on any split of any working section, or any worked-out area, whether pillared or nonpillared. (Emphasis added).

Return air. Air that has ventilated the last working place on any split of any working section or any worked-out area, whether pillared or non-pillared. If air mixes with air that has ventilated the last working place on any split of any working section or any worked-out area, whether pillared or nonpillared, it is considered return air. For the purposes of existing '75.507-1, air that has been used to ventilate any working place in a coal producing section or pillared area, or air that has been used to ventilate any working face if such air is directed away from the immediate return is return air.

The Dictionary of Mining, Minerals, and Related Terms, U.S. Department of the Interior, 1968 Edition, defines "worked-out area" as "[a] mine or large section of a mine from which all mineable coal has been taken."

MSHA's Arguments

MSHA asserts that Brushy Creek does not contest the fact that mining was completed in the 5-B area, and that its witnesses admitted there was no coal production going on in that area, that the continuous miner had been squeezed out of the area and was moved to the 5-A area where coal was being produced.

MSHA states that Brushy Creek's witnesses further admitted that the 5-B area had no power, that this area had been previously roomed and paneled, that they had "retreated out" and that none of the crew would have to go into the 5-B area because "there was nothing left in there for them to get," that one work crew was in the process of building seals, and that approximately two (2) weeks from the date of the subject citations, the 5-B area would have been completely sealed.

In reply to Brushy Creek's assertion that the 5-B area was an intake air course and would remain so until the area was completely sealed, MSHA maintains that Brushy Creek failed to show that it treated this 5-B area as an intake air course by performing the required examinations for such air courses, and instead admitted that much of the 5-B area was "squeezing." In light of this, MSHA concludes that passage into certain of this area's points of deepest penetration were inaccessible for any such required examinations.

In response to Brushy Creek's assertion that the 5-B "intake air course" area, by definition, can not be a "worked-out" area, MSHA argues that Brushy Creek took no affirmative action to treat the 5-B area as an intake air course, and that Safety Manager Pait admitted that most of the 5-B area was still marked as a return air course because the color patterns on the reflectors

located there had not yet been changed. Further, MSHA states that despite its knowledge of the examination requirements and its promises to the contrary, Brushy Creek presented no proof at hearing of conducting the pre-shift examinations required for an intake air course, presented no evidence to rebut the MSHA inspector's credible testimony that he did not observe any examiner's initials in the 5-B area points of deepest penetration, and Mine Manager Hatcher referred to the 5-B area as the "old works."

MSHA cites my decision in Zeigler Coal Company, 2 FMSHRC 304, 324 (February 1992), affirming a violation of 75.507, for locating non-permissible golf carts in return air. In that case, I found that intake air which had initially passed two working faces was return air when it continued to sweep additional faces where the cited golf carts were located. MSHA asserts that the new ventilation regulations parallel my Zeigler holding, and that ' 75.301 added definitions for "intake air" and "return air" to characterize the air current by whether the air has ventilated a working place or a mined out area.

MSHA states that under the final rule, and in conformance with established distinctions made throughout the mining industry, if air has ventilated either the last working place or any worked-out area, then this air is considered to be "return air." MSHA argues that the definition of "return air" also makes clear that if intake air mixes with air that has ventilated either working places or "worked-out" areas, then this air is considered return air. MSHA maintains that the air which flowed through the 5-B "worked-out" area was destined to ventilate the 5-A working face, and despite Brushy Creek's assertion that it had the "prerogative" to define its air courses, the regulations provide a codified definition to which it must adhere.

MSHA argues that its interpretation of the regulation is consistent with the language and purpose of the Act and deserves substantial deference. In support of this conclusion, MSHA states that the legislative history of the Act demonstrates Congress' intention to prevent, and not merely to minimize, violative conditions, particularly with respect to ventilation regulations that are aimed at eliminating ignitions and fuel sources for explosions and fires. Citing several court decisions, MSHA concludes that courts have recognized the great deference due an agency's interpretation of the law it administers and enforces.

MSHA asserts that the proper standard of review when considering the validity of a regulation is whether or not it

is consistent with, and reasonably related to, the statutory provisions under which it was promulgated and is not in conflict with other statutory provisions. MSHA concludes that in the instant cases, the only interpretation that promotes the protection of the miners at the Brushy Creek Mine, who are exposed to air which has coursed through an un-examined mined-out area with all of that area's consequent contaminants, among them methane, is the interpretation it has advanced. In support of this conclusion, MSHA relies on the testimony of Mr. Eslinger regarding the definition of "worked-out area" and the intent of the regulations.

MSHA points out that Mr. Eslinger confirmed that its interpretation of the term "worked-out area" applies to the 5-B area of the mine. MSHA concludes that its interpretation is reasonable and would better protect the miners working in the 5-A area than the interpretation proposed by Brushy Creek.

MSHA asserts that even if Brushy Creek mistakenly believed that the 5-B area was an intake air course, the Mine Act provides for liability without fault. Citing the Commission's decision in Ideal Cement Company, 12 FMSHRC 2409, 2415 (November 1990), MSHA argues that the test as to whether Brushy Creek violated the standard is whether a reasonably prudent person, familiar with the mining industry and the protective purposes of the standard, would have recognized that air which traveled through an extensive area, known to be gassy, then mixed with air coming off the belt haulageway before it ventilated the working face in the 5-A area would be considered "return air."

Disputing Brushy Creek's assertions to the contrary, MSHA takes the position that the subject definition contained in the regulations at 30 C.F.R. ' 75.301 is not necessarily circular, vague, or overly broad. Citing Alabama By-Products Corporation, 4 FMSHRC 2128, 2130 (December 1982), MSHA states that, "[b]roadness is not always a fatal defect in a safety and health standard. Many standards must be simple and brief in order to be broadly adaptable to myriad circumstances."

Finally, MSHA points out that Brushy Creek is not a new, inexperienced mine operator, and that its familiarity with the mining industry and with MSHA's regulations, the purpose of which is to protect miners, should have made it aware that the 5-B area would be considered "return air." MSHA concludes that Brushy Creek can not, in good faith, allege that it believed that MSHA would permit potentially dangerous conditions resulting from the cited conditions to exist without penalty merely because it chose to label this air course "intake air."

Brushy Creek's Arguments

Brushy Creek agrees that the common issue with respect to Citation Nos. 4260292, 4260295, 42266732, and 4266737 is whether the cited 5-B area was a "worked-out area" as defined by section 75.301. Brushy Creek takes the position that the definition of a "worked-out" area is circular and therefore can not be applied to turn an intake air course into something else.

In support of its argument, Brushy Creek states that the section 75.301 definition of "intake air" reveals that it is defined with reference to "worked-out area," and that intake air does not include air which has ventilated a worked-out area. Brushy Creek concludes from this that the inartful definition of a worked-out area circles back upon itself and leaves no choice other than to conclude that an intake air course can not be a worked-out area.

Based on the regulatory "worked-out area" definition, Brushy Creek asserts that developing entries, return air courses, and intake air courses must be excluded from a worked-out area, and if any of these three is present an area is not a worked-out area. Brushy Creek believes that since the 5-B area was separated from other entries by stoppings or other ventilation control devices, it met the regulatory definition of an "air course." Since the air passing through that air course had not yet ventilated the last working place, Brushy Creek concludes that the air in that air course was intake air. Since this was the case, Brushy Creek believes that the physical area which contained the intake air course could not be a worked-out area, and that this area either contained an intake air course which directed air over the 5-A face or it contained a return air course. In either case, Brushy Creek does not believe it was a worked-out area since the definition of such an area excludes both return air courses and intake air courses.

Brushy Creek asserts that the difficulties in understanding the meaning of "worked-out" justifies its reliance upon its understanding of the term in relation to the terms describing other underground mine areas. With regard to Mr. Eslinger's testimony that there is little difference between an abandoned area and a worked-out area, Brushy Creek takes the position that the 5-B intake air course was being regularly inspected and ventilated, and thus did not meet the statutory definition of "abandoned area" or the Mining Dictionary definition of "abandoned workings."

Brushy Creek maintains that the air course around the perimeter of the 5-B area met all of the practical requirements as an intake air course in that the entries were separated from the neutral entries by ventilation control devices, and that the only connection between the air course and the neutral entries was through metal personnel doors used to allow methane in the neutral areas to "trickle" into the air course so as to be diluted and carried away.

Brushy Creek states that the concept of an air course around a neutral area is shown in the mine ventilation plan that was examined by Mr. Eslinger and Mr. Wirth before their inspection, and that a map of the 5-B area showing the perimeter air course around the neutral entries dated September 21, 1993, was also examined by Mr. Eslinger when it was filed with MSHA. In addition, Brushy Creek asserts that the air course was examined as an intake air course, and that it was in the process of marking the air course an intake air course primary escapeway at the time of the March 29, 1994, inspection, and that MSHA insisted it was necessary to mark the entire perimeter as a means of abating two other escapeway citations issued during the inspection.

In comparing its mine map, Exhibit O-2, with MSHA's mine map, Exhibit G-2, both of which were prepared for this litigation, Brushy Creek points out that MSHA's map fails to show the permanent ventilation controls which created the intake air course. Conceding that its designation of an area as an intake air course may not, of itself, establish the area as such, Brushy Creek nonetheless concludes that it has always been its prerogative to adopt a ventilation plan which fits the unique circumstances at its mine.

Brushy Creek concedes that there was no coal production equipment in the air course at the time of the inspection, but takes the position that nothing in the regulations states that removal of the equipment or seal construction magically transforms an intake air course into a worked-out area. Brushy Creek concludes that any dissatisfaction regarding the length of the air course or the specific conditions found did not give MSHA the authority to arbitrarily reclassify an intake air course as a worked-out area. Brushy Creek further concludes that the inspectors could have cited it for an improperly inspected intake air course, or for other regulatory violations, but instead focused on the "worked-out area" newly promulgated regulation "written" by Mr. Eslinger, and having made the choice, the citations stand or fall on this definition.

Citing the testimony of Mr. Eslinger at Tr. 705-709, Brushy Creek states that while the 5-B area was being mined the air course delivered clean intake air to the face, and the contaminated return air was carried away in the air course. As the location of the face changed, the classification of the air course changed, depending on whether it carried "intake" or "return" air. When mining ceased in the 5-B area on Friday, March 25, 1994, the air course up to the face was an "intake air course" and beyond the face was a "return air course."

Brushy Creek points out that according to Mr. Eslinger when the equipment moved back to the 5-A face on Monday, March 28, 1994, the entire 5-B area became "a worked-out area" and the air course became a return air course. In short, Brushy Creek concludes that what had been an acceptable intake air course became, for no stated reason, an unacceptable worked-out area, and although Brushy Creek was permitted to run fresh air through the area on Friday, it was not permitted to do so on Monday, even though the air at the 5-A face never exceeded acceptable levels.

Brushy Creek states that reduced to its simplest terms, MSHA's claim is that intake air entered the 5-B area, moved with the atmosphere in this "worked-out" area, then exited as return air sweeping the 5-A face. However, Brushy Creek points out that permanent ventilation controls existed which met MSHA's definitions and created an air course around the 5-B area. Further, the intake air does not mix with the atmosphere in any worked-out area. Intake air stays in the intake air course and does not ventilate a work area. Even if it did mix, the air would have picked up the air bubble discovered in the neutral.

Brushy Creek points out that the intake was always clear of excessive methane, and no one ever found "bad air" in the form of high methane or low oxygen at any place in the air course or at the faces. Brushy Creek states further that the parties agree that the air in the No. 5 air course was intake air up to the point where the seals were under construction at the 5-B entry area, and if the seals had been in place, the air would have had a direct flow to the 5-A face and there would have been no violation.

Brushy Creek concludes that nothing occurred to the air in the 5-B intake air course which could change the "intake" air into "return" air. The air did not become contaminated with methane or lose its oxygen content, there was no coal production equipment present, there was no working face or working places, the only working place in that area of the mine on March 29 was the 5-A face, there were no power sources, and the only equipment present was miscellaneous belt structures and other equipment

which was being recovered, none of which was "mechanized mining equipment" requiring a separate split of air pursuant to section 75.332(a)(1).

Brushy Creek asserts that if the permanent stoppings were not in place throughout the 5-B area, as represented in MSHA's map, Exhibit G-2, then the entire area would be classified as a "worked-out area." However, because the permanent ventilation controls were in place, the entries separated by those permanent controls remain classified as an air course pursuant to the definition of that term in section 75.301. Since it was an air course, and was utilized as an intake air course, Brushy Creek concludes that by definition, it can not be a worked-out area.

Citing the Zeigler decision, supra, Brushy Creek states that return air may have different meanings for different standards, and for the purpose of Subpart D, Part 75, it means "air that has ventilated the last working place." Brushy Creek takes the position that the air passing along the 5-B intake air course did not ventilate the "last working place" until it reached the 5-A face.

Brushy Creek asserts that before going underground on March 29, 1994, Mr. Wirth and Mr. Eslinger had apparently concluded that the 5-B area fit Mr. Eslinger's definition of "worked-out" (Tr. 144). Mr. Wirth was familiar with the area and told Mr. Culpepper shortly after they started that the air course contained return air (Tr. 596), and that before starting into the air course from the other end, Mr. Eslinger told Mr. Pait that the air was "off old works, so it's return air" (Tr. 665). Brushy Creek suggests that since Mr. Eslinger had supposedly superior knowledge in regard to MSHA's interpretation of the "worked-out area" provisions of the new ventilation regulations, and had previously been to the mine and was familiar with the ventilation plan and mine maps of the 5-B area, he was obliged to point out any hazards to Brushy Creek, rather than playing a game of "gotcha."

Brushy Creek states that if the 5-B air intake is a "worked-out" area, then the four citations must be considered separately and either vacated or modified. With regard to Citation No. 4260292, Brushy Creek believes that the essence of the alleged violation is that it should have had clean air ventilating the producing section, and that it was "S&S" because of the possibility of methane from below or from the lengthy air course. However, Brushy Creek points out that during the two inspection days in question, the air in the air course and at the face was clean and there was no methane levels in the working section that were above acceptable levels. Brushy Creek concludes that, at most, this citation results

from a reasonable disagreement as to the classification of 5-B air course resulting from the difficulty of the definition. It concludes that the citation should be vacated, and, if not, reduced to non-"S&S" with no negligence.

With regard to Citation No. 4260295, Brushy Creek states that the time noted for the issuance of the citation is wrong, and that only one golf cart was present. Although the citation was marked "S&S" and "reasonably likely" to result in a permanently disabling injury, Brushy Creek points out that the operator was allowed to start the cart and give one of the inspectors a ride out, and it concludes that no danger would have been present if Mr. Wirth had not taken it upon himself to change the air flow. Brushy Creek believes the citation should be vacated and, if not, reduced to non-"S&S" with no negligence.

With regard to Citation No. 4266732, Brushy Creek points out that MSHA acknowledged that "management was compelled by circumstances beyond their control to change ventilation that may have permitted the cited condition to exist." Further, while the citation alleges that the neutrals (the "worked-out area") "was not ventilated," Mr. Eslinger admitted that the air quality on the working section was satisfactory (Tr. 245). Under the circumstances, Brushy Creek concludes that the methane in the area was continuously diluted within the intent of the standard, and it believes that the citation should be vacated or reduced to non-"S&S" with no negligence.

With regard to non-"S&S" Citation No. 4266733, Brushy Creek argues that it was in the process of changing the escapeway markers when the inspection team arrived, and at MSHA's direction, to abate the citation, the entire 5-B intake air course was marked, even though Mr. Eslinger admitted he would take a shorter way out (Tr. 264). Brushy Creek maintains that MSHA's prosecution of this citation is inconsistent since if it is sustained, it is an acknowledgment that the primary escapeway which MSHA required to be marked was ventilated with intake air. If this citation is sustained, Brushy Creek suggests that consistency requires that the other three must be dismissed.

The 5-B area in question was a rather extensive area containing entries, rooms, and panels from which coal had been extracted. Mr. Smock estimated that it was approximately two and one half to three miles around the perimeter of the area, and Mr. Wirth stated that it took four and one half hours to walk around the area (Tr. 73, 450).

In the instant proceedings, if access to the 5-B area had been sealed at the time of the inspection, the intake air would

have continued down the intake air entry directly to the 5-A face area where it would have swept and ventilated the faces before exiting the mine through the return. In that scenario, there would be no violation because the intake air traveled directly to the face area without first migrating and traveling through the 5-B area. However, by coursing the air through the 5-B area where the sealing work had not been completed, and allowing that air to mix with the air ventilating the neutral area before exiting the area where it was again used to ventilate the 5-A working faces, the respondent ran afoul of the cited ventilation standards.

As noted earlier, "intake air" is defined by section 75.301 as (1) air that has not yet ventilated the last working place on any split of any working section or (2) air that has not yet ventilated any worked-out area. "Return air" is defined in relevant part as (1) air that has ventilated the last working place on any split of any working section, or (2) air that has ventilated any worked-out area. In short, air that has not ventilated any worked-out area is considered intake air, and air that has ventilated any worked-out area is considered return air.

The controversy with respect to the four disputed violations in question is focused on the interpretation of the section 75.301 definition of the phrase "worked-out area" and its interpretation and application to the terms "intake" and "return" air.

The phrase "worked-out area" is defined, in relevant part, by section 75.301, as "an area where mining has been completed, ... excluding developing entries, return air courses, and intake air courses."

Inspector Wirth testified that during his inspection of the 5-B area there was no coal production in progress, no continuous mining unit or coal producing equipment, and no electrical power. He also observed that some of the permanent ventilation stoppings were crushing out, and the only work that he found in progress was the work to complete the sealing of the area (Tr. 59-65).

Inspector Eslinger characterized the 5-B area as "a classic worked-out area" where mining had been completed (Tr. 282, 285).

Although Mr. Eslinger believed that the ventilation method used at the time the area was being mined, as shown on the mine maps, was sufficient, he confirmed that management did not submit a ventilation plan showing the method of ventilation used in the 5-B area at the time of the inspection (Tr. 282, 285). Since Brushy Creek was in the process of sealing the 5-B area, Mr. Eslinger concluded that Brushy Creek tacitly admitted that mining was completed in that area and it never intended to go back to mine coal (Tr. 287).

Mr. Smock agreed that a "worked-out area" is one where mining has been completed, and he conceded that at the time of the inspection, "we had finished cutting coal in this area, but mining wasn't done because I had to get out of there" (Tr. 406).

Conceding that there was no electrical power on the 5-B area, Mr. Smock suggested that because of the sealing work in progress, and the presence of some equipment in one of the rooms (belt, framing drives, and power boxes), which had not been removed from the area, the area was not "worked-out" (Tr. 412-412, 467-468). General Mine Manager Hatcher identified similar equipment that was in the area (Tr. 510-511).

During closing arguments at the hearing, Brushy Creek's counsel stated that, "we haven't contested the fact that mining was completed in that area" (Tr. 741). Indeed, in its post-hearing brief, Brushy Creek concedes that there was no coal production equipment in the 5-B area at the time of the

inspection, and it does not dispute the fact that there was no power on the 5-B area.

I conclude and find that the evidence here establishes that at the time of the inspection in question, the mining of coal had been completed in the 5-B area, there was no power, and the area was in the process of being sealed. I further conclude and find that the fact that the sealing had not been totally completed, and that certain pieces of equipment had not yet been removed from the area, does not detract from the fact that the area was for all intents and purposes "mined-out." Under the circumstances, I conclude and find that the 5-B area was a "worked-out area" as that term is defined by section 75.301.

With regard to the exclusion of return air courses and intake air courses from the definition of "worked-out area," I cannot conclude that the 5-B area contained any clearly defined intake air course that qualifies for a "worked-out area" definitional exclusion.

For the reasons which follow, and notwithstanding the fact that the 5-B perimeter area was separated by ventilation stoppings, I can not conclude that it constituted a de facto intake air course that would exclude the 5-B area as a worked-out area.

In support of its assertion that the perimeter of the 5-B area constituted an intake air course, thereby excluding the 5-B physical area as a "worked-out area," Brushy Creek maintains that the ventilation stoppings constituted an "air course" as defined by section 75.301, and that since the air in that air course had not yet ventilated the last working place, it was intake air.

Brushy Creek argues that the 5-B perimeter air course met all of the practical requirements as an intake air course in that the entries were separated from the neutral entries by the stoppings and ventilation doors that allowed methane in the neutral area to "trickle" into the air course, that the concept of an air course around a neutral area is shown in ventilation plan Drawing A0717-01 (Exhibit JE-2), that the air course was examined as an intake air course, and that it was in the process of marking the air course as an intake air course primary escapeway when the inspectors appeared on March 29, 1994.

I conclude and find that the fact that a ventilation plan sketch depicts a "concept" for an air course around a neutral area does not support any conclusion that the respondent's ventilation method in use at the time of the inspection was covered or authorized by the approved plan. In fact, the testimony is to the contrary.

Conceding that simply designating an area as an intake air course does not ipso facto establish it as such, Brushy Creek maintains that it has always been its prerogative to adopt a ventilation plan which fits its unique circumstances. However, Mr. Eslinger testified credibly that there was nothing in the mine ventilation plan allowing Brushy Creek to do what it was doing (Tr. 159). Further, although Mr. Pait testified that the mine ventilation plan did not prohibit the ventilation configuration for the 5-B perimeter area (Tr. 666), Mr. Smock testified that the ventilation plan did not cover or authorize what was being done at the time of the inspections on March 29 and 30, 1994 (Tr. 499).

Brushy Creek's assertion that it considered the 5-B area to be an intake air course because it regularly inspected the area as such is not well taken, and its conclusion in this regard is rejected for lack of any supporting probative or credible evidence. The only written documentation produced by Brushy Creek to support its assertion that the 5-B area was being regularly inspected as an intake air course is a preshift mine examiner's report signed by Richard Doty for an inspection of the "#5 intake" on March 29, 1994 (Exhibit P-0-3). Mr. Doty was not called as a witness and Brushy Creek introduced no further examination reports from its mine records.

Brushy Creek's Shift Manager Reynolds, who walked part of the 5-B perimeter with Inspectors Holland and Eslinger on March 29, 1994, testified that he observed two locations where Mr. Doty had initialed and dated March 29 on the inspection boards, and he marked the locations on Exhibit 0-2 (Tr. 588). However, no records documenting these examinations were forthcoming and one can only speculate as to whether one of these locations was the one documented by the aforementioned Doty report.

Although Underground Superintendent Smock testified that he had to examine the entire 5-B area as an intake air course, and that his mine examiners "would have been there daily" to examine the area of deepest penetration, the seal work area, and "the intake for an air course" (Tr. 414, 452-459), no documentation in the form of examination records were produced, and none of the examiners who purportedly conducted the examinations were called to testify.

Safety Manager Pait testified that the 5-B area did not have definite examination points, and he asserted that examiners would initial "at the point of deepest penetration or somewhere within that area between the beginning and the end" (Tr. 670). Although Mr. Pait believed the area was regularly inspected, the only specific examination he could identify was the one by Mr. Doty on March 29 (Tr. 670). Brushy Creek confirmed that it could not find any examination records for the 5-B area other than the one it produced (Tr. 695).

Inspector Wirth testified that the 5-B area was not being properly pre-shifted or examined weekly as required by sections 75.360 and 75.364, and that when he walked the perimeter of the 5-B area to the point of deepest penetration, he found no dates, times, initials, or evidence to indicate that these examinations were being conducted. Under the circumstances, he cited Brushy Creek with a violation for not conducting these examinations (Tr. 48, 53-54, 76).

Inspector Eslinger was aware of only one entry in the 5-B area that was examined and marked "safe," but he did not believe that Brushy Creek was examining all of the entries and rooms throughout the entire area as required by section 75.360(b)(6), and he disputed Brushy Creek's contention that it considered the 5-B area to be intake air because it was being examined as an intake air course (Tr. 284).

After careful consideration of all of this evidence, I conclude and find that, at most, Brushy Creek may have conducted sporadic and cursory examinations of the 5-B area while working and preparing to seal the area before the inspections in question, but I can not conclude that it was regularly inspecting or treating the area as an intake air course.

Mr. Wirth testified credibly that intake air can become return air, but that return air can not become intake. He further testified that when he inspected the 5-B area with Mr. Culpepper he observed that it was marked with red reflectors, and that Mr. Culpepper informed him that these markings were used to identify return air (Tr. 84-85, 122-123). Mr. Pait testified

that at the time of the inspection most of the 5-B area "was still marked as a return because that's what those had been a week before ..." (Tr. 677-688).

The definition of "air course" found in section 75.301 states, in relevant part, that the separation of an entry or entries by stoppings or other ventilation control devices is so that any mixing of air currents between each is limited to leakage. The evidence here reflects that the mixing of the 5-B neutral air and the perimeter air was more than leakage or confined to "a trickle."

The respondent's assertion that the 5-B "intake air" did not mix or ventilate any worked-out area and stayed in the "intake air course" is not supported by the evidence and testimony, and it is rejected.

Mr. Smock confirmed that the 5-B neutral area was being ventilated in order to keep any methane below the legal limits. In order to facilitate the flow of air through that area, stopping blocks were removed, and the air that was used to ventilate this area blended in with the rest of the air in the air course that was exiting the 5-B area (Tr. 414-416). He further confirmed that air was coursed into the neutral areas by stopping doors to allow the air to circulate and ventilate the neutral area. The air would then exit through these doors and into the air course (Tr. 423). He also testified that air from the belt haulageway was used to ventilate the area that was being sealed, and that it traveled the perimeter of the 5-B area, through the neutral area, and out into the air course that then swept the 5-A working faces before exiting the mine through the return (Tr. 477-478).

The evidence establishes that the mine is an extremely gassy mine. Indeed, the mining that had previously taken place at the 5-A area was suspended and moved to the 5-B area because of high levels of methane migrating through the 5-A floor from an old abandoned mine below that area. Mining resumed in the 5-A area after the methane was cleared up after bore holes were drilled to bleed it off.

Mr. Wirth testified credibly that the worked-out area included the neutral area between the stoppings where methane was detected in an area where there was no air movement (Tr. 147). He also observed 5-B areas where the stoppings were crushing out and where below normal oxygen levels were discovered, as well as methane levels up to 1.8 percent. Mr. Eslinger testified that his methane detector, which was

set at 2.5 percent methane, sounded when he walked through a stopping door into the 5-B neutral area. Underground Superintendent Smock candidly admitted that he "wanted out of there as soon as possible" because of pillar squeezing and the presence of gas bleeders. He also admitted that the 5-B area was "troubled" before the inspection because of the squeezing that was "messing up" the ventilation system.

Mr. Wirth acknowledged the presence of permanent and temporary ventilation controls and stoppings while he was traveling the 5-B area during his inspection (Tr. 106-107, 111).

He confirmed that the air ventilating the 5-A face area where mining was taking place was the same air that had ventilated the 5-B area, and that both areas were being ventilated by the same split of air and not separately. Although Mr. Wirth acknowledged that the air entering the section was initially intake air, he concluded that once it was coursed through the 5-B area, it became return air, regardless of whether it remained in the perimeter area or in the "neutral area" (Tr. 85). Since the air ventilating the 5-A area was not on a separate fresh air intake split, he concluded there was a violation of section 75.332(a)(1).

Mr. Wirth testified that the last working place on the section for the purpose of applying the definition of return air was the 5-A working place where coal was being produced (Tr. 98).

He agreed that by definition, the air must first pass by that working place before it can be considered return air pursuant to section 75.301. However, since the air had already ventilated the "worked-out" area before reaching the last working place, he concluded that it was return air by that same definition (Tr. 99).

Mr. Eslinger considered the entire 5-B area, including the "neutral areas" between the stopping lines, to be worked-out areas (Tr. 147). He conceded that the air that exited the 5-B area and was used to ventilate the 5-A face area would have been within the legal limits of intake air, but for the section 75.301 definition of return air that defines such air as air that has been used to ventilate a worked-out area (Tr. 147).

Although I agree with Brushy Creek's assertion that the definition of "worked-out area" is circular, confusing and inartfully drafted, I am not persuaded that Brushy Creek was totally ignorant of the prohibitions against using air which has ventilated a worked-out area to ventilate the working face area in question. Nor can I ignore the hazards associated with potential methane ignitions and explosions that may occur as a result of ventilating active face areas with air that was used to ventilate other worked-out areas before exiting the mine through

the returns. I find that the promulgation of the ventilation standards found at sections 75.332, 75.334, and 75.380, was clearly intended to address, remedy, or prevent these potential hazards to miners working underground.

After careful consideration of all of the evidence in these proceedings, I conclude and find that MSHA has the better part of the argument. I can not conclude that Brushy Creek has established that the 5-B perimeter area that it has characterized as an intake air course was in fact a clearly identifiable separate air course delivering un-mixed air directly to the 5-A working faces without first ventilating the 5-B worked-out areas. Since the evidence establishes the 5-B perimeter air mixed with the air from the belt haulageway that was used to ventilate the 5-B neutral worked-out areas, I conclude and find that the air did in fact ventilate worked-out areas before reaching the 5-A working faces. Under the circumstances, I further conclude and find that this air was return air as that term is defined by section 75.301.

The parties agreed that the principal issue with respect to the citations in question is whether the cited 5-B area was a "worked-out area" as defined by section 75.301 (Tr. 281, 505, 692; Respondent's Post-hearing Brief, pg. 9). They further agreed that if I should find that the cited 5-B area was a worked-out area, the violations should be affirmed. Under the circumstances, Citation Nos. 4260292, 4260295, 4266732, and 4266733 **ARE AFFIRMED.**

Citation No. 4260297 (LAKE 94-175-R; LAKE 94-250)

In this citation, Brushy Creek is charged with a violation of mandatory safety standard 30 C.F.R. 75.370(a)(2), for failing to follow its approved ventilation plan requiring a minimum of 6,500 cfm of air at the end of a ventilation line curtain at all times while the miner machine is cutting or loading coal (Ventilation plan, pg. 1, paragraph C.(2) (Exhibit JE-2)). Section 75.370(a)(1) requires a mine operator to develop and follow its approved plan, and, in this case, the inspector found less than the required amount of air at the cited face ventilation curtain in question while coal was being cut and loaded.

Inspector Wirth's credible and un rebutted testimony clearly establishes that there was little or no air movement at the end of the cited line curtain in question. The respondent's approved ventilation plan requires that 6,500 cubic feet of air per minute be maintained at the end of the line curtain at all times while

coal was being cut and loaded. Mr. Wirth's testimony establishes that the available air was insufficient to even turn the vanes of the anemometer that he used to test the air.

Mr. Wirth's testimony that he observed coal being cut and loaded at the face of the No. 6 entry where the cited curtain was located was corroborated by the credible testimony of Inspector Bird who testified that when he and Mr. Wirth walked into the entry, he observed coal being loaded, and a loaded car leaving the area. Mr. Bird's inspection notes reflected that the remote control miner was cutting and loading coal in the No. 6 entry. Mr. Eslinger testified credibly that he arrived at the cited location shortly before Mr. Bird and Mr. Wirth and observed a loaded shuttle car leaving. He then watched as other shuttle cars pulled in and were loaded with coal.

I find no credible testimony or evidence to rebut the observations made by Mr. Bird, Mr. Wirth, and Mr. Eslinger in support of the violation. Mine Manager Hatcher confirmed that he did not observe the cited conditions and was not present when the citation was issued. Assistant Safety Inspector Gene Culpepper testified that when he went to the face area he found Mr. Eslinger, Mr. Bird, and Mr. Wirth there and they informed him that a citation had been issued because of insufficient air at the face. Mr. Culpepper confirmed that when he arrived in the area, the mining machine was shut off and he did not take any air readings at the end of the cited line curtain.

Safety Manager Pait confirmed that he had no personal knowledge of the line curtain violations and that he was on the surface when Mr. Culpepper called him to inform him that the citation was being issued.

The only relevant testimony by the respondent in defense of the violation was that offered by miner operator Steve Burgess. He testified that he did not take an air reading before starting his cuts because he had no anemometer. He confirmed that Mr. Wirth checked the air and found none because part of the curtain was missing.

Mr. Burgess claimed that when he first observed the inspectors he was through cutting coal and was backing the machine up to clean up so that he could begin bolting the roof. He took the position that he was simply cleaning up the loose coal that was on the ground and suggested that he was not cutting or loading coal. I reject this testimony as a less than credible defense to the violation. Even if I were to accept as true that Mr. Burgess was cleaning up loose coal when he first observed the

inspectors, they testified credibly that when they were observing the work at the face, coal was being cut and loaded, and shuttle cars were coming and going from the face areas with loaded coal that had been cut at the face by Mr. Burgess.

On cross-examination, Mr. Burgess confirmed that he had not cleaned up any loose coal when the inspectors appeared at the face areas and that he had just made a 35 foot cut of coal that was dumped in the ram cars and hauled away. He further confirmed that he cleaned up the place and loaded the coal out after the violation was abated and terminated.

I conclude and find that the petitioner has established by a preponderance of the credible and probative evidence that the requisite amount of air was not being maintained at the end of the ventilation line curtain while coal was being cut and loaded.

Brushy Creek's failure to maintain the air as required constitutes a violation of its approved plan, and its failure to follow the plan constitutes a violation of section 75.370(a)(1). Accordingly, the citation **IS AFFIRMED**.

Citation No. 4261610 (LAKE 94-176-R; LAKE 94-250)

Brushy Creek is charged here with a violation of mandatory safety standard 30 C.F.R. 75.370(a)(1), for failing to follow its approved ventilation plan requiring the cited ventilation line curtain to be maintained within 40 feet of the deepest penetration of the face while coal is being cut and loaded (Ventilation Plan, pg. 1, paragraph C.(2) (Exhibit JE-2)). Here the inspector found that the curtain measured 66 feet from the deepest penetration where coal was being cut and loaded.

The credible testimony of Inspector Bird establishes that the cited ventilation line curtain was not maintained to within 40 feet of the face as required by the approved mine ventilation plan. The applicable plan provision when remote control miners are in use requires the ventilation line curtain to be maintained to within 40 feet of the deepest penetration of the face.

Mr. Bird determined that the line curtain was not maintained to within 40 feet of the face by measuring the distance between the miner bits cutting at the face to the tail of the miner, and the distance from the line curtain to the last row of roof bolts.

Based on these measurements, he concluded and found that the line curtain was being maintained at a distance of 66 feet from the point of deepest penetration where coal was being cut and loaded at the face. Mr. Eslinger, who was present at the scene, testified credibly that after he pointed out that coal was being

cut and loaded, Mr. Bird proceeded to make his measurements, and that mining was stopped.

Brushy Creek's Safety Inspector Gene Culpepper, who made a sketch of the curtain, including a notation that it was "taken down by a car," confirmed that he based this notation on what he "thought" had happened, and he admitted that he did not see any car tear the curtain down and did not speak to any car operator. Although he claimed that he saw that the curtain was missing, he conceded that he did not know what happened. He further stated that miner operator Burgess told him that he "thought" that a car had torn down the curtain. Mr. Culpepper confirmed that he made his sketch six months after the citation was issued, and although he took exception with the curtain sketches made by the inspectors, he admitted that even on his sketch the curtain is shown as more than 40 feet from the face, and that this would be a violation.

Miner operator Burgess claimed that he saw the curtain being torn down, but indicated that only 30 feet of the 70 foot curtain was torn down and that the last five or six feet of curtain skirting towards the face was missing. He confirmed that abatement was achieved by hanging a new curtain that had been stored in a roof bolting machine nearby, and he testified that this new curtain was intended to replace the old curtain.

Inspector Wirth testified credibly that he saw no evidence that the curtain had been ripped down and he saw no curtain lying on the mine floor. Although he did observe a gap at the bottom of the curtain, he did not believe this was significant as long as the air was maintained as required by the ventilation plan.

Inspector Bird, who was also at the scene with Mr. Wirth, did not observe any curtain on the ground or a car tearing it down. He testified that he would not have issued the citation if the curtain had been torn down and loading was stopped to hang it back up. However, he saw no evidence that this was the case.

Inspector Eslinger testified that he observed no ripped curtain or any curtain being dragged off by a shuttle car, and he saw no evidence that the curtain had been hung up to the last full roof bolts.

The respondent's suggested defense that the curtain was not maintained to within 40 feet of the face because it was torn down by a shuttle car leaving the area is rejected. Mine operator Burgess' testimony that the new curtain stored on the roof bolter was intended to be hung earlier "to start with," suggests that part of the curtain may have been down sometime prior to the

arrival of the inspectors, and that mining continued on with no action taken to install the new curtain until after the citation was issued. Under the circumstances, I can not conclude that this excuses the violation.

I conclude and find that the petitioner has established by a preponderance of the credible and probative evidence that the cited violation line curtain was not maintained to within 40 feet of the deepest penetration while coal was being cut and loaded, as required by the mine ventilation plan. Brushy Creek's failure to maintain the required curtain distance as required by its approved plan constitutes a violation of section 75.370(a)(1). Accordingly, the citation **IS AFFIRMED**.

Brushy Creek's counsel suggested that the inspectors were mistaken as to the location of the cutting machine, as well as the depths of the cuts, and he advanced the argument that the machine operator was "strictly cleaning up after completing some cuts" and was not cutting or loading coal (Tr. 382-393). Counsel further asserted that Brushy Creek was charged with two separate line curtain violations rather than one and he voiced his displeasure with MSHA's "double barrel" enforcement action (Tr. 393-394).

I find no credible or probative evidence to support any conclusion that the inspectors were mistaken as to the location of the violations. Even if they were, I find no prejudice to Brushy Creek in defending the citation. I further find no evidence to support a conclusion that the inspector mistook the depths of the cuts. I find the inspector's unrebutted measurements in support of the violation to be credible.

With regard to Brushy Creek's "duplicate violation" argument, while it is true that the two line curtain violations resulted from a single episode, the evidence supports two distinct violations and the Act requires a penalty assessment for each violation, 30 U.S.C. 820(a). However, I have taken all of this into consideration in assessing the penalties for the violations in question.

Significant and Substantial Violations

A "significant and substantial" violation is described in section 104(d)(1) of the Mine Act as a violation "of such nature as could significantly and substantially contribute to the cause and effect if a coal or other mine safety or health hazard." 30 C.F.R. ' 814(d)(1). A violation is properly designated as significant and substantial, "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 reasonably serious nature." Cement Division, National Gypsum Co., 3 FMSHRC 822, 825 (April 1981).

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.

In United States Steel Mining Company, Inc., 7 FMSHRC 1125, 1129, the Commission stated further as follows:

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 Company,

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, Secretary of Labor v. Texasgulf, Inc., 10 FMSHRC 498 (April 1988); Youghiogeny & Ohio Coal Company, 9 FMSHRC 2006 (December 1987). Further, any determination of the significant nature of a violation must be made in the context of continued normal mining operations. National Gypsum, 3 FMSHRC 327, 329 (March). Halfway, Incorporated, 8 FMSHRC 8 (January 1986).

In the Texasgulf, Inc. case, supra, the Commission affirmed the judge's non-"S&S" finding in connection with a permissibility violation and commented that in order for an ignition or explosion to occur, "there must be a confluence of factors, including a sufficient amount of methane in the atmosphere surrounding the impermissible gaps and ignition sources," 10 FMSHRC 501.

Citation No. 4260292

Mr. Wirth based his "S&S" finding on the fact that the 5-A face area where mining was taking place was not being ventilated by a separate split of fresh intake air, and was instead being ventilated by air that had circulated through and ventilated the worked-out 5-B area. He concluded that it was reasonably likely that an injury would occur because the 5-B area was not being properly examined, there was a body of methane present in the neutral worked-out area, with no air movement sufficient enough to dilute and move out that methane, and he believed that contaminated air from this area would easily find its way to the coal producing area. He also considered the fact that methane was being liberated from an old mine and was migrating through Brushy Creek's mine.

Mr. Wirth further believed that low oxygen levels and high methane levels may go undetected in areas that are not properly examined, and that roof falls could result in the failure of permanent ventilation control devices. Mr. Eslinger confirmed that he reviewed Mr. Wirth's "S&S" finding and agreed with it. Since it was only the second day of mining, Mr. Eslinger was concerned that methane could again come through the mine floor, and he found methane in the 5-B area and believed that it could travel to the working 5-A face at any time.

I conclude and find that Mr. Wirth's testimony in support of his "S&S" finding is general and somewhat speculative. Although I have found that the failure to ventilate the 5-A working face area with a separate split of intake air constitutes a violation of section 75.332(a)(1), on the specific facts of this case, I cannot conclude that in the course of continued mining the cited condition would reasonably likely result in an accident or injuries of a reasonably serious nature.

The evidence establishes that no active mining was taking place in the 5-B worked-out area and there was no power on the area. Except for some miscellaneous belt structures, all of the electrical equipment used to mine coal had been removed from the worked-out area. Except for the area where sealing work was being conducted, there is no evidence that miners were regularly working in other worked-out areas. Although Mr. Wirth concluded that it was "very easy" for any contaminated air exiting the worked-out area to enter the 5-A producing section, Mr. Eslinger confirmed that there was sufficient air quantity and oxygen at the working 5-A faces, and there was no evidence of any carbon monoxide. Indeed, Mr. Eslinger characterized the air sweeping the faces as "up to snuff" (Tr. 147). Mr. Eslinger also testified that he found no methane levels or oxygen levels that would have endangered miners on March 29 and 30, 1994 (Tr. 709).

In view of the foregoing, I conclude and find that the evidence does not support the inspector's "S&S" finding, and his finding in this regard **IS VACATED**. The citation **IS MODIFIED** to a non-"S&S" citation.

Citation No. 4160295

Inspector Wirth cited the nonpermissible golf cart that was driven into the area where he found 1.9 percent methane and 18.8 percent oxygen. Brushy Creek conceded that the cart was non-permissible. Mr. Wirth believed that it was reasonably likely that an explosion would occur if work had been allowed to continue because the cart was driven into an area where he found the methane and low oxygen levels. Although he did not inspect the golf cart, he believed that the cart batteries, and the motor, which sparks and arcs, the battery terminals, and the headlight all constituted ignition sources.

After careful review of all of the evidence and testimony with respect to this violation, I cannot conclude that it was "S&S." Although the evidence establishes that the golf cart was non-permissible, the inspector conceded that he did not inspect it and there is no evidence that any of its components were defective. Further, the evidence establishes that no active mining was taking place in the 5-B area, there was no power on the section, and all of the mining equipment had been removed.

The evidence reflects that Mr. Culpepper was initially driving a cart in the neutral area behind the stoppings while the inspector he was with was on the other side. Mr. Culpepper had operated the cart without incident or inspector complaints for most of the inspection. However, when the battery went dead, Mr. Culpepper abandoned the cart and was picked up by another cart driven by the walkaround representative. When Mr. Culpepper subsequently got off the cart and started walking in the direction of an entry from where he was being flagged by someone, his methane detector sounded in the presence of all of the inspectors who had apparently just stepped through a stopping door and detected the presence of methane. At that point in time, Mr. Culpepper was informed that he would be cited for driving the golf cart into the area where methane was detected.

Inspector Wirth conceded that the cart was not taken out of service, and that he allowed it to be driven from the area after it was pushed out of the area where the methane was detected. However, before the cart was started again, Mr. Wirth tested for methane and found that it was below the allowable

limit. This indicates to me that the condition was immediately abated. I also note Mr. Wirth's testimony that prior to entering the neutral area through the personnel door, his methane detector never sounded (Tr. 108). He also testified that the methane level he found would not in itself warrant a citation for the worked-out area in question (Tr. 94).

Based on the facts and evidence presented, I conclude and find that the methane level that caused the detectors to sound was an isolated event of very short duration, and with rather instant abatement. In the context of continued mining operations, I cannot conclude that it was reasonably likely that a methane ignition or explosion would have occurred. The only work in the 5-B area was the sealing work, and there is no evidence that miners would normally be working in the neutral area behind the stoppings where the cart was being driven at the time of the inspection, nor is there any evidence of any methane or golf carts being otherwise operated in the sealing work area as part of any normal mining operation. Under all of these circumstances, the "S&S" finding by the inspector **IS VACATED**, and the citation **IS MODIFIED** to a non-"S&S" citation.

Citation No. 4266732

Inspector Holland issued this citation after finding 1.9 percent methane and 18.8 percent oxygen in the cited worked-out area. He did not testify. However, based on the narrative description of the cited condition, it would appear that Mr. Holland concluded that the area was not sufficiently ventilated to move out the methane that he found.

Mr. Eslinger testified that he observed the conditions that gave rise to the citation and he agreed with Mr. Holland's "S&S" finding. Mr. Eslinger concluded that the lack of air movement, coupled with the high methane and low oxygen levels indicated that the available air was not moving out the methane. He further concluded that in the normal course of mining, it was reasonably likely that methane would continue to build up to an explosive level, and it could be ignited or moved towards the active working faces. He was also concerned that the low level of oxygen could cause depleted oxygen levels that would be insufficient for breathing.

For the reasons stated with respect to my non-"S&S" findings in connection with Citation No. 4260295, I conclude and find that the evidence does not support the inspector's "S&S" finding associated with Citation No. 4266732. In addition to those reasons, I have considered Mr. Wirth's testimony that there is no specific methane limit for worked-out areas, and that the methane level he found would not result in a citation for the

cited worked-out area (Tr. 68, 94). Under the circumstances, and on the facts of this case, I cannot conclude that the evidence supports any conclusion of a reasonable likelihood of an accident or injury if work were allowed to continue in the 5-B area. Accordingly, the inspector's "S&S" finding **IS VACATED** and the citation **IS MODIFIED** to a non-"S&S" citation.

Citation No. 4260297

With regard to this citation, issued by Mr. Wirth for inadequate air behind the ventilation line curtain, he testified that he based his "S&S" finding on the fact that mining had only resumed in the 5-A area two days prior to his inspection after it had been discontinued for ten months because of the high levels of methane leaking through the mine floor from an old abandoned mine. Conceding that the methane level he found at the time of the inspection was below the allowable limit, and that Brushy Creek drilled bore holes to bleed out the methane, Mr. Wirth nonetheless was concerned that a build-up of methane could again occur in the absence of adequate air ventilation at the face curtain area where mining was actively going on and where mining equipment was in operation. He concluded that a build-up of undiluted methane was reasonably likely in the absence of ventilation, and that this would pose an explosion hazard.

Citation No. 4261610

With respect to the citation issued by Mr. Bird for not positioning the ventilation line curtain to within 40 feet of the face, he testified that he based his "S&S" finding on the fact that methane had in the past been freely liberated through the mine floor, and in the presence of the ignition sources that were present, he believed fire and ignition hazards were present and that three miners who he observed working in the area were at risk. If an explosion had occurred, he believed it was reasonably likely that the miners would suffer fatal injuries.

Although it is true that the air ventilating the active 5-A area faces was not contaminated with high levels of methane at the time of the inspection, some methane was detected. Given the fact that mining had only recently resumed in that area after it had been discontinued for approximately ten months because of excessive methane liberation through the mine floor from an old abandoned mine, I conclude and find that the lack of adequate air flow at the face, and the positioning of the ventilation curtain approximately 66 feet from the face, rather than the required

40 feet, presented a discrete safety hazard in that methane could have been liberated and accumulated while the miner was cutting and loading coal at the face area. Indeed, Mr. Smock confirmed that periodic gas bleeders are still encountered in the 5-A area (Tr. 448). Further, the continuous miner, as well as the other mining equipment that was operating in the area, constituted potential ignition sources while coal was being cut and loaded. Under the circumstances, I conclude and find that in the course of continued mining at the cited face area, it was reasonably likely that a methane ignition, fire, or explosion would have occurred.

I further conclude and find that in the event of a face ignition, fire, or explosion, it would be reasonably likely that the miners who would be present would suffer injuries of a reasonably serious nature. Under the circumstances, I conclude and find that the violations associated with Citation Nos. 4260297 and 4261610 were "S&S", and the findings of the inspectors in this regard **ARE AFFIRMED**.

Size of Business and Effect of Civil Penalty Assessments on the Respondent's Ability to Continue in Business

I conclude and find that Brushy Creek is a large mine operator and the parties have stipulated that payment of the civil penalty assessments for the violations in question will not adversely affect Brushy Creek's ability to continue in business.

History of Prior Violations

An MSHA computer printout listing Brushy Creek's compliance record for the period March 29, 1992 through March 28, 1994, reflects that it paid civil penalty assessments in the amount of \$96,028 for 549 violations, 337 of which were "single penalty" non-"S&S" violation. Except for one section 104(d)(1) citation, all of the listed violations were issued as section 104(a) citations. There are 29 prior violations of section 75.370(a)(1) (failure to follow the ventilation plan), and 55 violations of section 75.503 (electric face equipment permissibility).

Although I cannot conclude that the respondent's history of prior violations is particularly good, for an operation of its size, I cannot conclude that it warrants any increases in the civil penalty assessments which I have made for the violations which have been affirmed.

Good Faith Abatement

The parties stipulated that Brushy Creek abated all of the violations in good faith.

Gravity

Based on my "S&S" findings and conclusions, I conclude and find that the violations affirmed as "S&S" violations were serious violations, and that the non-"S&S" violations were non-serious.

Negligence

The inspectors found that Citation Nos. 4240292, 4260295, 4266732, and 4266733 resulted from a moderate degree of negligence on the part of Brushy Creek. The "moderate" negligence finding for Citation No. 4266732 was subsequently modified to "low" negligence by MSHA in the course of a conference (Tr. 208-213).

Citation Nos. 4260297 and 4261610 were initially issued with findings of "high" negligence. However, they were subsequently modified to reflect a "moderate" degree of negligence.

I agree with the negligence findings, as modified, and I conclude and find that all of the violations were the result of Brushy Creek's failure to exercise reasonable care.

Civil Penalty Assessments

On the basis of the foregoing findings and conclusions, and taking into account the civil penalty assessment criteria found in section 110(i) of the Act, I conclude and find that the following penalty assessments are reasonable and appropriate for the violations that have been affirmed in these proceedings:

<u>Citation No.</u>	<u>Date</u>	<u>30 C.F.R. Section</u>	<u>Assessment</u>
4260292	3/29/94	75.332(a)(1)	\$150
4260295	3/29/94	75.50701	\$ 75
4266732	3/29/94	75.334(a)(1)	\$100
4266733	3/29/94	75.380(f)(1)	\$ 50
42660297	3/30/94	75.370(a)(1)	\$600
4261610	3/30/94	75.370(a)(1)	\$400

ORDER

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

1. Section 104(a) "S&S" Citation Nos. 4260292,

4260295, and 4266732 **ARE MODIFIED** to section 104(a) non-"S&S" citations.

2. Brushy Creek shall pay a civil penalty assessment of \$310, in settlement of section 104(a) "S&S" Citation No. 4266730, March 29, 2994, 30 C.F.R. 75.503.
3. Brushy Creek shall pay civil penalty assessments in the amounts shown above for the remaining citations that have been affirmed. Payment is to be made to MSHA within thirty (30) days of the date of these decisions and orders, and upon receipt of payment, these matters are **DISMISSED**.

George A. Koutras
Administrative Law Judge

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