

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

OFFICE OF ADMINISTRATIVE LAW JUDGES
601 New Jersey Avenue, N.W. Suite 9500
Washington, DC 20001-2021

January 10, 2008

CONSOL OF KENTUCKY, INC.	:	CONTEST PROCEEDING
Contestant	:	
v.	:	Docket No. KENT 2007-351-R
	:	Order No. 6643961; 06/25/2007
	:	
SECRETARY OF LABOR,	:	
MINE SAFETY AND HEALTH	:	Mine: Jones Fork E-3
ADMINISTRATION, (MSHA),	:	Mine ID 15-18589
Respondent	:	

DECISION

Appearances: R. Henry Moore, Esq., Jackson Kelly, PLLC, Pittsburgh, Pennsylvania, on behalf of the Contestant;
Mary Sue Taylor, Esq., Office of the Solicitor, U.S. Department of Labor, Nashville, Tennessee, on behalf of the Respondent.

Before: Judge Melick

This case is before me pursuant to section 107(e)(1) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 801 et seq., the “Act,” upon the contest by Consol of Kentucky, Inc., (Consol) of “imminent danger” withdrawal Order No. 6643961 issued to Consol, pursuant to section 107(a) of the Act.¹ The order alleges as follows:

¹ Section 107(a) provides as follows:

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an order requiring the operator of such mine to cause all persons, except those referred to in section 104(c), to be withdrawn from, and to be prohibited from entering, such area until an authorized representative of the Secretary determines that such imminent danger and the conditions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. The issuance of an order under this subsection shall not preclude the issuance of a citation under section 104 or the proposing of a penalty under section 110.

An explosive atmosphere exists inby 3 North Seals (Seal Set 8), the oxygen content is between 15.1-16.5 percent and methane between 10-12 percent. The 3 North Seals are adjacent to the primary and secondary escapeways for active MMU 002-0 and 004.0 sections. An oral 107(a) imminent danger order was issued to Freddie Crockett, foreman, at 1500 hours on this date.

Randy Newsome, an inspector for the Department of Labor's Mine Safety and Health Administration (MSHA), issued the subject order on June 25, 2007. Newsome is a registered professional mine engineer and has industry experience in underground mining as a section boss and project engineer. Newsome was directed by his supervisor, Garrett Robinson, to perform a spot inspection of the seals at the subject mine. The inspection was the result of an emergency temporary standard (ETS) issued by MSHA.²

The particular issue herein involves seal set No. 8. The No. 8 set is one of three sets of seals that separate part of the northern portion of the mine from the active workings of the mine. There are six seals in the set. One of the seals has a sampling pipe that extends 15 feet behind the seal. These seals were built in June 2006 under 30 C.F.R. 75.335(a) (2006). Once an area is sealed no ventilation is provided to that area. It is expected that the atmosphere behind the seals will become inert as methane levels rise above the explosive range and oxygen levels fall below that range. However, the area immediately inby the seals may, on occasion, contain lower levels of methane than generally present throughout the sealed area because of leakage across the seals from the active areas.

² Following the Sago and Darby mine disasters, where miners were killed as a result of methane explosions originating in sealed areas of mines, MSHA acted to require mine operators to monitor the atmosphere in such areas and to address potentially hazardous conditions. MSHA issued Program Policy Bulletin No. P06, on July 19, 2006, which required operators to assess the atmosphere behind alternative seals, and to take remedial action if concentrations of methane from 3 percent to 20 percent were present. On May 22, 2007, MSHA issued an ETS, pursuant to section 101(b) of the Act. 72 FR 28796-28817 (May 22, 2007). The ETS, which became effective upon publication, amended 30 C.F.R. § 75.335, by increasing strength requirements for newly constructed seals. It also required mine operators to develop and submit for approval protocols for monitoring and maintaining inert the atmosphere in sealed areas where the seals were not constructed to withstand 120 psi of overpressure.

The ETS further provided:

(4) When oxygen concentrations are 10.0 percent or greater and methane concentrations are from 3.0 percent to 20.0 percent in a sealed area, the mine operator shall take two additional gas samples at one-hour intervals. If the two additional gas samples are from 3.0 percent to 20.0 percent and oxygen is 10.0 percent or greater – (i) The mine operator shall implement the action plan in the protocol; or (ii) Persons shall be withdrawn from the affected area, except those persons referred to in section 104(c) of the Act.

The Jones Fork Mine at issue liberates approximately 1.4 million cubic feet of methane per day. Without ventilation in the sealed area, the methane levels in the sealed area continue to rise above the upper explosive limit and the oxygen levels decrease past levels that would support an ignition of methane. The explosive range of methane in a normal atmosphere is 5-15%. Above 15% methane is not explosive in a normal atmosphere containing 20.5% oxygen. The level of oxygen necessary to support a methane ignition is 12%. As methane approaches the upper explosive limit and oxygen approaches the 12% level, the mixture of air becomes less susceptible to ignition.

The seals that were constructed in the No. 8 set are solid concrete block seals known as Mitchell-Barrett seals. They are “hitched” into the ribs and floor in that a notch is cut into the ribs and into the floor to increase the perimeter strength of the seal. There are two cribs in front of and behind each seal in the No. 8 set to provide additional roof support in the areas of the seals. Each seal also has a pilaster, which provides support in the middle of the seal. The seals were built in June 2006, following an incident involving a set of alternative omega block seals at a different location in the mine. Once those damaged seals were replaced, Consol constructed new Mitchell-Barrett seals at the Nos. 6,7, and 8 locations consistent with guidelines developed by MSHA expert Clete Stephan.

As previously noted, one seal in each set is required to have a sampling pipe that extends 15 feet into the sealed area. At the No. 8 set, the sampling pipe is at the No. 1 seal. In June 2007, Consol and other operators were required to begin sampling through this pipe behind each set of seals. Leakage at seals may occur through the seals and the surrounding strata. Depending on the barometric pressure as well as other factors in the mine, seals may “ingas” or “outgas.” If the seal is ingassing, air from the active portion of the mine leaks into the sealed area. If the seal is outgassing, air from the sealed area leaks into the active portion of the mine.

The ETS requires operators to take samples through the sampling pipe to establish a 14-day baseline. If the seals are ingassing, sampling is not required. The No. 8 seals were outgassing. The results of the baseline sampling for the No. 8 set of seals indicated that the atmosphere immediately behind the seals contained methane above 5% and below 15% and oxygen above 12%. The No. 7 set of seals were ingassing. The methane levels at the No. 8 set of seals were apparently affected by the leakage at the No. 7 set of seals. A thin layer of the leaked air would travel across the most southern of the entries in the sealed area. The rest of the sealed area would remain inert.

Upon arriving at the mine, Inspector Newsome initially met with Mine Superintendent Lloyd Shomo. He informed Mr. Shomo that he would be checking the atmosphere behind the seals. Newsome then reviewed the baseline and seal sampling records from June 15-22, 2007. He observed that on June 18, the No. 8 seals had a methane level of 17% and an oxygen level of 12.4%. These levels fell within the “action range,” defined by the ETS as between 3% and 20% for methane and above 10% oxygen. Inspector Newsome discussed this situation with his supervisor, Garrett Robinson, before he went underground. He also informed Mr. Shomo that if his inspection produced results similar to the levels reported on June 18, Shomo would have to withdraw people from the mine or he would issue a “Section 107(a)” order.

Inspector Newsome went to the No. 8 seals, accompanied by Shomo. Chief engineer Jon Hale, engineer Steve Hicks, and mine examiner Joey Sammons were present when Inspector Newsome and Shomo arrived at the No. 8 seals. Between the time Inspector Newsome took his second and third samples, mine foreman Freddie Crockett arrived. Upon arriving at the No. 8 seals on June 25, 2007, Inspector Newsome noted that they were outgassing. He took samples at the sampling pipe with an ATX620 gas detector. He also took a “bag sample” which was sent to MSHA’s laboratory for more precise analysis. Newsome observed initial readings from the gas detector at 1:00 p.m. of 11% methane and 16.5% oxygen.

Under the ETS, he was required to take two additional samples, for a total of three, spaced an hour apart, to confirm his initial readings. The samples at around 2:00 p.m. indicated 11% methane and 15.8% oxygen. The samples at around 3:00 p.m. were 12% methane and 15.1% oxygen. Based on these results, Inspector Newsome verbally issued a “Section 107(a)” order. The written order followed and is at issue herein. In concluding that an imminent danger existed, Inspector Newsome testified that he considered the readings indicating what he believed was an explosive mixture of methane and oxygen behind seal set No. 8, that there had been nearby roof falls, that the area behind the No. 8 set of seals was pillared and that there had been lightning the day before somewhere in eastern Kentucky and he speculated that the weather could produce lightning at any time. Newsome also speculated, as part of his rationale, as to the possibility that electrical equipment and cables could have been left in the sealed area and the effect of “human error” in situations involving explosive mixtures.

Section 3(j) of the Act defines “imminent danger” as the “existence of any condition or practice in a coal or other mine which could reasonably be expected to cause death or serious physical harm before such condition or practice can be abated.” As previously noted, Section 107(a) of the Act provides for the issuance of an order requiring the withdrawal of persons in areas of a mine who are exposed to such an imminent danger. “Imminent danger orders permit an inspector to remove miners immediately from a dangerous situation, without affording the operator the right of prior review, even where the mine operator did not create the danger and where the danger does not violate the Act or the Secretary’s regulations. This is an extraordinary power that is available only when the ‘seriousness of the situation demands such immediate action.’” *Utah Power & Light Co.*, 13 FMSHRC 1617, 1622 (October 1991) (quoting from the legislative history of the Federal Coal Mine Health and Safety Act of 1969, the predecessor to the 1977 Act).

An imminent danger exists “when the condition or practice observed could reasonably be expected to cause death or serious physical harm to a miner if normal mining operations were permitted to proceed in the area before the dangerous condition is eliminated.” *Wyoming Fuel Co.*, 14 FMSHRC 1282, 1290 (August 1992) (quoting from *Rochester & Pittsburgh Coal Co.*, 11 FMSHRC 2159, 2163 (November 1989). While the concept of imminent danger is not limited to hazards that pose an immediate danger, “an inspector must ‘find that the hazardous condition has a reasonable potential to cause death or serious injury within a short period of time.’” *Cumberland Coal Resources, LP*, 28 FMSHRC 545, 555 (August 2006). Inspectors must determine whether a hazard presents an imminent danger without delay, and a find of an imminent danger must be

supported “unless there is evidence that [the inspector] had abused his discretion or authority.” *Rochester & Pittsburgh Coal Co.*, 11 FMSHRC at 2164.

While an inspector has considerable discretion in determining whether an imminent danger exists, that discretion is not without limits. An inspector must make a reasonable investigation of the facts, under the circumstances, and must make his determination on the basis of the facts known, or reasonably available to him. As the Commission explained in *Island Creek Coal Co.*, 15 FMSHRC 339, 346-347 (March 1993):

While the crucial question in imminent danger cases is whether the inspector abused his discretion or authority, the judge is not required to accept an inspector’s subjective “perception” that an imminent danger existed. Rather, the judge must evaluate whether, given the particular circumstances, it was reasonable for the inspector to conclude that an imminent danger existed. The Secretary still bears the burden of proving [her] case by a preponderance of the evidence. Although an inspector is granted wide discretion because he must act quickly to remove miners from a situation that he believes to be hazardous, the reasonableness of an inspector’s imminent danger finding is subject to subsequent examination at the evidentiary hearing.

An inspector “abuses his discretion...when he orders the immediate withdrawal of miners under section 107(a) in circumstances where there is not an imminent threat to miners.” *Utah, Power & Light Co.*, 13 FMSHRC at 1622-23.

The critical question in determining whether an accumulation of methane presents an imminent danger is whether there is a ignition source that might reasonably be expected to cause an explosion resulting in death or serious injury within a short period of time. In *Island Creek*, the Secretary conceded that explosive accumulations of methane in a longwall gob would create an imminent danger only if an ignition source presented a significant danger. 15 FMSHRC at 347. Similarly, on the related question of whether a methane accumulation hazard presented a reasonable likelihood of an injury causing event, the Commission has focused on the presence of an ignition source. *Texasgulf, Inc.*, 10 FMSHRC 498, 501 (April 1988) (critical question for significant and substantial determination is likelihood of explosive concentrations of methane coming into contact with an ignition source). The Commission has held that statements that certain events “could” occur, are not sufficient to support a finding that there was a reasonable likelihood of an ignition of methane for a significant and substantial determination. *Zeigler Coal Co.*, 15 FMSHRC 949, 953-54 (June 1993).

Within the above framework of law and the evidence of record, I am constrained to find that an imminent danger did not exist and that the issuing inspector abused his discretion in issuing the order at bar considering the facts known, or reasonably available, to him. Indeed, the Secretary’s own expert in explosions and ignitions, Clete Stephan, opined based on the facts presented at hearings by Inspector Newsome, that the potential for an explosion behind the seals was “unlikely” (Tr. 209). Consol’s experts, Mssrs. Fertall and Mucho agreed with Stephan. Specifically, when

asked his opinion of the conditions behind the No. 8 seals, Mr. Stephan testified as follows:

Well, I believe that based on the information [Inspector Newsome] had, that he - he could have correctly made the assumption that an explosive mixture - to what extent he didn't know, but an explosive mixture existed behind those seals. And that just in the unlikely event that those explosive mixtures would have - would have exploded they could have easily compromised the seals (Tr. 209; emphasis added)

Aside from the Secretary's own principal expert witness opining that an ignition was an "unlikely" event, the uncontradicted evidence which should have been known to the issuing inspector, or was reasonably available to him, fully corroborates that opinion. The issuing inspector herein cited several potential sources of methane ignition including lightning and roof falls. As for lightning being a potential source of ignition MSHA's Bleeder and Gob Manual states that from 1959-1994, lightning has been determined to be an ignition source in only two mine explosions (Exh. R-28 p.23). Mr. Stephan also noted that before the Sago mine accident in January 2006, all explosions in sealed areas attributed to lightning had the commonality of having a conduit into the sealed area. Inspector Newsome could not identify any such conduit at the Jones Fork mine. In other words, prior to the Sago accident, there had never been an explosion caused by lightning without a conduit - - and the Jones Fork mine had no conduit to the sealed area.

As for roof falls being a potential source of ignition, the MSHA training manual developed by its experts states that only 0.7% of methane ignitions and explosions in United States mines between 1959 and 1994 could be attributable to roof falls (Exh. R-28 p. 23).³ The training manual concludes that "[c]onsidering that thousands of roof falls occur annually in the United States, the ignition of methane caused by roof falls is unlikely" (Exh. R-28, p. 23). The issuing inspector had been trained on this information and the subject manual was available in his office. Consol's expert, Mr. Mucho, also testified that, historically, roof falls have proven to be highly unlikely sources of ignition. This was especially true according to Mucho where the roof consists of shale as in the sealed areas of the Jones Fork mine

While Inspector Newsome also speculated as potential ignition sources the possible failure of roof supports, the possibility that electrical equipment and cables could have been left in the sealed area and human error, the credible record evidence does not support this speculation. No one was working in the sealed area and speculation that "human error" could cause an imminent danger is so vague as to be without probative value. Moreover, no authoritative studies were presented to support his opinion that roof supports could be a source of ignition of methane. Indeed, according to Mr. Stephan, laboratory testing by the Bureau of Mines would not support such a conclusion. Moreover, Consol's expert, Thomas Mucho, explained that the most recent research showed that the failure of roof support materials in fact cannot generate enough heat to cause an ignition. Finally,

³ In a recent case, an MSHA ventilation expert also essentially conceded that a roof fall was an unlikely ignition source. *Cumberland Coal Resources, LP*, 27 FMSHRC 295, 319-20 (March 2005)(ALJ) (aff'd in part rev. in part, 28 FMSHRC 545 (August 2006).

there is no credible evidence that any electrical equipment or cables were left in the sealed areas. The only evidence in this regard was from mine Foreman Crockett that, indeed, no electrical equipment was left behind when the areas were sealed. In any event, as previously noted, the Commission has held that such speculative statements that certain events “could” occur are not sufficient to even support a finding that there was a reasonable likelihood of an ignition of methane. *Ziegler*, 15 FMSHRC at 933-4.

Under all the circumstances it is apparent that an actual ignition of the explosive atmosphere behind the seals at issue was, at best, a theoretical possibility. The evidence clearly does not support the issuance of a “section 107(a)” imminent danger order.

ORDER

Order No. 6643961 is hereby vacated.

Gary Melick
Administrative Law Judge
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