

**FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION**

OFFICE OF ADMINISTRATIVE LAW JUDGES  
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FALLS CHURCH, VIRGINIA 22041

November 28, 2001

RAG CUMBERLAND RESOURCES, LP, : CONTEST PROCEEDINGS  
Contestant :  
v. : Docket No. PENN 2000-181-R  
: Citation No. 3657290; 7/6/2000  
SECRETARY OF LABOR, :  
MINE SAFETY AND HEALTH : Docket No. PENN 2000-182-R  
ADMINISTRATION (MSHA), : Citation No. 3657291; 7/6/2000  
Respondent :  
: Docket No. PENN 2000-183-R  
: Order No. 7076284; 7/6/2000  
: :  
: Docket No. PENN 2000-207-R  
: Order No. 2840951; 8/2/2000  
: :  
: Docket No. PENN 2000-208-R  
: Order No. 2840952; 8/2/2000  
: :  
: Docket No. PENN 2000-209-R  
: Order No. 3657297; 7/20/2000  
: :  
: Docket No. PENN 2000-210-R  
: Order No. 7078294; 7/20/2000  
: :  
: Cumberland Mine  
: Mine ID 36-05018  
: :  
SECRETARY OF LABOR, : CIVIL PENALTY PROCEEDING  
MINE SAFETY AND HEALTH :  
ADMINISTRATION (MSHA), : Docket No. PENN 2001-63-A  
Petitioner : A.C. No. 36-05018-04200  
v. :  
: :  
RAG CUMBERLAND RESOURCES LP, :  
Respondent : Cumberland Mine

**DECISION**

Appearances: R. Henry Moore, Esq., Buchanan Ingersoll, Pittsburgh, Pennsylvania,  
for the Contestant/Respondent;  
Susan M. Jordan, Esq., Donald K. Neely, Esq., Office of the Solicitor, U.S.  
Department of Labor, Philadelphia, Pennsylvania, for the  
Respondent/Petitioner.

Before: Judge Feldman

These consolidated contest and civil penalty proceedings arise under the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 801 et seq. (1994) (“Mine Act”). These matters also concern a compensation case in Docket No. PENN-2000-204-C brought pursuant to section 111, 30 U.S.C. § 821, by the United Mine Workers of America (UMWA) on behalf of its members. The compensation case was stayed on January 30, 2001, pending the outcome of these proceedings. The consolidated hearing was conducted in Fairmont, West Virginia, in two sessions, from April 3 through April 6, 2001, and from July 24 through July 25, 2001. After the hearing recess in April 2001, the parties resolved several of the contested citations.

On June 26, 2001, I approved a settlement agreement in Docket No. PENN 2001-94 wherein Rag Cumberland Resources LP (Cumberland) agreed to pay a reduced civil penalty for Citation Nos. 2840951 and 2840952. These citations are the subjects of the contests in Docket Nos. PENN 2000-207-R and PENN 2000-208-R. Consequently, Cumberland has moved to **withdraw its contests in Docket Nos. PENN 2000- 207-R and PENN 2000-208-R.**

The Secretary moved to vacate Order Nos. 3657294 and 3657297 on March 29 and July 2, 2001, respectively. These orders are the subjects of the contests in Docket Nos. PENN 2000-209-R and Penn 2000-210-R. Consequently, Cumberland has moved to **withdraw its contests in Docket Nos. PENN 2000- 209-R and PENN 2000-210-R.**

The remaining contested citations and order in Docket Nos. PENN 200-181-R, PENN 2000-182-R and PENN 200-183-R, consist of 104(a) Citation No. 3657290 and related 107(a) imminent danger Order No. 7076284, and, 104(d)(1) Citation No. 3657291. Docket No. PENN 2001-63-A is the civil penalty case dealing with Citation Nos. 3657290, 3657291 and Order No. 7076284.<sup>1</sup> These citations concern bleeder conditions at the Cumberland Mine during the afternoon shift on July 5, 2000. The imminent danger order withdrew mine personnel who went into the bleeder entries during the early morning hours on July 6, 2000, to make ventilation changes. The specific area of the bleeder system that is in issue is the eastern perimeter located behind the gob that remained after a number of longwall panels had been mined. The parties have filed thorough post hearing briefs and reply briefs that have been considered in the disposition of these matters.

### I. Statement of the Case

The explosive methane range of an air-methane mixture is 5% to 15%. As a general proposition, The Secretary’s safety regulations require that methane concentrations in bleeder

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<sup>1</sup> At Cumberland’s request, on July 31, 2001, Chief Judge Barbour severed contested Citation Nos. 3657290 and 3657291 from unrelated citations in Docket No. PENN 2001-63 and placed these contested citations in Docket No. PENN 2001-63-A to facilitate resolution of the issues in these proceedings.

entries shall not exceed 2%.<sup>2</sup> These matters concern continued longwall operations during the afternoon shift on July 5, 2000, after several 3.6% methane readings were obtained at the surface of the No. 1 exhaust fan shaft that was used to ventilate the eastern perimeter bleeders. 104(a) Citation No. 3657290 alleges a significant and substantial (S&S) violation of the provisions of 30 C.F.R. § 75.334(b)(1) that require bleeder systems to dilute and move methane from worked-out areas away from active workings. 104(d)(1) Citation No. 3657291 cites an S&S violation of 30 C.F.R. § 75.363(a) that is attributed to Cumberland's unwarrantable failure. Section 75.363(a) requires all personnel, except those specified in section 104(c) of the Mine Act, 30 U.S.C. § 814(c), to be withdrawn from mine areas where there are hazardous conditions that pose an imminent danger. Section 104(c) of the Mine Act, however, permits persons designated by the mine operator to correct conditions that constitute an imminent danger.

As noted, the explosive range of methane is a 5% to 15% air-methane mixture. Concentrations below 5% are not explosive because they lack adequate methane. Concentrations above 15% are not explosive because they lack adequate oxygen. The Secretary asserts the 3.6% methane reading at the surface of the No. 1 shaft was indicative of potential explosive concentrations of methane in the travelable bleeders that were not being adequately ventilated away from the working face. Cumberland contends that the 3.6% methane at the shaft was representative of approximately 3.6% methane in the travelable bleeder entries, and, that the methane in the bleeder was being carried away from the working areas.

Significantly, despite repeatedly obtaining abnormally high methane readings of 3.6% at the surface of the No. 1 shaft as early as 3:30 p.m. on July 5, 2000, Cumberland continued normal longwall operations until midnight without determining if methane concentrations in the underground bleeder were approaching the 5% explosive range. It would have taken several hours for a mine examiner to travel the eastern perimeter bleeder entry to take the necessary methane concentration readings. (Tr. 490-91).

The dispositive question is not, as Cumberland suggests, whether the Secretary has met her burden of demonstrating methane bleeder concentrations were in the explosive range on July 5. (*C. Reply Br.* at 2). Although the burden of proof rests with the Secretary, the Secretary's *prima facie* burden of demonstrating the cited violations occurred is satisfied by establishing that there was a malfunction in the bleeder system. Having established a malfunction, the focus shifts to whether 3.6% methane exiting from the bleeder at the surface should have alerted a reasonably prudent person that underground bleeder readings were required to ensure that methane adequately was being diluted and carried away from active workings.

As discussed below, the Secretary, relying on the bleeder's ventilation design, as well as comparisons of previous methane readings at the shaft and in the travelable bleeder, has provided a reasonable basis for concluding that the 3.6% methane exiting the bleeder at the surface was indicative of potential explosive levels of methane in the bleeder below. In contrast,

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<sup>2</sup> The provisions of section 75.323(e), 30 C.F.R. § 75.323(e), the mandatory safety standard governing methane levels in bleeders, specifies that methane concentrations, determined by readings taken in a split of air immediately before that split joins another split of air, shall not exceed a 2.0 percent.

Cumberland's assertion that the 3.6% readings at the No. 1 fan were not indicative of explosive levels of methane in the bleeder entries is conjecture that could have been resolved if Cumberland had taken underground bleeder readings before continuing active mining. Having failed to do so, Cumberland's defense that the bleeder conditions on July 5 did not require the suspension of normal longwall operations because they were not hazardous is not supported by the evidence.

Consequently, Citation Nos. 3657290 and 3657291 shall be affirmed. However, as discussed below, 107(a) imminent danger Order No. 7076284, issued after midnight on July 6, 2000, when Cumberland already had removed all mine personnel, except those persons designated under section 104(c) of the Mine Act to correct the hazardous condition, shall be vacated.

## II. Background

### A. The Bleeder System

The Cumberland Mine is classified as a "gassy mine" because it liberates approximately 12 million cubic feet of methane per day. As a gassy mine, the Cumberland Mine is subject to increased Mine Safety and Health Administration (MSHA) inspections pursuant to section 103(i) of the Mine Act, 30 U.S.C. § 823(i).<sup>3</sup> (Tr. 868-69, 1492). These matters concern a set of bleeder entries on the eastern perimeter of a number of longwall gobs at Longwall Section 42. (Ex. R-5).<sup>4</sup> The longwall gobs are all interconnected and air flows within and between them. The term "gob", as used in this decision, is the area where coal has been extracted from successive longwall panels, as well as from the development entries between the mined-out panels, where the roof has collapsed as a consequence of the mining cycle.

The active longwall panel on July 5, 2000, was the 90 butt longwall panel that is located at the northern end of the gob. *Id.* At the western perimeter of the gob there is a set of mains entries. *Id.* The southern perimeter of the gob is formed by another set of bleeder entries known as the 1B Right bleeders. *Id.* The split of air from the 1B Right bleeders meets the split of air from the eastern perimeter bleeders at the bottom of the No. 1 bleeder shaft. *Id.* The No. 1 bleeder shaft is a vertical shaft measuring approximately 600 feet deep from its base in the southeastern corner of the bleeder system to the surface. (Tr. 494-95; Ex. R-5). At the surface of the shaft is a bleeder exhaust fan. The No. 1 bleeder shaft is used solely to transport a diluted air-methane mixture from the bleeder entries underground to the surface and out of the mine.

As a general proposition, the gob liberates high concentrations of methane that must be safely diluted and carried away from working places where there are potential ignition sources. Thus, methane concentrations in the gob vary from 0% to 100%. As previously noted, methane levels in excess of 15% are not explosive because they lack sufficient oxygen. Bleeder entry systems are designed to dilute methane liberated from the gob in a controlled fashion. The

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<sup>3</sup> Under Section 103(i), gassy mines are subject to a minimum of one spot inspection every five working days at irregular intervals.

<sup>4</sup> Cumberland and government exhibits will be designated as "R" and "G", respectively.

Secretary's mandatory safety regulations require that methane concentrations shall not exceed 2.0% in a bleeder split of air to be measured before that split of air joins another split of air. 30 C.F.R. § 75.323(e). There are no other limits on methane concentrations in bleeders in the Secretary's regulations. (Tr. 818). However, MSHA has an informal, unwritten policy that methane concentrations below 4.5% in bleeder entries do not constitute an imminent danger. (Tr. 269, 402, 405, 419).

At Cumberland's longwall section, prior to beginning mining of the 90 butt panel on June 6, 2000, methane liberated from the gob into eastern perimeter was diluted from fresh air traveling in a southerly direction to the No. 1 Bleeder shaft. Upon commencement of mining of the 90 butt panel, the No. 2A Bleeder shaft and exhaust fan, located in the northeastern corner of the eastern perimeter of the bleeder system, became operational. (Ex. R-5). Thus, as of June 6, 2000, methane from the gob in the eastern perimeter bleeder entries was diluted by fresh air that was split and directed to the surface by either the No. 1 Bleeder shaft or the No. 2A Bleeder shaft. (Tr. 188-89, 1121, 1553).

As of June 6, 2000, air principally entered the bleeders at the northern end from the headgate of the 90 butt panel through entries known as the No. 1 and No. 2 sweeteners, as well as from the tailgate (also known as the 82 butt entries) through a regulator known as "Fred's Hole." (Tr. 1956-62). As air travels through the No. 1 and No. 2 sweeteners and Fred's Hole in a southerly direction in the eastern bleeders, it is split near a location in the vicinity of bleeder evaluation points (BEPs) 18 and 18A. (Tr. 192-4; Ex. R-5). BEPs are locations where there are regulators that control the amount of methane exiting the gob into the bleeder entries where the methane is diluted with fresh air and carried to the surface. (Tr. 1687). In the vicinity of BEPs 18 and 18A, some of this bleeder air is split and directed to the No. 2A bleeder shaft and some of the air goes to the No. 1 bleeder shaft. In essence, these two bleeder shafts compete for the air traversing through the eastern perimeter bleeders. (Tr. 1689-90).

As air travels through the eastern bleeders, air from the gob is vented into the bleeders at various BEP locations designated by numbers in descending order from north to south, specifically BEP Nos. 21, 20, 18, 18A, 8, 7 and 6. (Ex. R-5). As noted, at these locations the air coming out of the gob through regulators into the bleeder contains higher levels of methane. It is the function of the bleeder system to dilute these high methane levels with fresh air coursing the bleeder entries.

Between June 6 and July 5, 2000, BEPs 6, 7 and 8 were adjusted to their most closed positions, although air continued to come out of them. (Tr. 1671-72, 1676, 1910-11). Cumberland maintains they were closed because the methane released from the gob at these locations was creating lowered oxygen levels in areas of the eastern bleeders where miners were required to travel to pump water from the bleeder. (Tr. 1723-24, 1912). Although the BEP locations were approved by MSHA under the ventilation plan, Cumberland maintains MSHA approval for closing the regulators was not required because their closures were merely

adjustments performed within the operator's discretion.<sup>5</sup> (Tr. 902, 1672-73, 1808). During this period Cumberland also installed check curtains in entries across from BEP 22 to BEP 18. (654-55, 982). The closure of BEPs 6, 7 and 8, and the installation of check curtains from BEP 22 to BEP 18 prior to July 5, 2000, reduced the rate of methane that was being liberated into the eastern perimeter entries, consequently reducing the methane concentrations in the No. 1 shaft. The Secretary asserts these actions bottled up methane in the gob rather than properly ventilating methane from the gob. In this regard, the Secretary contends that such actions, over time, could result in an accumulation of unliberated methane that would eventually back-up from the bleeder system into working areas. (Tr. 621-24, 631, 762, 765, 780, 977, 981-82, 992, 1732, 1734-35, 2016-18).

In addition to the methane concentrations exiting the gob at the BEPs along the eastern perimeter, methane also is ventilated from the southeast corner of the gob at locations in the vicinity of what were formally BEPs 3 and 4. (Ex. R-5). The southeast corner of the gob is the area of lowest pressure because of its proximity to the No. 1 fan. Consequently, Cumberland contends methane from this area tends to travel more easily into the bleeders and out the No. 1 shaft to the surface. (Tr. 899-900, 1800-01, 1819). There are also openings from the gob into the 1B Right bleeders in the southern perimeter. (Ex. R-5).

There were water accumulations in the eastern bleeders south of BEP 5A. Although Cumberland had set up a pumping system, this area of the bleeder remained inaccessible. Because of elevations in the mine floor, it was not expected that water levels would rise to the roof completely blocking air to the No. 1 shaft. Since June 6, 2000, the water levels south of BEP 5A had remained relatively constant in that the water gauge at the No. 1 fan, that measures fan resistance evidencing a possible blockage of the bleeders, remained fairly constant. However, Cumberland noted that the water gauge at the No. 1 bleeder fan had begun to rise in the days preceding July 5 reflecting a possible increase in the accumulated water in the vicinity of BEP 5A. (Tr. 1970).

#### B. Ventilation of the Longwall on July 5, 2000

As previously noted, the 90 butt longwall panel began retreat mining on June 6, 2000. It had retreated approximately 1500 feet by July 5, 2000. The longwall face was ventilated by coursing intake air down the headgate entries and directing the air across the longwall face. After sweeping the face, the air traveled along the edge of the gob in the tailgate entry, and into the No. 2 entry of the 82 butt where some of the air traveled inby back into the bleeders through Fred's Hole, and some of the air traveled outby in the No. 2 entry of the 82 butt. (Ex. R-5). Initially, the tailgate (the No. 1 entry of 82 butt) was an intake entry that joined the air sweeping the face at the tailgate and traveled into the bleeder system through Fred's Hole or back out through the No. 2 entry of the 82 butt to the Mains on the western perimeter. *Id.* Although air

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<sup>5</sup> As discussed *infra*, while adjustments to regulators may not require MSHA approval, the closing of regulators that, in effect, void MSHA's approved BEP locations, may constitute a modification of the ventilation plan that requires MSHA approval. Cumberland has not been charged with a violation of its approved ventilation plan.

enters Fred's Hole to ventilate the bleeders, Fred Hole is actually located in the gob rather than in a bleeder entry. (Tr. 1751, 1904-05).

On July 3, 2000, a problem developed with the face ventilation on the longwall after air velocities at the face had dropped. This occurred because the resistance in the No. 2 entry of 82 butt had increased because of roof falls associated with the retreat of the 90 butt panel. The resistance to the return air flow resulted in a diminution of air flowing across the face. (Tr. 1120, 1125, 1554, 1557-58). Consequently, an air change was made on July 3, 2000, to change the longwall tailgate air in the No. 1 entry of 82 butt from intake air to return air. (Tr. 1118, 1120, 1554, 1558-59). The air change resulted in increased air flow across the longwall face. After the air change, the velocity of air at Fred's Hole was 49,000 cfm. (Tr. 1903, 1987-88).

The longwall face ventilation is designed to maintain pressure on the gob immediately behind the longwall shields. This prevents methane from the gob immediately behind the shields from coming out into the longwall face. (Tr. 1173). At the end of the face the air is split. Some of the air is directed toward the bleeder and the remaining air exits out the tailgate as return air. The area at the end of the face where the air is split is known as a "T-split." (Tr. 1802, 1834-36). A properly functioning T-split, in conjunction with a properly functioning bleeder system, maintains pressure differentials that are intended to prevent methane from the gob from backing up into the working face. (Tr. 1835-37).

### C. Events of July 5 and July 6, 2000

During the day shift on July 5, 2000, MSHA Inspector Ronald Hixson was at the Cumberland Mine to participate in an ongoing MSHA inspection. Hixson reviewed the weekly examination books in the mine office. The normal methane concentration at the No. 1 bleeder shaft was approximately 1.6%. (Tr. 183-85). Hixson noticed that the methane readings at the No. 1 bleeder fan had been higher than normal during the previous two weeks. For example, the examination book entries reflected normal readings of 1.6% on May 18; 1.6% on May 24; 1.6% on May 30; and 1.4% on June 6. (Tr. 183-85; Ex. G-7). More recent readings were consistently higher in the 1.8% to 1.9% range. There was a 1.8% reading on June 14; a 1.9% reading on June 22, a 1.89% reading on June 30; and a 1.9% reading on July 3, 2000. (Ex. G-7).

At approximately 12 noon on July 5, Hixson traveled to the No. 1 bleeder fan with Michael Konosky, Cumberland's safety representative. Konosky took readings with his Exotector. The results indicated methane was exiting the fan shaft at concentrations from 1.8% to 2.2%. Hixson also took a bottle sample of air for laboratory analysis. The results, which were not known until July 13, showed 3.6% methane. (Tr. 212-13; Ex. G-2). Hixson left the mine at approximately 1:30 p.m. on July 5. At the time of Hixson's departure, he had no knowledge of bleeder shaft methane readings above the 1.8% to 2.2% range. (Tr. 206, 207-09, 469).

To ensure proper functioning of the bleeder system, the exhaust fans are monitored by water gauge pressure readings. The water gauge measures the degree of resistance caused by water accumulations that block bleeder entries. As water levels rise, resistance in the bleeder system rises causing the bleeder shaft fan to exert more pressure (work harder) to overcome

the resistance. Since the water gauge at the No. 1 fan had been rising, Fred Evans, Cumberland's mine foreman, convened a meeting on the morning of July 5, 2000, to discuss the increase in fan pressure. (Tr. 1132, 1562-63, 1970). Evans was concerned that the increase in pressure could cause too much methane to be drawn out of the gob at too fast a rate, thus increasing the concentration of methane in the bleeder. Evans was also concerned that the water pumps in the eastern perimeter south of BEP 5A may not have been working properly. In addition to water accumulations, a high water gauge reading could indicate other causes of increased resistance in the gob areas behind the longwall face or in the tailgate entry of the 82 butt. (Tr. 1795).

As a result of the meeting, Evans dispatched Jason Hustus, a Cumberland engineer, to the No. 1 shaft to obtain a methane reading. At approximately 3:30 p.m. on July 5 Hustus obtained a methane reading of 3.6% at the No. 1 shaft. Evans knew that Hixson and Konosky had obtained a 1.8% methane reading of at the No. 1 shaft earlier that same morning. Evans asked Hustus to recalibrate his methane detector and sent Hustus back for another reading. Once again Hustus obtained a reading of 3.6%.

Evans informed Gary DuBois, manager of engineering, and Robert Bohach, manager of safety, of Hustus' methane readings. At approximately 6:00 p.m. DuBois and Bohach went to the No. 1 shaft and took several methane readings of 3.6%. (1137-38, 1778). Concerned, they went to the 32-1 surface gob vent hole that is located in close proximity to the No. 1 shaft. (Ex. R-5). Gob bore holes are drilled from the surface into the strata above longwall panels to vent methane directly from the gob to the surface. DuBois and Bohach determined the bore hole was closed. They opened the surface hole and methane began to flow out. They tried to start a pump that was connected to the bore hole, but it was not operating. They notified a surface electrician to repair it.

After opening the bore hole, DuBois and Bohach returned to the No. 1 shaft where they once again obtained readings of 3.6% methane. (Tr. 1142, 1568, 1779). DuBois and Bohach returned to the portal to discuss what they believed was the appropriate course of action. They felt the high methane at the No. 1 shaft was caused by the high water gauge reading that resulted in too much methane being pulled out of the southeastern corner of the gob. They decided that changes to the No. 1 fan blade setting as well as air changes underground had to be made. Changing the fan blade would reduce the pressure the fan was pulling on the bleeder entries. A change in the fan pressure would require air changes underground, such as opening the sweeteners, to compensate for the reduced air pressure.

There are methane sensors on the longwall shearer, at the tailgate and at midface. The sensors on the shearer momentarily de-energize the shearer if levels of methane exceed 1%. The sensors at the tailgate and at midface shut down power on the face if methane exceeding 1% is detected. If methane was baking up from the gob, it usually would first be detectible at the face in the vicinity of the tailgate.

There were approximately 100 miners working underground with approximately 12 miners on the longwall section during the afternoon shift that began at 4:00 p.m. on July 5, 2000. Among the miners working at the longwall was Timothy W. Hroblak, who is a UMW safety committeeman. Hroblak has been employed at the Cumberland Mine since May 1979. (Tr. 105). Hroblak testified that beginning at approximately 7:00 p.m., there were intermittent power shut downs triggered by the methane sensor at the tailgate. (Tr. 109). The face crew could not



determine the cause of the problem as the 1% methane detected by the sensor would dissipate within a few minutes after which power could be restored. (Tr. 109, 111-12, 149, 155). Hroblak went to the face and took several methane and air velocity readings that were all within normal limits below 1%. (Tr. 111-12, 150, 151-52, 155, 375-76). Given the normal methane and air velocity readings at the face during the afternoon shift, Dubois and Bohach decided to make the ventilation adjustments at the start of the midnight shift since section 75.324, 30 C.F.R. § 75.324, requires keeping all personnel, except those making ventilation air changes, from going underground.

At approximately 8 p.m. on July 5, during the middle of the shift, the miners on the longwall were advised that there would be no "hot seat" changes because the midnight crew would be kept out of the mine so that air changes could be made. A "hot seat" change requires an afternoon shift member to remain at his work station until he is relieved by an arriving midnight shift employee. (Tr. 110, 113-15, 117, 1162).

Dubois and Bohach continued to monitor the conditions at the No. 1 fan as normal longwall operations continued. For example, Dubois obtained 3.6% methane readings at the No. 1 shaft at 7:30 p.m. and 10:30 p.m. (Tr. 1784, 1827-28). Dubois and Bohach decided they would withdraw miners from the mine if methane levels at the No. 1 fan rose above 4%. They based their decision on MSHA's informal policy of not considering methane levels of less than 4.5% to be an imminent danger; on the fact that a 4% concentration provided a 1% margin of error below explosive levels; on the fact that methane readings at the face were within normal limits despite several tailgate sensor shut downs; and the fact that the distance from the bottom of the number of the No. 1 shaft to the working section was over 9,000 feet. (Tr. 1150, 1152, 1158-59, 1351, 1790, 1826, 1829, 1893-96, 1953).

At midnight, at the end of the July 5, 2000, afternoon shift, Dubois and Bohach had a meeting with mine safety committee members who were exiting the mine, or who were arriving for work. (Tr. 117, 1160-61). They told the committeemen that there were problems at the No. 1 bleeder fan. The committeemen were informed, for the first time, that Cumberland had obtained 3.6% methane readings at the No. 1 bleeder shaft as early as 7:00 p.m. Hroblak and other committeemen became upset that normal mining had continued. Hroblak believed the amount of methane exiting the bleeder shaft was approximately half the methane concentrations at BEP 5A because the amount of methane exiting the fan was diluted by air from the 1B right bleeder entry in the southern perimeter. (Tr. 127). Thus, Hroblak believed the amount of methane in the bleeder eastern perimeter entries could have been in the explosive range between 5% and 7%. (Tr. 127-28). Hroblak stated that, had he known of the conditions at the surface of the bleeder shaft, he would have exercised his rights as a union safety committee member by immediately withdrawing all hourly personnel from the mine. (Tr. 128, 139). Upon leaving the mine, at approximately 12 midnight, Hroblak telephoned inspector Hixson to report the conditions at the mine. (Tr. 123-24, 226-27, 1160, 1161-62).

Consistent with the provisions of section 75.324, the July 6, 2000, midnight shift was not permitted to enter the mine because of the ventilation changes that were to be made. Power to the mine was de-energized and management personnel and several hourly employees entered

the mine to begin corrective action. The hourly employees were used as runners to relay communications from the bleeder entries to a telephone located in a headgate entry of the 90 butt panel. (233, 1851, 1899, Ex. R-5).

On the surface, Dubois went to the No. 1 bleeder shaft and changed the louvers at the main fan and the back-up fan to reduce the amount of pressure the fan was pulling. He also tested the back-up diesel generator. Adjusting the louvers, which took approximately 15 to 20 minutes, was completed at approximately 1:00 a.m. (Tr. 1161, 1163-64, 1787, 1789-90, 1845). Before leaving the No. 1 fan Dubois obtained another methane reading of 3.6%. (Tr. 1789). Dubois assigned a foreman to remain at the No. 1 shaft to continue monitoring the methane concentrations.

To evaluate the bleeder conditions, Cumberland management personnel Roger Peelor and Robert Kimutis traveled to BEP 5A, the farthest point in by the travelable bleeders, to measure the air flow and methane before air changes were made. (Tr. 1582). It took approximately 1½ hours to walk to BEP 5A. (Tr. 1691-92, 1703). Peelor testified he took methane readings at approximately 1:30 a.m. at BEP 5A that ranged from 3.6% to 3.8% methane. (Tr. 1682, 1690-91). Peelor and Kimutis then adjusted the regulators at the No. 2A bleeder shaft to direct more air towards the No. 1 shaft. (Tr. 1574, 1683). This involved sliding the regulator doors by hand about one inch towards a more closed position that resulted in an approximate 8,000 cfm change in the air flow. (Tr. 1574, 1710-11, 1901).

Peelor and Kimutis also changed the openings at the No. 2 and No. 3 sweeteners by knocking out blocks that controlled the flow of air into the bleeders. (Tr. 1709). The blocks were removed gradually while air at the longwall face was monitored to ensure adequate air velocity was maintained. Once it was determined that ventilation of the face was not adversely affected, the sweeteners were opened further and the opening at Fred's Hole was restricted. (Tr. 1709, 1899-1900).

Opening the sweeteners permitted more fresh intake air to flow into the eastern perimeter bleeders. (Tr. 1166-67, 1574-75, 1577, 1689-90, 1693-94, 1962, 1982). Adjusting the regulator at the base of the No. 2A bleeder shaft decreased the air going into that shaft and increased the air flow to the No. 1 shaft. (Tr. 1578, 1595, 1693-94, 1982). Restricting the regulator at Fred's Hole reduced the amount of methane coming into the bleeder system at that location, diverting more methane to the southeast corner of the gob. (Tr. 1167-68, 1692, 1714). The regulator at Fred's Hole is normally closed once the active longwall panel had retreated a distance of approximately 2,000 feet. (Tr. 1500-02, 1906).

At approximately 1:30 a.m., Hixson, in response to the information provided by Hroblak, arrived at the Cumberland Mine while the air changes were in progress. (Tr. 229, 1179). Hixson met Bohach on the surface. Bohach told Hixson that the last reading at the No. 1 fan was 3.6% and that men were underground making air changes. (Tr. 234-35, 490). Methane readings were being telephoned to Bohach in the mine office every 15 to 20 minutes by employees stationed at the fan. Shortly after Hixson arrived at the mine, methane levels at the No. 1 fan reportedly had risen from 3.6% to 3.8%. (Tr. 231, 240, 1176, 1333-34). A subsequent reading taken at the fan between 2:30 and 2:45 a.m. was reported to Bohach as having increased to 4.2%. Bohach informed Hixson of the reading. (Tr. 240, 491, 1334, 1777).

Hixson telephoned his supervisor Robert Newhouse to discuss the bleeder shaft methane concentrations. (Tr. 240, 385-711). Newhouse telephoned Acting District Manager Kevin Stricklin. After evaluating the situation, Hixson was directed to issue an imminent danger order that would require Cumberland to immediately stop its air changes and remove everyone from the mine. (Tr. 385, 388, 711-12). At approximately 3:10 a.m., Hixson verbally issued a 107(a) imminent danger withdrawal order requiring everyone, including personnel making air changes, to leave the mine and vacate the No. 1 shaft area until the methane conditions had stabilized. (Tr. 239, 1335, 1778; Ex. G-3). Hixson was concerned that methane conditions were rising despite the fact that longwall operations had been suspended and no methane was being generated off the longwall face. (Tr. 534-35).

After the imminent danger order was verbally issued, readings at the fan dropped from 4.2% to 3.8%. (Tr. 1179, 1430). The next fan reading was taken at approximately 6:00 a.m. on July 6 by MSHA inspectors after the mine had ceased operations for over six hours. The methane exiting the fan at that time was 2.8%. (Tr. 1186). It took more than two hours for the miners underground to arrive at the surface because of the lengthy distance to be traveled. (Tr. 490-91). The last men underground exited the mine at 6:30 a.m. (Tr. 266).

Imminent Danger Order No. 7076284 was formally written and served on Cumberland by Hixson at approximately 9:00 a.m. on the morning of July 6. (Tr. 239; Ex. G-3, p.1). The imminent danger order was modified at 2:00 p.m. on July 6, 2000, to allow teams of company and MSHA personnel to go underground to evaluate the bleeder conditions. Methane concentrations exiting the fan had declined to 2.1% at that time. (Tr. 1190-91; Ex. G-3, p.3). The imminent danger order was modified again at 9:30 p.m. on July 6 to allow Cumberland to make additional ventilation adjustments underground. (Ex. G-3, p.4).

Citation No. 3657290 citing an alleged significant and substantial (S&S) violation of the mandatory safety standard in section 75.323(e) was issued to Cumberland by Hixson at 4:30 p.m. on July 6. Section 75.323(e) requires that methane concentrations in a bleeder split of air, before that split joins another split of air, shall not exceed 2.0%. Although Citation No. 3657290 attributed the cited violation to Cumberland's reckless disregard, the citation was issued under section 104(a) of the Mine Act, 30 U.S.C. § 814(a), and it did not allege an unwarrantable failure. (Ex. G-4).

Citation No. 3657290 was modified on July 7, 2000, to substitute section 75.334(b)(1), 30 C.F.R. § 75.334(b)(1), as the violated mandatory safety standard. Section 75.334(b)(1) requires bleeder systems to dilute and move methane-air mixtures away from active workings and into a return air course, or, to the surface of the mine. Simply put, section 75.334(b)(1) requires bleeder systems to function properly.

Finally, 104(d)(1) Citation No. 3657291 was issued by Hixson at 6:00 p.m. on July 6 citing an S&S violation of the provisions of section 75.363(a), 30 C.F.R. § 75.363(a), that specify, if conditions pose an imminent danger, all persons, except those referred to in section 104(c) of the Mine Act (persons designated by the operator to correct the condition), immediately must be withdrawn from the mine. The cited violation was attributable to Cumberland's unwarrantable failure.

### III. Findings and Conclusions

#### A. 104(a) Citation No. 3657290

##### 1. Fact of Violation

As a threshold matter, in defense of the subject citations, Cumberland asserts the 2% methane limit in bleeder splits of air in section 75.323(e) does not apply to a bleeder shaft. (*C. Br.* at 23-27). Thus, Cumberland seeks to undermine Citation No. 3657290, issued on July 6, 2000, because the citation initially alleged a violation of section 75.323(e). Section 75.323 provides:

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

The Secretary's mandatory standard in section 75.323(e) addresses the method of obtaining representative methane readings in components of bleeder systems to ensure the air coursing through the bleeder contains not more than 2% methane. Thus, not surprisingly, the standard requires methane concentration measurements to be taken in splits of air *before* the concentration of methane in these splits of air is diluted or otherwise altered by an additional split of air. As Cumberland states in its posthearing brief, "[t]he air from the 1B Right bleeders meets the air from the eastern perimeter bleeders at the bottom of the No. 1 bleeder shaft, a shaft from the surface used solely to transport air from the bleeder entries out of the mine." (*C. Br.* at p.2).

To obtain accurate methane concentrations in 1B Right, and in the eastern perimeter of the bleeder, it is clear that section 75.323(e) requires methane readings to be taken in both 1B Right and the eastern perimeter *before* these two splits of air meet. When these splits meet, they feed a new split of air - - the No. 1 bleeder shaft. The only method of obtaining a representative methane sample in the bleeder shaft is to measure the methane concentration before the air in the shaft joins another split of air - - the atmosphere. Moreover, it reasonably can be argued that the No. 1 bleeder shaft is a "return air course" as contemplated by section 75.323(e).

Accordingly, I am not persuaded by Cumberland's assertion that the 3.6% to 4.2% methane concentrations in the shaft on July 5 and July 6 are irrelevant, or otherwise entitled to little evidentiary weight, because such readings are not prohibited by section 75.323(e), the only regulation concerning permissible methane levels in bleeders. On the contrary, it is difficult to understand Cumberland's contention that the 2% limit in section 75.323(e) is inapplicable because it was on *actual notice* that section 75.323(e) does in fact apply to bleeder shafts. In this regard, Cumberland was previously cited on December 20, 1996, in Citation No. 7013734, for an excess of 2% methane in the No. 1 bleeder shaft. (Ex. R-6). The citation was issued after several bottle samples revealed methane of 2.2%, 2.84%, and 2.7% at the surface of the No. 1 shaft. The citation was terminated on October 23, 1997, after Cumberland made numerous adjustments to its bleeder system over a ten month period, when methane in the shaft had been

reduced from 2.5% to 1.7%. (Ex. R-6, p.2-7). Finally, the fact that the Secretary's mandatory safety standards impose a 2% methane limit in bleeder shafts was acknowledged succinctly by Roger Peelor, Cumberland's Senior Mining Engineer, when he testified that operating with 3.6% methane in a bleeder shaft is prohibited because "[i]t's the law." (Tr. 1726).

In an apparent effort to avoid Cumberland's assertion that a bleeder shaft is not "a split of air" as contemplated by section 75.323(e), the Secretary modified Citation No. 3657290 on July 7, 2000, to reflect an alleged violation of section 75.334(b)(1). Citation No. 3657290 states:

The ventilation and bleeder system used for the longwall section and active gob failed to properly remove methane as required. There was 3.6% to 4.2% methane being coursed through the No. 1 Bleeder shaft. The methane concentration at 6:30 p.m. on 7/5/00 at the fan was 3.6%. The Company failed to make corrections immediately. They allowed the afternoon shift to continue to work until the end of their production shift. The persons exited the mine and corrections started around 12 midnight. The split exceeded the 2% limit.

(Ex. G-4, p.1). The July 7 citation modification added the following additional conditions:

- . . . . It has been determined that the bleeder system for the longwall is not functioning properly for the following reasons:
1. Methane exceeding 2.0% has been detected exhausting from the No. 1 bleeder fan.
  2. Water has accumulated to the point that the airflow in the bleeder system has been obstructed.
  3. BEP 6 BEP 7 have been closed without prior approval.
  4. Low oxygen levels have been found in the travelable bleeder entry.

(Ex. G-4, p.3).

Section 75.334(b)(1) provides:

During pillar recovery a bleeder system shall be used to control the air passing through the area and *continuously dilute and move methane-air mixtures* and other gases, dusts and fumes from the worked-out area away from active workings and into a return air course or to the surface of the mine.

(Emphasis added).

In applying section 75.334(b)(1) to the facts of this case, we start with the longstanding proposition that the "language of a regulation . . . is the starting point for its interpretation." *Dyer v. United States*, 832 F. 2d 1062, 1066 (9<sup>th</sup> Cir. 1987)(citing *Consumer Prod. Safety Comm'n v.*

*GTE Sylvania, Inc*, 447 U.S. 102, 108 (1980)). Where the language of a regulatory provision is clear, the terms of that provision must be enforced as they are written unless the regulator clearly intended the words to have a different meaning or unless such meaning would lead to absurd results. *Utah Power & Light Co.*, 11 FMSHRC 1926, 1930 (Oct. 1989); *Consolidation Coal Co.*, 15 FMSHRC 1555, 1557 (Aug. 1993). The plain language of section 75.334(b)(1) requires that bleeder systems *both* continuously dilute *and* move methane-air mixtures away from active workings.

Notwithstanding the question of whether there is a 1:1 ratio between methane in the No. 1 shaft and methane in the eastern perimeter bleeder, the undisputed facts support the conclusion that methane in the bleeder was not being adequately diluted and carried away from the working face. Cumberland concedes the rising water gauge at the No. 1 shaft was indicative of restrictive air flow caused by water accumulations located in by BEP 5A, increased resistance caused by an increase in the gob area, and/or deteriorating conditions in the tailgate of the 90 butt panel caused by the panel's retreat. (*C. Br.* at 7). Indicia of restrictive air flow support the conclusion that the bleeder was not functioning properly.

Moreover, Cumberland's actions in this case reflect that the bleeder system was malfunctioning. Namely, before MSHA arrived at the mine, Cumberland took numerous methane readings during the afternoon shift at the No. 1 fan; Cumberland initiated air changes at the start of the next shift on midnight July 6; Cumberland adjusted the louvers on surface at the No. 1 fan; Cumberland adjusted the regulator at the base of the No. 2A bleeder shaft; Cumberland closed the regulator at Fred's Hole; and Cumberland opened the regulators on two sweeteners. In addition, in view of the restrictive air flow in the bleeder, activation of the tailgate sensor on several occasions during the July 5 afternoon shift is a further indication that methane was migrating back from the gob towards the working face. In short, the evidence in this case provides an ample basis for concluding that Cumberland's bleeder system was not adequately diluting and coursing methane through the bleeder system. **Accordingly, the Secretary has satisfied her burden of demonstrating a violation of section 75.334(b)(1).**

## 2. Significant and Substantial

In its Posthearing Brief, Cumberland has elected not to further argue the S&S designation in Citation No. 3657290 if the cited violation of section 75.334(b)(1) is affirmed. (*C. Br.* at p.19, n.8).

A violation is properly designated as significant and substantial in nature if, based on the particular facts surrounding the violation, there exists a reasonable likelihood that the hazard contributed to by the violation will result in an injury or an illness of a reasonably serious nature. *Cement Division, National Gypsum*, 3 FMSHRC 822, 825 (April 1981). The issue of whether a particular violation of a mandatory safety standard is S&S in nature must be resolved by assuming continued normal mining operations. *U.S. Steel Mining*, 7 FMSHRC 1125, 1130 (Aug. 1985). Consideration should be given to both the time the violative condition existed before the citation was issued and the time it would have existed if normal mining operations had continued. *Bellefonte Lime Co.*, 20 FMSHRC 1250 (Nov. 1998); *Halfway, Inc.*, 8 FMSHRC 12 (Jan. 1986).

The Secretary presented significant evidence to support her S&S designation concerning the hazards associated with a malfunctioning bleeder system in proximity to potential ignition sources generated during active longwall operations. When bleeder systems malfunction, methane can build to 5% to 15% explosive levels. These explosive levels of methane can back up through the tailgate into the working face where sparks generated during the coal extraction process are not uncommon. It is reasonably likely that an explosion at the longwall face would result in serious or fatal injuries.

Cumberland asserts there is a 1:1 ratio of methane concentrations between the No. 1 shaft and travelable eastern perimeter bleeders. The Secretary asserts the ratio is 1:2 in the No. 1 shaft as compared to the BEP 5A area of the bleeder. Cumberland did not take actual methane readings in the bleeder entries on July 5, 2000. Thus, at best, Cumberland contends the 3.6% methane at the shaft's surface was representative of the methane concentrations in the eastern bleeder. Cumberland's weekly examination records reflect that methane concentrations at the shaft were rising in the weeks preceding July 5, 2000. Rising methane concentrations are an indication that methane is not being effectively diluted and moved away from working places. In this regard, Peelor testified that the mine cannot continue to operate with 3.6% methane at the shaft not only because "[i]t's the law" but also because "there are hazards involved with that . . . [w]ith methane, you have a potential fuel. If you allow it to go unchecked, it can go into the explosive range." (Tr.1725-28). Thus, it is apparent that the abnormally high methane readings in the No. 1 shaft were indicative of a serious explosive hazard. **Accordingly the S&S designation in Citation No. 3657290 shall be affirmed.**

### 3. Negligence

The Secretary attributes the improperly functioning bleeder system to Cumberland's reckless disregard. The Secretary contends that to address its rising methane concentrations in the bleeder, Cumberland closed BEPs 6 and 7 in an effort to "bottle up" the methane in the gob by impeding it from flowing into the bleeders. Cumberland asserts it closed the BEPs to improve the oxygen levels in the travelable bleeder entries. The Secretary acknowledged there were low levels of oxygen in the travelable bleeders in her July 7 modification of Citation No. 3657290. (Ex. G-4, p.3).

Although the closing of BEPS 6 and 7 may have constituted a modification of Cumberland's ventilation plan that required MSHA approval, Cumberland was not cited for failing to follow its approved ventilation plan. Therefore, Cumberland's failure to consult MSHA before closing BEPs 6 and 7, when viewed in isolation, is not relevant to the issue of Cumberland's degree of culpability with respect to the violation of section 75.334(b)(1). The closure of these BEPs is relevant to the issue of negligence if the Secretary can demonstrate the closure of these regulators contributed to the high methane in the bleeders.

In determining the degree of negligence to be attributed to Cumberland with respect to its ineffective bleeder system, it is noteworthy that the July 5 bleeder problems occurred shortly after the July 3 air change that converted the intake air in the No. 2 tailgate entry to return air. It is reasonable to conclude that this adjustment, that was taken to maintain proper air velocity along the longwall face, ultimately necessitated additional bleeder adjustments, such as opening sweeteners, to increase the fresh air flow to the bleeders. Bleeder systems by nature require ongoing monitoring and adjustment after significant ventilation changes are made. In view of the

recent conversion of the No. 2 tailgate entry from intake to return air, it is not surprising that the bleeder's ventilation system required additional adjustments. Thus, the Secretary has not established, by a preponderance of the evidence, that Cumberland's closure of two BEP sites was a significant cause of the bleeder malfunction. In this regard, it is noteworthy that methane readings in the No. 1 shaft were within normal range in the days preceding July 5, 2000, after BEPs 6 and 7 had been closed. The record, therefore, supports no more than a moderate degree of negligence rather than the recklessness alleged by the Secretary.

#### 4. Civil Penalty

The Secretary has proposed a \$6,000 civil penalty for Citation No. 3657290. The parties have stipulated that Cumberland is a large operator with a favorable violation history, that it abated the cited violations in a timely manner, and that payment of the proposed penalties will not impair its ability to continue in business. Although the cited violation of section 75.334(b)(1) is serious in gravity, the reduction in the degree of negligence attributable to Cumberland from reckless disregard to moderate warrants a moderate reduction in the proposed civil penalty. **Accordingly, a \$5,000 civil shall be imposed for Citation No. 3657290.**

#### B. 104(d)(1) Citation No. 3657291

##### 1. Fact of Violation

Citation No. 3657291, issued by Hixson, cites a violation of the mandatory safety standard in section 75.363(a) that is attributed to Cumberland's unwarrantable failure. Citation No. 3657291 states:

An accumulation of methane was detected at the No. 1 bleeder shaft. The methane ranged from 3.2 to 3.6% as detected at 6:30 p.m. on 7/5/00. The company failed to correct the condition immediately. The company also failed to remove [all persons except] those persons referred to in section 104(c) of the Act. The men were allowed to continue working their production shift until 11:30 p.m. It was after the men exited the mine that corrections were started. The methane was detected by a certified mine official.<sup>6</sup>

Section 75.363(a), the cited mandatory standard, provides:

Any hazardous condition found by the mine foreman or equivalent mine official, or other certified persons designated by the operator for the purpose of conducting examinations under this subpart D, shall be posted with a conspicuous danger sign where anyone

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<sup>6</sup> Hixson testified that he inadvertently omitted the above bracketed words "all persons except" when he issued Citation No. 3657290. (Tr. 310-12). Cumberland does not claim that this clerical error in the citation misled or otherwise prejudiced it in its preparation for trial.



entering the areas would pass. A hazardous condition shall be corrected immediately or the area shall remain posted until the hazardous condition is corrected. If the condition creates an imminent danger, everyone *except those referred to in Section 104(c) of the Act* shall be withdrawn from the area affected to a safe area until the hazardous condition is corrected. Only persons designated by the operator to correct or evaluate the condition may enter the posted area.

(Emphasis added).

Section 75.363(a) has two components. This safety standard requires hazardous conditions to be corrected immediately or to be dangered-off, and, if the hazard constitutes an imminent danger, everyone except those persons designated under section 104(c) of the Mine Act shall be removed from the affected area where the imminent danger exists. In this case it is not feasible to use a danger-off sign because hazardous bleeder conditions effect the entire mine. Thus, the question is whether the bleeder conditions during the afternoon shift of July 5, 2000, could be properly characterized as a hazard that must be corrected immediately because it constituted an imminent danger.

Analyzing whether the bleeder conditions on July 5 constituted an imminent danger is a matter of degree. For example, as previously noted, on December 20, 1996, MSHA issued to Cumberland Citation No. 7013734 for a violation of section 75.323(e) for methane in the subject No. 1 bleeder shaft in excess of 2.0% methane. (Ex. R-6, p.1). The citation was issued after several bottle samples revealed methane of 2.2%, 2.84%, and 2.7%. The bleeder violation, which was attributed to a moderate degree of negligence, was designated as non-S&S. After six extensions of the abatement termination date, the citation was terminated 10 months later on October 23, 1997, when methane in the shaft had been reduced from 2.5% to 1.7%. (Ex. R-6, p.2-7). Although the December 1996 bleeder shaft condition was designated as non-S&S, I note that the 2.8% methane in the shaft in December 1996 is 28.5% less than the 3.6% methane at the shaft's surface on July 5, 2000.

Although there was 3.6% methane in the shaft, we will never know the methane concentrations at BEP 5A during the July 5 afternoon shift because Cumberland did not obtain any readings in the travelable bleeder entries. Resolution of the imminent danger question must be viewed in the context of whether 3.6% methane in the shaft should have alerted a person exercising reasonable care to acquire additional knowledge of the fact in question (taking readings to determine whether there was explosive methane in the bleeder entries) or to infer its existence. See *Kenny Richardson*, 3 FMSHRC 8, 16 (Jan. 1981) (quoting *United States v. Sweet Briar, Inc.*, 92 F. Supp. 777, 780 (W.D.S.C. 1950).

Although there is no official MSHA policy, as a general proposition, MSHA considers methane levels in bleeder entries of 4.5% or more to be an imminent danger. (Tr. 820-21; Ex. R-3). At the hearing, Cumberland conceded it would have withdrawn all personnel from the mine if the methane readings at the No. 1 shaft rose above 4%. (Tr. 1794, 1829, 1953). Thus, the question is whether Cumberland should have believed there was a reasonable possibility of explosive methane in the travelable bleeders.

MSHA ventilation expert John Urosek testified that an excess of 2% methane exiting the bleeder fan “tells you there is a problem with the bleeder system.” (Tr. 1029). The methane levels in the No. 1 shaft during the afternoon shift on July 5 were consistently at 3.6%. The methane spiked to between 3.8% and 4.2% in the early morning hours of July 6. The Secretary asserts these amounts of methane exiting a bleeder shaft were unheard of except in emergency situations. (Tr. 1725-28). Urosek testified he had never known of these levels of methane exiting a bleeder fan in an operating coal mine. (Tr. 1009). Even Peelor admitted he could not recall working in a mine when there was 4.2% methane in the bleeder shaft. (1725).

BEP 5A is located inby in the eastern perimeter more than one mile from the active longwall face. (Tr. 1803-04, Ex. R-5). Abnormally high concentrations of methane at BEP 5A is an indication that methane from the gob is migrating back toward the working face rather than being diluted and carried away to the surface. The Secretary’s witnesses contend there is an approximate 2:1 ratio between the methane at BEP 5A and the methane at the No. 1 shaft. (Tr. 562, 681-82, 714, 719, 721, 724). Their conclusion is based on both the design and operation of Cumberland’s bleeder system, as well as comparisons of contemporaneous BEP 5A and No. 1 shaft methane results.

With respect to the bleeder design, the eastern perimeter vents the greatest concentrations of methane consisting of methane that is liberated during active mining of the 90 butt panel. (Tr. 305). Air traveling down the 1B Right entry (the southern perimeter) joins and *dilutes* the air from the eastern perimeter *before* it enters the No. 1 bleeder shaft. (Tr. 497-98). The Secretary’s assertion that the 1B Right air dilutes the eastern perimeter air is supported by Cumberland’s weekly examination records. For example, during the period June 14, 2000, through June 30, 2000, methane at BEP 5A was 3.5%, while methane in 1B Right for the same period averaged only .6%. (Tr. 558-59, 562; Ex. G-7). Given the 3.6% methane at the No. 1 shaft on July 5, after the eastern perimeter air was mixed and diluted with 1B Right air, the Secretary argues that it is likely that methane in the eastern perimeter outby BEP 5A in the direction of the longwall face, beyond where air currents strongly travel towards the fan, exceeded the 5% explosive range for methane. (Tr. 242,-43, 496-98, 505, 564, 714, 719, 721, 724, 1024).

A comparison of BEP 5A and No. 1 bleeder shaft readings support the Secretary’s claimed 2:1 ratio. For example, Cumberland’s weekly examination records reflect average methane concentrations of 3.5% at BEP 5A, and 1.8% at the No. 1 bleeder fan, during the period June 14, 2000, through June 30, 2000. (Tr. 558-59, 562; Ex. G-7).

Cumberland maintains there is a 1:1 ratio of methane at the No. 1 shaft and BEP 5A. Cumberland bases its conclusion on an uncorroborated BEP 5A methane reading of 3.8% by Roger Peelor at approximately 1:30 a.m. on July 26 2000, that is similar to the 3.6% methane obtained at the fan. However, other pairs of methane readings do not support Cumberland’s claimed 1:1 ratio. For example, when the first team of MSHA and Cumberland personnel went underground during the morning of July 6, 2000, methane at BEP 5A was 2.6% while methane at the No. 1 shaft was 2.2% methane. (Tr. 1049-50; Ex. G-3). Using the July 6, 2000, readings as an example, the BEP 5A methane is 18% greater than the concentration at the fan. Using this ratio, the 3.6% methane at the No. 1 fan on July 5 would be indicative of 4.25% at BEP 5A. Significantly, 4.25% methane in the bleeders is greater than the 4.0% that Cumberland admitted would justify withdrawing personnel from the mine.

While it is not clear whether or not methane levels actually exceeded 4.5% in the bleeders, it is clear that 3.6% at the fan was significant enough to raise serious concerns. Thus, Cumberland should have obtained bleeder readings to ensure there were no explosive levels of methane. In the absence of actual readings, Cumberland was obliged to err on the side of caution and infer the existence of a hazardous condition that warranted the immediate removal of all personnel except those designated under section 104(c) of the Mine Act who were necessary to evaluate and correct the potentially dangerous bleeder condition. **Accordingly the Secretary has demonstrated the fact of occurrence of a section 75.363(a) violation.**

## 2. Significant and Substantial

As previously noted, Cumberland has elected not to further argue the S&S designation in Citation No. 3657291 if the cited violation of section 75.363(a) is affirmed. (*C. Br.* p.19, n.8). Having found that the bleeder conditions on July 5 constituted an imminent danger because there was a reasonable likelihood of explosive levels of methane in the bleeder system during active longwall mining it is clear that the S&S criteria have been met. **Consequently, the Secretary's S&S designation shall be affirmed.**

## 3. Negligence

The Secretary attributes Cumberland's violation of section 75.363(a) to an unwarrantable failure. The term unwarrantable failure is taken from section 104(d) of the Mine Act, 30 U.S.C. § 814(d), and refers to more serious conduct by an operator in connection with a violation. In *Emery Mining Corp.*, 9 FMSHRC 1997 (Dec. 1987), the Commission determined that unwarrantable failure is aggravated conduct constituting more than ordinary negligence. *Id.* at 2001. Unwarrantable failure is characterized by such conduct as "reckless disregard," "intentional misconduct," "indifference," or a "serious lack of reasonable care." *Id.* at 2003-04; *Rochester & Pittsburgh Coal Co.*, 13 FMSHRC 189, 194 (Feb. 1991); *see also Buck Creek Coal, Inc.v. MSHA* 52 F.3d 13, 136 (7<sup>th</sup> Cir. 1995)(approving Commission's unwarrantable failure test).

Whether conduct is "aggravated" in the context of unwarrantable failure is determined by looking at all the facts and circumstances of each case to see if aggravating factors exist such as the operator's knowledge of the existence of the violation, the length of time the violation existed, the extent of the violative condition, and whether the violation is obvious or poses a high degree of danger. All relevant facts and circumstances must be examined to determine if the operator's conduct is aggravated, and whether mitigating circumstances exist. *Eagle Energy Inc.*, 23 FMSHRC 829, 834 (Aug. 2001) (citations omitted).

As early as the morning of July 5, 2000, Fred Evans, Cumberland's mine foreman, knew there were problems with the bleeder system based on the rising water gauge at the No. 1 bleeder shaft. Despite evidence of abnormally high readings of 3.6% methane at the shaft obtained by Hustus at approximately 3:30 p.m., as well as several additional 3.6% methane results obtained by Dubois and Bohach beginning at 6:30 p.m., Cumberland allowed longwall operations to continue and the miners were not advised of the potential hazard until the end of their shift. The fact that the methane sensor at the tailgate was activated during the afternoon shift on July 5 was an additional indication that the bleeder system was not effectively moving methane away from the working place.

Moreover, the violation posed a very high degree of danger. There was a significant possibility that rising methane levels in by BEP 5A could accumulate in the bleeder system and back up to the longwall face if the bleeder problem was not corrected immediately. (Tr. 127, 998-99, 1024). Potential ignition sources at the longwall face included sparks generated by the longwall shearers. (Tr. 127, 1001, 1024-25). There were also numerous pieces of electrical equipment located in the face area. (Tr. 1024). In the event of an ignition, the explosion likely would have caused fatalities given the enormous quantity of explosive methane that could accumulate in the eastern perimeter bleeder that was more than 9,000 feet in length.

In short, it is clear that the violation was obvious, rather than undetected, given the repeated abnormally high methane readings in the bleeder shaft. The violation was allowed to continue to exist for an extended period of time throughout the July 5 afternoon shift. Finally, the violation was extremely dangerous. Additionally, Cumberland's failure to disclose the bleeder problem to its hourly employees is a further indication that its conduct was unjustified. In sum, Cumberland's conduct on July 5, 2000, is a classic case of the aggravating factors that are the hallmarks of an unwarrantable failure. **Accordingly, the Secretary has demonstrated that Cumberland's violation of section 75.363(a) was unwarrantable.**

#### 4. Civil Penalty

The Secretary has proposed a civil penalty of \$5,000 for 104(d)(1) Citation No. 3657291. However, Commission judges make *de novo* findings with respect to the penalty criteria in section 110(i) of the Mine Act, 30 U.S.C. § 820(i), based on the record in adjudicatory proceedings, and they are not bound by the Secretary's proposed civil penalties. *Sellersburg Stone Co.*, 5 FMSHRC 287, 291 (March 1983), *aff'd*, 736 F.2d 1147 (7<sup>th</sup> Cir. 1984).

As previously noted, the parties have stipulated that Cumberland is a large operator; that it has a favorable violation history; that it abated the cited violations in a timely manner; and that payment of the proposed civil penalties will not impair its ability to continue in business. With respect to the seriousness of the gravity of the violation, it is clear that Cumberland was worried about the bleeder's safety during the July 5 afternoon shift. Its degree of concern is demonstrated by the actions of Evans who repeatedly directed Hustus, Bohach and DuBois to obtain additional methane readings at the No. 1 fan after Hustus' initial 3.6% reading at approximately 3:30 p.m. In fact, Evans apparently could not believe the high methane concentrations first detected by Hustus because Evans ordered Hustus to recalibrate his methane detector before Hustus was sent back to the shaft to obtain additional readings.

Despite continued high levels of methane exiting the bleeder, Cumberland's safety concerns were not communicated to the miners who continued to work the longwall. MSHA ventilation expert Urosek testified he had never known of methane levels in the 3.6% range exiting a bleeder shaft in an operating coal mine. (Tr. 1009). Peelor admitted he could not recall working in a mine when there was 4.2% in a bleeder shaft. (1725). Consequently, it is understandable that Hroblak testified that he would have exercised his rights as a UMW safety committeeman and withdrawn all hourly personnel from the mine if he had known there was 3.6% methane in the bleeder shaft. (Tr. 128, 139). Under these circumstances, it is clear that

Cumberland's failure to disclose the abnormally high methane concentrations exiting the bleeder to the safety committeemen enabled Cumberland to complete the afternoon production shift without interruption before making the necessary ventilation changes in the bleeder.

A fundamental purpose of the Mine Act is to encourage mine operators ". . . with the assistance of the miners" to identify and eliminate unsafe conditions and practices in the Nation's mines. 30 U.S.C. § 801(e). This statutory goal is thwarted if mine operators are not dissuaded from withholding safety related information from miners to avoid production shut downs. Thus, Cumberland's failure to disclose the bleeder conditions during the afternoon shift on July 5, 2000, is an aggravating factor that warrants an increase in civil penalty.

Finally, with regard to negligence, the totality of circumstances evidencing Cumberland's failure to suspend production despite its knowledge of the potentially hazardous bleeder conditions demonstrates Cumberland's violation of section 75.363(a) is attributable to a reckless disregard. **Accordingly, a civil penalty of \$10,000 shall be imposed for 104(d)(1) Citation No. 3657291.**

C. 107(a) Imminent Danger Order No. 7076284

Imminent Danger Order No. 7076284, was verbally issued by Hixson at 3:30 a.m. The order withdrew all personnel who were then underground to make air changes to alleviate the high methane concentrations in the bleeder. Order No. 7076284, which was formally issued in writing at 6:30 a.m. on July 6, 2000, states:

This imminent danger order is being issued to the mine due to methane that is exiting the mine through the No. 1 bleeder shaft. The methane detected measured from 3.2% to as high as 4.2%. All persons including persons involved in the air change must be removed from the underground portions of the mine. The sampling of the No. 1 bleeder shaft must be done from a remote location.

Order No. 7076284 was issued pursuant to section 107(a) of the Mine Act, 30 U.S.C. § 817(a). Section 107(a) in pertinent part, provides:

If upon any inspection or investigation of a coal or other mine which is subject to this Act, an authorized representative of the Secretary finds that an imminent danger exists, such representative shall determine the extent of the area of such mine throughout which the danger exists, and issue an order requiring the operator of such mine to cause all persons, *except those referred to in section 104(c)*, to be withdrawn from, and to be prohibited from entering, such area until an authorized representative of the Secretary determines that such imminent danger and the conditions or practices which caused such imminent danger no longer exist.

(Emphasis added).

Section 104(c) of the Mine Act, 30 U.S.C. § 814(c), concerns persons designated by the operator or the Secretary who are not subject to withdrawal orders. Specifically, section 104 provides, in pertinent part:

(c) The following persons shall not be required to be withdrawn from, or prohibited from entering, any area of the coal or other mine subject to an order issued under this section:

(1) any person whose presence in such area is necessary, *in the judgment of the operator* or an authorized representative of the Secretary, to eliminate the condition described in the order[.]

(Emphasis added).

As an initial matter, there is an apparent inconsistency in the Secretary's prosecution of 104(d)(1) Citation No. 3657291 that, by its terms, cited Cumberland for not withdrawing all personnel except those 104(c) persons who were necessary to correct the cited hazardous condition, and imminent danger Order No. 7076284 that withdrew the same persons Citation No. 3657291 would have allowed underground. Obviously, had Hixson arrived at the Cumberland Mine prior to midnight on July 5, 2000, when longwall operations continued despite high bleeder shaft methane readings, Hixson would have been justified in issuing a 107(a) imminent danger order suspending normal mining operations and withdrawing all personnel from the mine. The issue here, however, is the propriety of a 107(a) withdrawal order issued after all persons involved in active mining had already been withdrawn, and only those persons designated by the operator under section 104(c)(1) of the Mine Act to correct the potential hazard were underground.

Resolution of this issue requires analysis of the statutory provisions of section 107(a). The first inquiry in statutory construction is "whether Congress has directly spoken to the precise question in issue." *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842 (1984); *Thunder Basin Coal Co.*, 18 FMSHRC 582, 584 (April 1996). If a statute is clear and unambiguous, effect must be given to its language. *Chevron*, 467 U.S. at 842-43; *accord Energy West Mining Co. V. FMSHRC*, 40 F.3d 457, 460 (D.C. Cir. 1994).

Here, section 107(a) explicitly exempts 104(c) persons from imminent danger orders. Section 104(c) delegates the authority to *either* the judgment of the operator, or, to the Secretary, to determine when and who to send into the mine to correct hazards. By its terms, section 104(c) does not require the operator to secure the Secretary's approval before it designates those persons it deems necessary to evaluate and correct a dangerous condition.

Although the statute grants the operator the discretion to exempt persons necessary to evaluate or correct hazardous conditions from the Secretary's withdrawal orders, the operator may not abuse its discretion by sending persons into mines who themselves are unnecessarily exposed to unacceptable levels of danger. Thus, the focus shifts to whether Cumberland abused its discretion after midnight on July 6, 2000, when it sent a team of ten men, comprised of seven management employees and three hourly miners, to evaluate the bleeder system and make ventilation changes.

At the time Hixson withdrew air-change personnel at 3:30 a.m. he reasonably concluded there was a substantial probability of explosive methane levels in the travelable bleeders based on shaft readings ranging from 3.6% to 4.2% methane. Thus, determining whether Cumberland abused its discretion when it sent personnel underground requires an analysis of potential sources of ignition. The ignition sources are limited to those present in the bleeder system as Cumberland had already suspended active mining and de-energized the longwall section.

As a preliminary matter, the Secretary asserted at the hearing that a stray bullet hitting the No. 1 shaft, or lightning striking the shaft, were ignition sources that warranted the 107(a) withdrawal order. These assertions were dismissed at the hearing because such sources of ignition, while possible, are highly improbable, and do not pose an imminent threat.

The Secretary relies on the possibility of a roof fall as a potential source of ignition. Although an unanticipated roof fall can occur at any time, the operative time period is the several hours personnel were underground to implement the air changes. To demonstrate Cumberland abused its 104(c) discretion requires a showing of some degree of imminence. The Commission has noted that the word “imminent” is defined as “ready to take place,” “near at hand,” “menacingly near,” or “impending.” *Utah Power & Light Co.*, 13 FMSHRC 1627 (October 1991). The Secretary has failed to identify any specific roof conditions that were in danger of imminent collapse. General speculation that a roof fall may occur before the air changes can be completed is not a basis for concluding that Cumberland abused its discretion when it sent personnel underground to make ventilation changes.

The Secretary also relies on potential sparks from doors on regulators, from tools to remove concrete block, and from bolts from spad guns, as potential ignition sources. In response, in its Reply Brief, Cumberland relies on a September 9, 1996, memorandum from Raymond A. Mazzoni, a mechanical engineer assigned to MSHA’s Roof Control Division, concerning laboratory analysis of cable bolt sparks as a possible methane ignition source. In the memorandum Mazzoni concluded “. . . the risk of a methane ignition from cable bolt sparks was very remote.” (C. Reply Br. at 22). This conclusion was drawn from tests demonstrating the spark temperature from a cable bolt was too low, the particle size was too small, and the duration of the spark was too short, to ignite methane.

To clarify the September 9, 1996, memorandum, the Secretary proffered a November 8, 2001, signed declaration by Mazzoni that cable bolts are distinguishable from roof bolts because they are made of flexible strands of cold-drawn steel rather than solid, hot-rolled steel bars.<sup>7</sup> Thus, the Secretary asserts the memorandum’s conclusion, that the ignition potential for cable bolts is remote, does not apply to roof bolts. In any event, the Secretary does not contend that roof bolting was occurring in the bleeders during the air changes. In the final analysis, the Secretary has not shown that the ignition potential of a bolt being installed by a spad gun is greater than the ignition potential created by installation of a cable bolt.

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<sup>7</sup> The September 9, 1996, memorandum, which was not introduced by Cumberland at trial, was considered over the objections of the Secretary. However, the Secretary was provided with the opportunity to respond to the memorandum. The Secretary did so by offering Mazzoni’s November 8, 2001, declaration.

As noted, the operative period for considering potential ignition sources is the period necessary to make the air changes. While sparks are common at the face during normal mining operations, speculation that a rare occurrence, such as a spark from opening a door or a regulator, or, a spark generated from a spad gun, may occur in the bleeder during an air change does not support the conclusion that there was an impending threat. In this regard, I credit the testimony of Peelor and Dubois that, in their experience, they had never seen sparks generated from moving regulator doors or hanging curtains or moving blocks. (Tr. 1696, 1699, 1810 1853). Moreover, miners making air changes in areas with explosive concentrations of methane are on a heightened state of alert to avoid actions that potentially could create ignition sources.

Thus, the Secretary has not shown more than a remote likelihood of ignition sources in the bleeder entries in the early morning hours of July 6, 2000, when air changes were being made. Consequently, the Secretary has not shown that Cumberland abused the discretion committed to it by section 107(a) when it sent persons underground to evaluate and correct the potentially hazardous bleeder conditions.

In reaching this conclusion, I recognize the Secretary's belief that it would have been more prudent to wait until methane conditions at the fan shaft had improved before initiating the air changes. In hindsight, the bleeder methane dissipated and the Secretary's belief proved to be correct. However, when viewed prospectively, delaying implementation of the air changes ultimately could have increased the risk if methane concentrations in the bleeder had continued to rise.

In the final analysis, Cumberland's decision to send personnel underground to make air changes in its bleeder system after midnight on July 6, 2000, when active mining had been suspended and all other personnel had been withdrawn from the mine, was within the scope of its authority under section 107(a) of the Mine Act. The evidence does not reflect that Cumberland abused its authority. **Accordingly, 107(a) imminent danger Order No. 7076284 shall be vacated.**

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### **ORDER**

1. Cumberland's request to withdraw its contests in Docket Nos. PENN 2000-207-R and PENN 2000-208-R because of its settlement of Citation Nos. 2840951 and 2840952 in Docket No. PENN 2001-94 **IS GRANTED**. **ACCORDINGLY**, the contests in Docket Nos. PENN 2000-207-R and PENN 2000-208-R **ARE DISMISSED**.

2. The Secretary's request to vacate Order Nos. 3657294 and 3657297 **IS GRANTED**. **ACCORDINGLY**, the contest proceedings in Docket Nos. PENN 2000-209-R and Penn 2000-210-R **ARE DISMISSED**.

3. In view of the above, **IT IS ORDERED** that 104(a) Citation No. 3657290 **IS MODIFIED** to reflect the cited violation was attributable to Cumberland's moderate degree of negligence. **ACCORDINGLY**, Citation No. 3657290 **IS AFFIRMED** as modified and the contest in Docket No. PENN 2000-181-R **IS DENIED**.



4. **IT IS FURTHER ORDERED** that 104(d)(1) Citation No. 3657291 **IS AFFIRMED**. **ACCORDINGLY**, the contest in Docket No. PENN 2000-182-R **IS DENIED**.

5. **IT IS FURTHER ORDERED** that 107(a) Order No. 7076284 **IS VACATED**. **ACCORDINGLY**, the contest in Docket No. PENN 2000-183-R **IS GRANTED**.

6. **IT IS FURTHER ORDERED** that RAG CUMBERLAND RESOURCES LP **SHALL PAY** a civil penalty of \$15,000.00 in satisfaction of Citation Nos. 3657290 and 3657291. Payment is to be made within 40 days of the date of this decision. Upon timely receipt of payment, the civil penalty proceeding in Docket No. PENN 2001-63-A **IS DISMISSED**.

Jerold Feldman  
Administrative Law Judge

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/hs