FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

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

December 2, 1998

CONSOLIDATION COAL COMPANY,	: CONTEST PROCEEDINGS
Contestant	:
V.	: Docket No. WEVA 93-77-R
	: Citation No. 3109521; 11/09/92
SECRETARY OF LABOR,	:
MINE SAFETY AND HEALTH	: Docket No. WEVA 93-78-R
ADMINISTRATION, (MSHA),	: Order No. 3109522; 11/09/92
Respondent	:
and	: Docket No. WEVA 93-79-R
	: Order No. 3109523; 11/09/92
UNITED MINE WORKERS OF AMERICA	A, :
(UMWA),	: Docket No. WEVA 93-80-R
Intervenor	: Order No. 3109524; 11/09/92
	:
	: Blacksville No. 1 Mine
	: Mine ID No. 46-01867
SECRETARY OF LABOR	· CIVIL PENALTY PROCEEDINGS
MINE SAFETY AND HEALTH	
ADMINISTRATION (MSHA)	· Docket No. WEVA 93-146-B
Petitioner	· A C No 46-01867-03938
and	
und	· Docket No WEVA 93-146-C
UNITED MINE WORKERS OF	· A C. No. 46-01867-03938
AMERICA (UMWA)	
Intervenor	· Blacksville No. 1 Mine
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CONSOLIDATION COAL COMPANY	
Respondent	

DECISION

Appearances: Robert S. Wilson, Esq., Office of the Solicitor, U. S. Department of Labor, Arlington, Virginia, on behalf of the Secretary; Judith Rivlin, Esq., United Mine Workers of America, Washington, D. C., on behalf of the Intervenor; David J. Hardy, Esq., and William Miller, Esq., Jackson & Kelly, Charleston, West Virginia, on behalf of Consolidation Coal Company.

Before: Judge Melick

A methane explosion at the production shaft of the Consolidation Coal Company (Consol) Blacksville No. 1 Mine on March 19, 1992, caused the death of four miners and injuries to two others. Following an investigation, the Secretary of Labor issued citations and orders for alleged violations under the Federal Mine Safety and Health Act of 1977, 30 U.S.C. ' 801 *et seq.*, the "Act." These proceedings, formerly consolidated under Master Docket WEVA 93-146-B, concern one of those citations and three of the orders issued by the Secretary to Consol and the civil penalties of \$200,000 proposed by the Secretary for the violations charged therein. The general issue before me is whether Consol violated the cited regulatory standards and, if so, whether those violations were "significant and substantial" and/or the result of Consol-s "unwarrantable failure" to comply with those standards. If violations are found it will also be necessary to determine the appropriate civil penalty to be assessed considering the criteria under Section 110(i) of the Act.

At the time of the explosion, the Blacksville No. 1 Mine was under the administrative control of Consol=s Northern West Virginia Regional Office (Regional Office). Van Pitman was manager in charge of operations for the Regional Engineering Office within the Regional Office. Rodney Baird and Russell DeBlossio worked in the Environmental Quality Control Department within the Regional Engineering Office and were supervised by Edward Moore. Charles Bane was regional manager for safety in the Regional Office and John Yerkovich was his assistant. Donzel Ammons was vice-president for Blacksville operations under the Regional Office and had supervisory authority over operations at both the Blacksville Nos. 1 and 2 Mines. Daniel Quesenberry was Ammon=s assistant. Robert Levo was superintendent of the Blacksville No. 1 Mine and Jack Lowe was its mine foreman.

In March 1992, the Blacksville No. 1 Mine was known to be liberating "excessive quantities of methane" as defined in Section 103(i) of the Act as it was liberating over one million cubic feet of methane in a 24-hour period. The mine ceased coal production in June 1991, and, in early 1992, was closing down. Activities at the mine during January through March 1992, therefore consisted primarily of maintenance, equipment withdrawal, supply recovery and coal loading from surface stockpiles and silos. The Department of Labor=s Mine Safety and Health Administration (MSHA) was informed of Consol=s intent to abandon the mine by Charles Bane=s letter dated February 3, 1992 (Resp. Exh. No. 3). In that letter, MSHA was advised that the mine was in the process of withdrawing production equipment and that all the shafts would be sealed simultaneously after the underground areas of the mine had been vacated.

In February 1992, Consol officials decided to install an 800-foot-long dewatering pipe into the production shaft to prevent water from accumulating underground and from seeping into adjacent mines. The production shaft had been used to transport coal out of the mine by a skip hoist. According to the approved ventilation plan, the shaft had also been intaking 187,880 cubic feet of air per minute (cfm). The Regional Engineering Office was responsible for installing the pipe. Van Pitman, regional manager of engineering, directed Ed Moore, supervisor of environmental quality control, to arrange for its installation. Moore then contracted with independent contractor M.A. Heston to install the pipe and ordered the materials needed to complete the project.

Mine management was responsible for constructing a working platform over the shaft. Ammons decided to cap the production shaft before withdrawing from the mine in order to facilitate the installation of the dewatering pipe. He assigned the project to Quesenberry, his assistant, who arranged for independent contractor Forest Construction to perform the job. Leon Slough, a foreman for Forest Construction, was responsible for the actual construction of the cap.

Contact with MSHA on matters relating to ventilation plans normally went through Consol=s regional safety office. Terry Palmer, coal mine inspector/ventilation, was the MSHA contact on ventilation matters for the Blacksville No. 1 Mine. John Yerkovich, Consol=s regional safety inspector, verbally informed Palmer of the proposal to cap the production shaft. Palmer testified that he told Yerkovich that the change in ventilation which would result from capping the shaft would have to be approved by MSHA=s district manager as a revision to the ventilation plan. Yerkovich testified on the other hand, that he was told by Raymond Strahin, also an MSHA ventilation inspector, that mere written notification of this change would be sufficient. Strahin denied making any such statement.

In any event, following his conversation with Palmer, Yerkovich submitted a letter to MSHA dated March 3, 1992, regarding the capping of the production shaft (Gov=t Exh. No. 27). This letter did not indicate when the production shaft would be capped nor did it indicate that a welded dewatering pipe would be installed through the cap and into the shaft. Consol proceeded to build the cap over the production shaft without receiving any response from MSHA to the March 3, 1992, letter. Palmer later drafted a letter in response to the March 3rd letter for the signature of MSHA District Manager Ronald L. Keaton (Gov=t Exh. No. 29). Although the letter was drafted the week before the explosion and was dated March 16, 1992, it was not actually mailed to Consol until March 19, 1992, after MSHA had been notified of the explosion.

Palmer recommended to Keaton that they seek additional information about capping the production shaft because it was unclear why Consol was deviating from its original plan to cap all the shafts at the mine. According to Bane=s February 3, 1992, letter, Consol originally planned to cap all the shafts after the underground areas of the mine had been vacated (Resp. Exh. No. 3). Palmer believed that capping the shaft required approval by the district manager because it changed the information submitted in the ventilation plan as required by the regulations, then at 30 C.F.R. ¹ 75.316. Specifically, on page five of the approved ventilation plan the production shaft was reported to intake 187,800 cfm of air (Gov=t Exh. No. 26). Palmer believed that section 75.316 required MSHA approval of revisions to ventilation plans. The previous ventilation plan approval letter also included the notation that "all changes or revisions to the ventilation plan must be submitted and approved before they are implemented" (Gov=t Exh. No. 26).

As noted, Consol arranged for Forest Construction to design and construct the cap for the production shaft and contracted with M.A. Heston to install the dewatering pipe into the shaft (Gov=t Exh. No. 8). Consol had frequently used the services of these as well as other independent contractors. Indeed, all jobs done by Consol=s Regional Engineering Department involved independent contractors. On this job, Forest Construction had hourly crews working exclusively for Consol, and Consol directed their work. Leon Shough, foreman for Forest Construction also reported to Consol foreman John Carter on a daily basis. M.A. Heston also worked for Consol

almost on a daily basis. They had previously worked many jobs for Consol. However, at the time Moore contracted with M.A. Heston for this job neither he nor DeBlossio was aware that M.A. Heston=s employees had never taken methane examinations. In addition Michael Heston and James Heston, respectively, testified that M.A. Heston=s employees did not have experience with mine ventilation and were not qualified to make methane examinations. Moore explained to Heston how the job would be done, including the configuration of the support structure, the preparation of the pipe segment, and how to seal the area around the 16-inch dewatering pipe to prevent welding sparks from entering the shaft.

Officials from Consol, Forest Construction and M.A. Heston conferred on methods to construct the cap to allow work to be performed over the production shaft and to support the weight of the dewatering pipe. Initially, Consol=s Regional Engineering Department had suggested using a partial covering over the production shaft, permitting additional ventilation to enter the shaft. A fireproof partition was also suggested to prevent sparks from entering the shaft. This was a procedure used successfully at three other jobs. Donzel Ammons decided however to completely cap the shaft. Officials from regional engineering were not consulted on this decision and did not learn of it until the cap had already been installed. Vice president for Blacksville operations, Dan Quesenberry, who was involved in these early discussions, did not recall that any consideration was given to using a partial cap. The decision was made by Ammons.

The cap was built over the production shaft based on a standard design previously used by Consol (Gov[±]. Exh. No. 24). It was constructed of 1/4-inch steel plating welded onto six-inch Ibeams with concrete over the top and down the sides. A 22-inch square opening was left in the center through which the dewatering pipe would be installed and a structure of 21-inch steel Ibeams was built to support the installation of the 16-inch dewatering pipe. In addition, two sixinch diameter steel pipes were welded to the steel plate in the cap to provide ventilation of the production shaft. Each pipe projected three feet above the cap and was topped with a valve and a six-inch diameter plastic PVC pipe. The PVC pipes added 10 feet to one pipe and 8 feet to the other (See Gov[±] Exh. No. 34A). Additional ventilation of the production shaft would be provided by air entering around the dewatering pipe in the 22-inch opening.

Ammons (vice president of Blacksville operations) made the decision to utilize the two six-inch pipes for ventilation. This was standard procedure for capping a shaft the size of the production shaft when sealing an area of the mine and Ammons determined that these pipes would provide adequate ventilation. He relied upon his own experience. He did not consult with any of Consol=s engineers or rely upon any simulations or studies. He did not know the methane liberation rate in the shaft nor how much air was intaking through the six inch pipes nor the velocity of that airflow. Ammons assumed that the air intaking through one six-inch pipe alone would have been sufficient to ventilate the production shaft. He had never been involved in a project such as this where welded pipe segments were installed through a cap. Other Consol officials including Quesenberry, Morrison, Pittman, Lowe, and Bane also acknowledged that they had never been involved in a similar project.

Ammons told Quesenberry that he wanted threaded pipe to be used for the dewatering pipe so there would be no welding over the shaft. He was concerned with igniting grease in the

shaft. Although he maintained that he was not concerned with a methane ignition, he acknowledged that he was aware of the potential for methane in the shaft. Quesenberry later told the regional engineering office that he wanted threaded pipe used to avoid cutting and welding over the shaft. After meeting with regional engineering officials, Quesenberry understood that threaded pipe would be used. Quesenberry later learned that they intended to use welded pipe only after the pipe arrived at the mine. When Ammons learned that the pipe received was not threaded pipe, he told Quesenberry to have it returned. Ammons had also been uninformed that the regional engineering office had decided to use welded pipe rather than threaded pipe. When the pipe arrived, Ammons called Van Pitman, who explained to Ammons that threaded pipe would not hold the weight of the casing.

When Ammons assigned the capping job to Quesenberry he maintains that he instructed him to be sure to put two pipes in it and make sure everybody knew that those pipes were to be left open for ventilation. Ammons maintains that he therefore assumed that Quesenberry would have informed M.A. Heston=s employees as well as Consol=s personnel from regional engineering, the mine and the regional safety department of the necessity to keep the two pipes open. Ammons claims that he also told mine superintendent Levo that the two ventilating pipes were to remain open. He did not, however, personally ensure that those pipes were kept open and survivors who had been working at the production shaft testified that they were not informed of the importance of the pipes (Tr. 126, 205, 437, 508).

Quesenberry acknowledged, moreover, that he never informed M.A. Heston=s workers about the purpose for the ventilation pipes. In addition he could not remember discussing this issue with Moore, Baird or DeBlossio. Quesenberry also could not recall whether Ammons told him to make sure that the people working on the job knew that those pipes were to remain open. Quesenberry maintains that he did not learn until after the explosion that one of the ventilation pipes had been cut off and plugged. He testified that if he had been present at the worksite and saw that one of the pipes had been closed, he would have stopped the work. He was shocked when he learned that one of the pipes had been cut.

During the week of March 9, M. A. Heston personnel began construction of the cap support structure and preparation for the first segment of 16-inch pipe. Consol regional engineering officials, primarily Moore, instructed M. A. Heston personnel on how to perform the work. According to Moore, Consol designed the 21-inch I-beam support structure based upon previous jobs. On Thursday, March 12, Forest Construction personnel began installing the steel framework for the production shaft cap. The 21-inch I-beam support structure was placed on top of the cap using Consol=s crane. Concrete was then poured over the top of the metal portion of the cap and over the sides. The 21-inch I-beam support structure protruded above the concrete.

On March 13, Consol prevented the oncoming shift of underground personnel from entering the mine while the steel framework and decking for the production shift cap were installed over the shaft. Between 7:20 a.m. and 7:50 a.m., the effects of the ventilation change underground were evaluated by Consol personnel. The mine was deemed safe to enter and miners then proceeded underground around 8:15 a.m. to 9:00 a.m., to continue removing mine equipment. The evaluation of capping the production shaft consisted of the same procedures as

followed during a preshift examination and took approximately 30 minutes to complete. The fan charts on the surface were also checked. Those charts would not, however, have shown the effects of capping on the airflow within the shaft itself.

Placement of the cap over the production shaft reduced the airflow within the shaft from about 187,000 cfm to about 7,350 cfm (Gov=t Exh=s 53, pp 6-7 and 13, pp 19-20). Mine foreman Jack Lowe traveled underground to the bottom of the production shaft at around 11:00 a.m. He released a smoke cloud from a smoke tube into the bottom of the shaft and observed the smoke travel toward himself, indicating a drift of airflow down the shaft. He did not measure the velocity of this airflow. After the cap was installed over the production shaft, three openings remained in the cap-the two 6-inch diameter pipes and the one 22-inch diameter opening. All three openings were initially intaking air into the production shaft.

There is no evidence that any evaluation was done to determine what effect the capping of the production shaft had on the air flow within the shaft itself. While Consol officials Moore and DeBlossio testified that they believed that two 6-inch pipes would provide adequate ventilation for the production shaft they admittedly did not know the amount of air intaking through the pipes and did not know the amount of methane being liberated into the shaft. DeBlossio and Mine Superintendent Levo also both acknowledged that such information would be necessary to determine the adequacy of the ventilation in the shaft. Indeed, Levo testified that a reasonably prudent mining engineer would want to know the amount of air intaking through the pipes to make a determination of whether the ventilation was adequate.

Environmental Engineer Rodney Baird and Environmental Technician Russell DeBlossio, from Consol=s Regional Engineering Department, were assigned to oversee the installation of the dewatering pipe. Baird was at the worksite on Thursday, March 19, and was killed in the explosion. DeBlossio was at the worksite on Monday and Wednesday but was not present at the time of the explosion. Baird was certified to make methane examinations and had a working methane detector in his truck at the worksite. However, neither Baird nor DeBlossio had any experience in underground ventilation. DeBlossio was even unaware that the Blacksville No. 1 Mine was considered to be a gassy mine.

DeBlossio testified that he and Baird spent the better part of the day, on both Monday and Wednesday, at the production shaft. Although they were present to basically monitor job progress, both DeBlossio and Baird participated in the physical labor. They helped line up the pipe when a new segment was lifted over the shaft and helped place the Thermoglass cloth around the pipe. DeBlossio testified that he believed that he had the authority to stop work if he thought that M.A. Heston=s employees were performing unsafely.

On Monday, March 16, M. A. Heston=s employees arrived at the mine to organize materials and set-up the worksite for the installation of the 16-inch casing into the production shaft. M.A. Heston employees began installing the 16-inch casing on Tuesday, March 17, following the procedures depicted in Government Exhibit No. 15. This installation process was conceived by Consol based upon previous jobs. These procedures were followed on March 18, and continued until the explosion at approximately 10:18 a.m., on March 19.

The first joint of 16-inch casing had been plugged to prevent welding sparks from entering the shaft through the pipe. As each new length of pipe was added, the area around the pipe was sealed with two steel plates cut to fit around it and then with layers of Thermoglass cloth, to prevent welding sparks from entering the shaft around the pipe (Gov=t Exh. No. 15 Drawings 2-7). The steel plates and Thermoglass cloth would be positioned around the casing just before the weight of the casing was placed on the support structure. While these procedures were designed to prevent sparks and hot materials from the welding process from igniting grease and dust in the shaft, Consol officials were also aware of the potential for methane in the shaft. The 6-inch ventilation pipes were incorporated into the cap in order to provide ventilation which was intended, at least in part, to dilute methane in the shaft. With the plugged 16-inch casing in place and the steel plates and Thermoglass cloth covering the area around the 16-inch casing, the airflow within the production shaft was reduced to approximately 790 cfm (Gov=t Exh. No. 13, pp 21-22).

On Tuesday, March 17, Rodney Baird and M. A. Heston employees cut off one of the 6inch vent pipes in the cap because it was interfering with the placement of the 16-inch dewatering pipe segments over the cap, thereby leaving 6 to 12 inches of the vent pipe extending above the cap. A ball of either Thermoglass cloth or burlap was then placed inside the pipe and a second piece of the material was then wrapped over top of the pipe and wired in place thereby sealing it. With only one of the 6-inch vent pipes intaking air into the production shaft, the airflow within the shaft was then reduced to only about 400 cfm (Gov=t Exh. No. 13, pp 22-23; Gov=t Exh. No. 53, p 11).

Levo visited the production shaft site on several occasions while the work was progressing. On one of those occasions, he observed that one of the two vent pipes was closed. According to Levo, Baird explained that they were having trouble swinging the segments of 16inch pipe into position because the vent pipe was in the way. They discussed cutting the pipe and installing a coupler on the pipe. Levo could not recall whether he told Baird of the importance of keeping the pipe open.

Later that day, Levo received a call, possibly from Baird, requesting that a guillotine saw be brought to the production shaft to cut the vent pipe. Levo instructed Leon Shough to deliver the saw to the production shaft. Levo knew that the saw was to be used to cut off one of the vent pipes, but thought that a valve would be installed to allow the pipe to remain open. He never inquired, however, to determine whether such a valve had been installed and he never instructed Baird to reopen the pipe. Levo assumed that Baird would know enough to reopen the pipe but did not know whether Baird had training or experience with ventilation matters. Baird=s supervisor, Edward Moore also knew that one of the 6-inch vent pipes was cut and either covered or plugged.

Installation of the dewatering pipe proceeded all day on Wednesday, March 18, from around 7:00 a.m. to 7:00 p.m., and resumed at approximately 7:30 a.m., on Thursday. Baird and DeBlossio were present at the production shaft for most of the day on Wednesday. Approximately 12 segments of pipe were installed by Wednesday afternoon. One welder was working at the production shaft on Wednesday. The same procedures were followed on Thursday but two welders were working. The addition of the second welder reduced the time needed to complete a joint from about 40 minutes or an hour to about 25 minutes.

Around 10:18 a.m., on March 19, there was a methane explosion in the production shaft, completely destroying the cap and damaging large portions of the shaft coping and the lower support structure of the head frame. Overcasts, cribs, stoppings, and the rotary dump in the underground areas within 100 feet of the shaft were also damaged. Rodney Baird, Frederick Heston, Donald Glaspell, and Robert Moran, who were working on or around the production shaft cap, were killed and James Heston and Gordon Lawson were injured.

Both the Secretary=s expert, John Urosek, and Consol=s expert, Donald Mitchell, concluded that, at the time of the explosion, the airflow in the production shaft beneath the cap had been reduced to no more than 400 cfm (Gov=t Exh. No. 53, p 7 and 56, p 10). While it is not disputed that one of the two 6-inch ventilation pipes had been sealed, it is unclear whether the second ventilation pipe was open and intaking air at the time of the explosion. Both experts agree however that the amount of air flowing through one six-inch pipe, about 400 cfm, would not have been sufficient to dilute and render harmless the methane being liberated from around the shaft (Gov=t Exh. No. 53 p.11 Tr. 2276)

Citation No. 3109521

This citation, issued pursuant to section 104(d)(1) of the Act, charges a "significant and substantial" violation of the standard at 30 C.F.R. ' 75.301 (1991) and alleges, in essential part, as follows:¹

 $^{^{1}}$ / Section 104(d)(1) of the Act provides as follows:

If, upon any inspection of a coal or other mine, an authorized representative of the Secretary finds that there has been a violation of any mandatory health or safety standard, and if he also finds that, while the conditions created by such violation do not cause imminent danger, such violation is of such nature as could significantly and substantially contribute to the cause and effect of a coal or other mine safety or health hazard, and if, he finds such violation to be caused by an unwarrantable failure of such operator to comply with such mandatory health or safety standards, he shall include such finding in any citation given to the operator under this Act. If, during the same inspection or any subsequent inspection of such mine within 90 days after issuance of such citation, an authorized representative of the Secretary finds another violation of any mandatory health or safety standard and finds such violation to be also caused by an unwarrantable failure of such operator to so comply, he shall forthwith issue an order requiring the operator to cause

The volume and velocity of air was not maintained in sufficient amounts to render harmless and to carry away explosive gases. An explosive methane/air mixture was allowed to accumulate in the production shaft which is a portion of the active workings of the Blacksville No. 1 Mine. The mine has a known history of methane liberation and, in addition, methane was being liberated from within the shaft itself.

* * * *

On March 19, 1992, the methane accumulation was ignited as M. A. Heston, Inc., employees performed welding operations during the installation of the 16-inch casing. This violation was determined from information gathered during the investigation of the explosion at the production shaft of the Blacksville No. 1 Mine that occurred on March 19, 1992, which resulted in four fatalities.

The cited standard, 30 C.F.R. ' 75.301 (1991), provided in relevant part as follows:

All active workings shall be ventilated by a current of air containing not less than 19.5 volume per centum of oxygen, not more than 0.5 volume per centum of carbon dioxide, and no harmful quantities of other noxious or poisonous gases: and the volume and velocity of the current of air shall be sufficient to dilute, render harmless, and to carry away, flammable, explosive, noxious, and harmful gases, and dust, and smoke and explosive fumes.

Respondent argues that there was no violation of the cited standard because the production shaft at issue was not within the "active workings" of the mine. It is undisputed that the ventilation requirements set forth in 30 C.F.R. ' 75.301 (1991), indeed, apply only to "active workings" of an underground coal mine. The term "active workings" was defined at 30 C.F.R. ' 75.2(g)(4) (1991) as "any place in a coal mine where miners are normally required to work or travel."

There is no evidence in this case that any person worked or traveled or normally worked or traveled in the production shaft after the shaft was capped on Friday, March 13, 1992. The Secretary nevertheless argues that it is sufficient that miners were working and traveling above and below the shaft and that the dewatering pipe, on which the miners above were working, extended into the shaft. In other words, the Secretary interprets the words "above" and "below" to mean "in." It is well established however, that 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 a meaning would lead to an absurd result. *Dyer v. United States*, 832 F.2d 1062, 1066 (9th Cir. 1987); see also *Utah Power & Light*

all persons in the area affected by such violation, except those persons referred to in subsection (c) to be withdrawn from, and to be prohibited from entering, such area until an authorized representative of the Secretary determines that such violation has been abated.

Co., 11 FMSHRC 1926, 1930 (October 1989); *Consolidation Coal Co.*, 15 FMSHRC 1555, 1557 (August 1993). The Secretary nevertheless maintains that her interpretation is "reasonable" and therefore is entitled to deference. However, since there is no ambiguity in regard to use of the term "in," the doctrine of deference is inapplicable. In any event, one would be hard pressed indeed to find the Secretary=s proffered interpretation to be reasonable.

Under the circumstances the Secretary has failed to sustain her burden of proving the elements of a violation of the cited standard and the citation at bar must accordingly be vacated.

Order No. 3109522

This order, also issued pursuant to section 104(d)(1) of the Act, alleges a "significant and substantial" violation of the standard at 30 C.F.R. ' 77.1112(b) (1991) and charges in essential part as follows:

Consolidation Coal Company (Consol) did not perform or require methane examinations at the capped Production shaft where M. A. Heston, Inc., an independent contractor (I.D. B48), was performing welding operations. M. A. Heston, Inc. employees were positioned on top of the shaft cap performing welding operations during the installation of a 16-inch casing on March 17, 18, and 19, 1992. The welding operations was observed by various Consol management personnel. Also, a Consol Environmental Engineer was present at the worksite nearly continuously observed by various Consol management personnel. Also, a Consol Environmental Engineer at the worksite nearly continuously observed by various Consol management personnel. Also, a Consol Environmental Engineer was present at the worksite nearly continuously on the 17th and 18th and had arrived at the Production shaft site on the 19th. The Consol Environmental Engineer directly participated in the working being performed by M. A. Heston, Inc. employees. A methane detector that had been issued to and was in the possession of the Consol Environmental Engineer was available at the worksite. No one conducted or required examinations for methane at any time.

The Production shaft had been capped on March 13, 1992. The 16-inch casing and other ventilation restrictions were introduced into the cap openings on March 17, 1992. Calculations indicate that the ventilation of the shaft was significantly reduced from approximately 200,000 cubic feet of air per minute (cfm) to approximately 400 cfm. The mine has a known history of methane liberations and, in addition, methane was being liberated form within the shaft itself. This violation was determined from information gathered during the investigation of the explosion at the Production shaft of the Blacksville No. 1 Mine that occurred on March 19, 1992, which resulted in four fatalities.

* * * *

The cited standard 30 C.F.R. ' 77.1112(b), (1991) provides as follows:

Before welding, cutting, or soldering is performed in areas likely to contain methane, an examination for methane shall be made by a qualified person with a device approved by the Secretary for detecting methane. Examinations for methane shall be made immediately before and periodically during welding, cutting, or soldering and such work shall not be permitted to commence or continue in air which contains 1.0 volume per centum or more of methane.

Consol maintains that there was no violation of the cited standard because: (1) methane was not likely to accumulate at the location where welding was actually performed, i.e., above the cap, and (2) welding was not performed below the cap, i.e., the area that was likely to contain methane on Thursday, March 19, 1992. Consol=s reading of the standard is however unreasonably narrow and would clearly defeat the underlying purpose of the standard. As the Secretary correctly observes, the clear purpose of the standard is to prevent welding operations from igniting methane. Accordingly the methane examinations required by that standard must appropriately be made in areas within the range or zone of likely ignition from such welding and, in this case, including the area beneath the cap.

The Secretary has in this case established, and it appears to be undisputed, that the area beneath the cap was an area likely to contain methane under conditions that existed on March 19, 1992. The methane explosion itself is *prima facie* proof of this. From air readings taken at the production shaft after the accident, laboratory experiments and computer simulations, the Secretary=s ventilation expert, mining engineer John Urosek, determined that with only one of the six-inch pipes intaking air into the shaft, the volume of air was approximately 400 cfm (Gov=t Exh No. 13, 53). This is corroborated by Consol=s expert in mine fires and explosions, Donald Mitchell, who agrees that MSHA=s analysis of the quantities of air passing into the production shaft was fairly accurate (Respondent=s Exh=s No. 56 p. 9). Urosek testified that an air flow of approximately 400 cfm correlates to an average velocity of approximately one-foot per minute (Gov=t Exh. No. 13 p 23 and Gov=t Exh. 53 p. 11). Urosek opined that such an air flow was inadequate to dilute, render harmless and carry away methane being liberated from the shaft. As a result, it may reasonably be inferred that once one of the six-inch vent pipes was closed, methane, which is lighter than air, had begun accumulating under the cap.

Mitchell corroborates Urosek in acknowledging that, with only one of the six inch pipes intaking air, there was a potential for explosive concentrations of methane to accumulate beneath the cap (Tr. 2169, 2276). Mitchell determined that, with one-six inch vent pipe open, the average concentration of methane immediately beneath the cap was 4.1 percent. Mitchell acknowledged that this was not an acceptable concentration of methane (Respondent=s Exh. 9 at page 6, Tr. 237). In addition, Mitchell agreed that the atmosphere beneath the cap was not a homogenous methane/air mixture. Thus, it may reasonably be inferred that there were likely to be areas beneath the cap with concentrations of methane within the explosive range of five to fifteen percent (Tr. 2275). Significantly, the cited standard applies not merely to areas likely to contain explosive levels of methane but to areas containing any methane.

I further find that the area beneath the cap (an area likely to contain methane) was within the area or zone affected by welding above the cap. In this case such welding could have provided an ignition source for methane below the cap by an electrical arc from a welding machine improperly grounded above the cap to a steel "I" beam. The "I" beam extended below the cap into the methane atmosphere. Indeed Consol=s expert, Donald Mitchell, agreed with the Secretary that the ignition source for the methane explosion in this case was most likely the improper grounding of the second welding machine onto one of the "I" beams extending under the cap. Accordingly, under the cited standard, methane examinations were required to be performed in the area immediately below the cap.

Consol appears to further argue that, while it admittedly failed to make methane examinations in the area beneath cap, such examinations were not feasible and, even if feasible, would not produce accurate results. Consol however has the burden of proving the infeasibility or impossibility of compliance with the standard and has failed in this burden. The feasibility of performing methane examinations beneath the cap was in any event credibly established at hearing, e.g. by the use of an extendable probe (Tr. 846, 2018) or flexible tubing which could have been lowered into the shaft (Tr. 515, 2022; Gov=t Exh No. 55), or by using sampling pipes incorporated into the cap. (Tr. 2021). Moreover, speculation concerning the potential accuracy of such tests is no defense to the failure to take such tests. The violation is accordingly proven as charged.

The Secretary maintains that the violation was "significant and substantial." A violation is properly designated as "significant and substantial" if, based on the particular facts surrounding that violation, there exists a reasonable likelihood that the hazard contributed to will result in an injury or illness of a reasonably serious nature. *Cement Division, National Gypsum Co.*, 3 FMSHRC 822, 825 (April 1981). In *Mathies Coal Co.*, 6 FMSHRC 1,3-4 (January 1984) the Commission explained:

In order to establish that a violation of a mandatory safety standard is significant and substantial under *National Gypsum* the Secretary must prove: (1) the underlying violation of a mandatory safety standard, (2) a discrete safety hazard **C** that is, a measure of danger to safety **C** 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.

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)). The likelihood of such injury must be evaluated in terms of continued normal mining operations without any assumptions as to abatement. *U.S. Steel Mining Co., Inc.,* 6 FMSHRC 1573, 1574 (July 1984); See also *Halfway, Inc.,* 8 FMSHRC 8, 12 (January 1986) and *Southern Ohio Coal Co.,* 13 FMSHRC 912, 916-17 (June 1991).

There can be no dispute that the violation of failing to conduct methane examinations beneath the cap before and during welding operations in this case was a "significant and substantial" violation and of the highest gravity. The Secretary also maintains that the violation was the result of Consol=s "unwarrantable failure" to comply with the cited standard. Unwarrantable failure is defined as aggravated conduct constituting more than ordinary negligence. *Emery Mining Corporation*, 9 FMSHRC 1997 (December 1987). It is characterized by such conduct as "reckless disregard," "intentional misconduct," "indifference" or a "lack of reasonable care." Id. at 2003-04; *Rochester and Pittsburgh Coal Company*, 13 FMSHRC 189, 193-194 (February 1991). Relevant issues therefore, include such factors as the extent of a violative condition, the length of time that it existed, whether an operator has been placed on notice that greater efforts are necessary for compliance, and the operator=s efforts in abating the violative condition. *Mullins and Sons Coal Company*, 16 FMSHRC 192, 195 (February 1994).

This mine was a known "gassy" mine and Consol officials admitted that they knew methane could be liberated into the production shaft. While Consol was accordingly negligent in failing to perform methane examinations beneath the cap I do not find that such negligence rises to the level of unwarrantability. First, it could reasonably have been perceived that methane was not likely to accumulate above the cap so that not testing at that location would not be violative. Second, it could also have been perceived, although incorrectly, that the welding was to be performed in a separate and discrete area above, and separated by, the concrete cap. Third, methane examinations were in fact performed at the bottom of the shaft where several Consol witnesses reasonably and in good faith believed (because of the direction of airflow into the shaft) would be the location where methane from within the shaft, if it existed at all, would have been detectable. Finally, the most likely ignition source in this case, an electrical arc from an improperly grounded welding machine, was not an obvious source of ignition.

Order No. 3109523

This order, also issued pursuant to section 104(d)(1) the Act, alleges a "significant and substantial" violation of the standard at 30 C.F.R. ' 75.316, (1991) and charges as follows:

The approved ventilation system and methane and dust control plan for this mine was not followed in that a major change in ventilation was made without the approval of the MSHA District Manger. This change occurred on March 13, 1992, when the Production shaft was capped. The capping operation included the forming of a 22-inch opening in the cap to facilitate the placement of a 16-inch diameter casing into the shaft and also included the installation of two 6-inch diameter pipes.

The placement of the cap reduced the ventilation of the shaft to the amount entering through the two 6-inch diameter pipes and through a 22-inch diameter hole in the cap. Calculations indicate that the airflow in the shaft was reduced from approximately 200,000 cubic feet of air per minute (cfm) to approximately 7,500 cfm. Mine officials treated the capping operation on March 13, 1992 as a major ventilation change by removing all personnel from the mine during the capping operations except those persons necessary to evaluate the change. The placement of the cap on the Production shaft was followed on March 17, 1992 by the preplanned installation of the 16-inch diameter casing onto the 22-inch opening in the cap and the subsequent cutting-off and plugging of one of the 6-inch pipes. These two actions further reduced the airflow through the Production shaft and allowed an explosive methane/air mixture to accumulate in the shaft where work was being performed on top of the shaft cap and in underground areas of the mine. This violation was determined from information gathered during the investigation of the explosion at the Production shaft of the Blacksville No. 1 Mine that occurred on March 19, 1992, which resulted in four fatalities.

The cited standard, 30 C.F.R. ' 75.316, (1991) which tracks section 303(o) of the Act, provides in relevant part that: "[a] ventilation system and methane and dust control plan and revisions thereof suitable to the conditions of the mining system of the coal mine and approved by the Secretary shall be adopted by the operator." The regulation further requires that "[t]he plan shall show ... such other information as the Secretary may require." It is also noted that when the extant ventilation plan was approved, the accompanying letter sent to Consol stated that "[y]ou are reminded that all changes or versions to the ventilation plan must be submitted and approved before they are implemented."

While acknowledging that it did not obtain approval from the Secretary before capping the production shaft, Consol maintains that there was no violation of the cited standard because it was not in fact required to obtain the Secretary=s approval for ventilation changes resulting from capping the production shaft. Consol argues that MSHA enforcement practices in March 1992, and its own prior dealings with the MSHA District 3 ventilation enforcement official, resulted in its reasonable and good faith belief that approval by the MSHA district manager was not required before capping the production shaft. There is indeed credible evidence that, as a general rule, approval by the MSHA district manager had not previously been required prior to the capping of mine shafts when the mine was being sealed. This case is clearly distinguishable however since the shaft here at issue was not sealed but remained partially open to allow the insertion of a dewatering pipe and to continue intaking air for ventilation. MSHA=s prior practice regarding the sealing of mine shafts is therefore inapplicable hereto.

Most significantly, however, the Secretary has proven by a preponderance of credible evidence that a responsible agent of Consol, John Yerkovich, who was assistant to the regional manager for safety of Consol=s Northern West Virginia Regional Office, was specifically informed that MSHA approval would be required before capping the production shaft. The evidence shows that contact with MSHA on matters relating to ventilation plans ordinarily went through Consol=s Regional Safety office and that MSHA inspector Terry Palmer was the contact at MSHA on ventilation matters for the Blacksville No. 1 Mine. As previously noted, John Yerkovich told Palmer of the proposal to cap the production shaft. Palmer testified that he told Yerkovich that the change in ventilation which would result from the capping of the shaft would have to be approved by the MSHA district manager as a revision of the ventilation plan. While Yerkovich testified that he was told by Raymond Strahin, also an MSHA ventilation inspector, that written notification would be sufficient, I do not find this testimony credible. Both Palmer and Strahin denied at hearing that Yerkovich was told that written notification was sufficient and Yerkovich in his own deposition contradicts his testimony at hearing. The following colloquy from his deposition demonstrates this contradiction:

Q. But in your conversation with Mr. Palmer and Mr. Strahin, is that right, Strahin?-

(Deponent indicating)

Q. - they indicated to you in no uncertain terms that they though that you needed prior approval; is that right?

A. That-s correct.

Q. Which would have indicated that you needed a response before the job could go forward?

A. If I agreed to what they were saying, that-s correct.

Q. Did you express to Mr. Ammons that the MSHA inspectors had said that to you?

A. Yes ma=am.

Q. What was his response?

A. He agreed with me.

* * * *

Q. I may have misheard before, but I heard you say you communicated to Mr. Ammons the MSHA sense that this was to be communicated to MSHA, correct?

A. I told Mr. Ammons that they had requested me to submit something for approval, that the cap was going to be put on the shaft.

* * * *

Q. So you clearly made it clear to Mr. Ammons that it was their opinion this needed to be approved by MSHA, Since that this was to be communicated to MSHA, correct?

A. Yes sir, I believe I said that before.

Q. You certainly understood that to mean approval before the cap, not after the cap, didn=t you?

A. Well, any time you apply for approval it means before. (Gov≠ Exh. No. 52, pp. 83-84, 108-09)

In addition, Yerkovich never stated in his deposition that he was told by Strahin that written notification was sufficient. Significantly, Yerkovich also admitted at hearing that he told both Ammons and Bain that MSHA=s position was that prior approval for capping the projection

shaft was required (Tr. 1219, Gov. Exh. No. 51 p. 128). This testimony further undermines Yerkovich=s denials that he was told that prior approval for capping the production shaft was required. I therefore find that Consol, through its agent, John Yerkovich, was specifically placed on notice that capping the production shaft was a revision to the ventilation plan therefore requiring prior submission of plans and MSHA approval for the capping. Under the circumstances, Consol=s deliberate failure to have submitted plans for capping the shaft and proceeding to cap the shaft without such approval, constituted a violation of the cited standard.

It is reasonably likely that Consol=s action in capping the shaft without prior review of such action by MSHA would lead to the inadequate ventilation of the production shaft and a fatal methane explosion. The violation was therefore of high gravity and "significant and substantial." Since I find that an agent of Consol was directly and specifically told of the necessity of obtaining MSHA=s prior approval for the capping job and that Consol deliberately disregarded this directive, operator negligence was of a particularly aggravated nature showing reckless disregard. The violation was clearly therefore the result of Consol=s gross negligence and "unwarrantable failure" to comply.

Order No. 3109524

This order, also issued pursuant to section 104(d)(1) of the Act, alleges a "significant and substantial" violation of the standard at 30 C.F.R. ' 75.322, (1991) and charges as follows:

Consolidation Coal Company (Consol) conducted a change in ventilation on March 13, 1992 and again on March 17, 1992. The changes had a cumulative effect which materially affected the split of air ventilating the Production shaft. Miners were allowed to work before the effects of the changes were fully ascertained by mine management or a certified person.

On March 13, 1992, Consol directed the Production shaft to be capped. The capping of the shaft reduced ventilation in the shaft to the amount entering through two 6-inch diameter pipes and through a 22-inch diameter hole in the cap. Calculations indicate that the airflow in the shaft was reduced by the placement of the cap from approximately 200,000 cubic feet of air per minute (cfm) to approximately 7,500 cfm. Mine officials treated the capping operation on March 13, 1992 as a major air change. All electric power was removed from the affected area during the capping operation. Consol evaluated the ventilating changes underground: however, Consol did not evaluate the change to the air split ventilation the Production shaft itself before allowing miners to return to work.

On March 17, 1992, Consol directed a second material change to the air split ventilating the Production shaft when a plugged length of 16-inch diameter casing was installed through the 22-inch diameter hole in the Production shaft cap and the remaining portion of the 22-inch diameter hole was sealed. In addition, one of the 6-inch diameter pipes was cut off and sealed. Calculations indicated that the changes made on March 17, 1992 reduced the ventilation of the

Production shaft from approximately 7,500 cfm to approximately 400 cfm. The March 17, 1992, change was conducted while miners were working underground and on top of the capped Production shaft. Consol did not make an evaluation of the split of air ventilating the Production shaft following the changes made on March 17 and miners were permitted to continue to work both underground and on the Production shaft cap following the change.

The mine has a known history of methane liberation and, in addition, methane was being liberated from within the shaft itself. Consol=s failure to determine that the Production shaft had a significant methane liberation rate and whether the shaft was adequately ventilated following the ventilation changes allowed an explosive methane-air mixture to accumulate undetected in the shaft while work was being performed on the shaft cap and in the underground mine. On March 19, 1992, the methane accumulation was ignited as employees of M. A. Heston, Inc., an Independent contractor, performed welding operations during the installation of the 16-inch casing through the Production shaft cap. This violation was determined from information gathered during the investigation of the explosion at the Production shaft of the Blacksville No. 1 Mine that occurred on March 19, 1992, which resulted in four fatalities.

The cited standard, 30 C.F.R. ¹ 75.322, (1991), which tracks section 303(u) of the Act, provides as follows:

Changes in ventilation which materially affect the main air current or any split thereof and which may affect the safety of persons in the coal mine shall be made only when then the mine is idle. Only those persons engaged in making such changes shall be permitted in the mine during the change. Power shall be removed from the areas affected by the change before work starts to make the change and shall not be restored until the effect of the change has been ascertained and the affected areas determined to be safe by a certified person.

The requirements of Section 75.322 are applicable when both parts of the first sentence of the standard are met, i.e., the change must materially affect a split of air and it must affect the safety of persons in the mine. There is no dispute in this case that the reduction of airflow within the production shaft affected the safety of persons in the mine. It is the first part of the standard, requiring that the change in ventilation "materially affect the main air current or any split thereof" that is at issue.

The order at bar charges in essence that Consol made ventilation changes on March 13 and on March 17 that materially affected the split of air ventilating the production shaft and that miners were allowed to work before the effect of the changes was fully evaluated.² It is undisputed that on March 13, the cap over the production shaft was completed and that this

²While Consol expressed some disagreement in its post-hearing brief that the Production Shaft could be characterized as a "split" of air, even its own vice-president for the Blacksville operations, Donzel Ammons, conceded that it was a "split" of air.

change reduced the airflow in the production shaft from approximately 187,000 cfm to approximately 7,350 cfm. It is further undisputed that on March 17, the plugged 16-inch casing was inserted into the 22-inch hole in the cap and sealed with steel plates and Thermoglass cloth. In addition, on that date one of the two 6-inch diameter vent pipes was cut and stuffed with Thermoglass cloth or some other material which caused a further reduction of air flow within the production shaft to approximately 400 cfm.

Consol argues, in essence, that the ventilation changes on March 13 and March 17 must be considered separately not cumulatively and that the March 17 reduction in airflow from about 3,750 cfm to about 400 cfm did not materially affect the split of air ventilating the production shaft. The term "materially" is not defined in the Act or pertinent regulations. It is defined, as relevant hereto, in Webster=s New Third International Dictionary (unabridged) as "to a significant extent or degree." By application of this common definition it is clear that a reduction in airflow from approximately 7,350 cfm to 400 cfm, more than a 94% percent reduction, would have affected the airflow in the production shaft to a "significant degree." Indeed, even Consol=s expert witness, Donald Mitchell, agreed that the reduction from 7,350 cfm to 400 cfm was a large reduction and would have a material affect (Tr. 2302, 2309). Within this framework of evidence, it is clear that Consol was therefore required to follow the procedures set forth in the cited standard following the reduction in air flow on March 17, 1992. When it failed to do so it was in violation of that standard.

In reaching these conclusions I have not disregarded Consol=s claims that the reduction on March 17, was not material because the change was less than 9,000 cfm. Consol relies in part upon MSHA=s Program Policy Manual relating to '75.322, which provides as follows:

Any ventilation change in which any split of air is to be increased or decreased by an amount equal to or in excess of 9,000 cfm shall be made only when the mine is idle. Before mine power can be restored in all areas affected by such ventilation changes, an examination is required in accordance with Section 75.303.

While this language does provide that any change of 9,000 cfm or more triggers the requirements of the standard it clearly does not preclude application of the standard to ventilation changes of less than 9,000 cfm. Consol further relies, in support of its argument herein, upon statements by MSHA Inspectors Palmer, Sperry and Dinning and former MSHA subdistrict manager William Reid, that they considered 9000 cfm as the threshold for triggering the applicability of '75.322. However, each of these individuals except Sperry clarified that, depending upon the circumstances, the requirements of '75.322 may also apply to ventilation changes of less than 9,000 cfm (Tr. 1164, 1175, 1414, 1538, 1856). While there is also some disagreement among Consol witnesses, both Bane and Wooten admitted that the purpose of the standard, to prevent exposure to potentially hazardous conditions resulting from ventilation changes, may be furthered even when an air change is less than 9,000 cfm (Tr. 1718, 1799).

Under the circumstances however, I conclude that the provisions Section 75.322 were triggered on March 17, so that all persons other than those making the changes were required to

be removed from the mine, the power removed from the affected areas and the effects of the change ascertained. Consol=s failure to follow these procedures constituted a violation of the cited standard. The violation was, under the facts at bar, also clearly "significant and substantial" and of high gravity.

I do not find however, that the violation was the result of unwarrantable failure. The Secretary argues that several Consol officials (including Levo, Moore, DeBlossio and Baird), were aware that one of the 6-inch vent pipes had been cut. It may also reasonably be inferred that Baird and DeBlossio also knew that the pipe had been sealed, thereby limiting the ventilation of the shaft. The Secretary further argues that Consol officials failed to notify those actually working on the project presumably including Baird and DeBlossio, of the importance of the two vent pipes, and that this failure constituted aggravated conduct amounting to unwarrantable failure. However, because four of the miners working on the project were killed, the Secretary cannot sustain her burden of proving what was communicated to those miners or what knowledge those miners had regarding the importance of the vent pipes. Her argument herein is therefore without the necessary evidentiary support. Consol was not, however, without negligence because of its failure to maintain the level of supervision and control warranted by the activities at the production shaft.

Civil Penalty Assessments

In assessing a civil penalty under Section 110(i) of the Act, consideration is to be given to the operator=s history of previous violations, the appropriateness of the penalty to the size of its business, the effect on the operator=s ability to continue in business, good faith abatement, negligence, and gravity. Consol is a large company and there is no evidence that its ability to continue in business would be affected by a penalty as high as that proposed by the Secretary. The Secretary acknowledges that all charging documents were satisfactorily abated. The gravity and negligence relating to these violations have previously been discussed. Within this framework of evidence I assess the civil penalties set forth in the Order below.

ORDER

Citation No. 3109521 is hereby vacated. Order No. 3109522 is modified to a "significant and substantial" citation under Section 104(a) of the Act and Consolidation Coal Company is directed to pay a civil penalty of \$10,000 for the violation charged therein. Order No. 3109523 is modified to a citation under Section 104(d)(1) of the Act and Consolidation Coal Company is directed to pay a civil penalty of \$50,000 for the violation charged therein. Order No. 3109524 is modified to a "significant and substantial" citation under section 104(a) of the Act and Consolidation Coal Company Act is directed to pay a civil penalty of \$10,000 for the violation charged therein.

Gary Melick Administrative Law Judge

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