# FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

1331 PENNSYLVANIA AVENUE, NW, SUITE 520N

WASHINGTON, D.C. 20004-1710

September 30, 2015

| SECRETARY OF LABOR,<br>MINE SAFETY AND HEALTH<br>ADMINISTRATION (MSHA) | : |                          |
|--|---|--------------------------|
| v.   | : | Docket No. SE 2012-681-R |
| JIM WALTER RESOURCES, INC.   | : |                          |

BEFORE: Nakamura, Acting Chairman; Cohen and Althen, Commissioners

# DECISION

BY: Nakamura, Commissioner:<sup>1</sup>

This proceeding arises under the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 801 et seq. (2012) ("Mine Act"). At issue is an imminent danger order issued by the Department of Labor's Mine Safety and Health Administration ("MSHA") pursuant to section 107(a) of the Mine Act, 30 U.S.C. § 817(a),<sup>2</sup> to Jim Walter Resources, Inc., ("JWR") at its No. 7 Mine, an underground coal mine in Alabama. The order alleges elevated levels of methane in excess of five percent in a roof cavity within the mine.

On January 23, 2014, the Administrative Law Judge issued a decision in this case affirming the section 107(a) withdrawal order. 36 FMSHRC 235 (Jan. 2014) (ALJ). The operator

<sup>&</sup>lt;sup>1</sup> Commissioner Nakamura affirms the Judge's decision on the basis that it is supported by substantial evidence. Chairman Jordan and Commissioner Cohen in a separate opinion affirm the Judge's decision because they agree with the opinion of Commissioner Nakamura that substantial evidence supports the decision of the Judge upholding the imminent danger order, and on the basis that five percent methane in active workings constitutes an imminent danger. Commissioner Young and Commissioner Althen dissent, as they would reverse the Judge's holding on the basis that it is not supported by substantial evidence and because they disagree with the approach articulated by Chairman Jordan and Commissioner Cohen.

<sup>&</sup>lt;sup>2</sup> Section 107(a) provides in relevant part that if an MSHA inspector "finds that an imminent danger exists, [the inspector] shall . . . issue an order requiring the operator of such mine to cause all persons . . . to be withdrawn from" the relevant area until the danger no longer exists. 30 U.S.C. § 817(a).

filed a petition for discretionary review of the Judge's decision, which the Commission granted. For the reasons stated below, I affirm the Judge's decision.<sup>3</sup>

### I.

# **Factual and Procedural Background**

#### A. Factual Background

On August 13, 2012, MSHA Inspector Larry McDonald was conducting a quarterly inspection of the No. 8 section of JWR's No. 7 mine. McDonald observed eight miners in the area, although he was not certain where each miner was located. Those miners included JWR safety supervisor John Connellan and United Mine Workers of America ("UMWA") miners' representative Steve Pendley, who both accompanied McDonald on the inspection. The closest miners not part of the inspection party included Eric Church, an hourly UMWA miner, and the section foreman James Woods.

As McDonald walked towards the face of the mine, he turned left onto the No. 2 entry, and his methane detector began to fluctuate. As McDonald walked through the No. 2 entry, he turned right into a long crosscut, which was located between the No. 2 and 3 entries. Once in the long crosscut, he observed a line curtain hung up, which was intended to ventilate the methane in the area. When McDonald reached the right corner of the curtain to make a reading, he observed a cavity in the roof of the long crosscut.

McDonald testified that while taking a series of dust surveys, he observed a Lo Trac machine<sup>4</sup> moving in the area. Tr. 92-95. After taking the dust surveys, McDonald turned off the No. 3 entry into a long crosscut heading toward the No. 2 entry. As he came through a man door into the crosscut, he observed a change in his methane detector, with an increase of .4 percent. McDonald went to a line curtain that was hung in the long crosscut to make another methane reading. He turned around and saw a high cavity in the roof. Tr. 95-96. McDonald subsequently stepped up on a pallet of blocks and raised his detector into the cavity. The reading exceeded five percent. Tr. 97. The cavity measured approximately five feet wide by seven feet in length by two feet in depth. Tr. 112-13. McDonald was not certain as to how close to the long crosscut the remaining miners in the vicinity were. Tr. 182.

<sup>3</sup> On this same date, the Commission is issuing a separate decision in a case involving a very similar issue. *Jim Walter Res. Inc.*, Docket No. SE 2011-407-R.

<sup>4</sup> A Lo Trac machine is a non-permissible piece of mobile equipment that hauls and delivers various supplies to and from the long crosscut. When a piece of equipment is "non-permissible," it lacks the protective safeguards to prevent dangerous electrical currents or sparks from being produced. All face equipment must be maintained in permissible condition. 30 C.F.R. § 75.503. "Permissible" means "all electrically operated equipment taken into or used inby the last open crosscut of an entry . . . designed, constructed, and installed, in accordance with the specifications of the Secretary, to assure that such equipment will not cause a mine explosion or mine fire, and . . . to prevent, to the greatest extent possible, other accidents in the use of such equipment." 30 C.F.R. § 75.2.

McDonald corroborated his methane reading of over five percent by having Pendley and Connellan use their methane detectors to take readings in the cavity, which showed the same result of over five percent methane. Tr. 97. McDonald then issued a section 107(a) imminent danger withdrawal order, directing the operator to cease mining operations in the area. The order alleged that "[m]ethane was allowed to accumulate in a high cavity on #8 section (MMU-008) in between the #2 intake entry and the #3 intake belt entry, which is the long crosscut." JWR Ex. C1.

JWR subsequently contested the imminent danger order. On January 23, 2014, the Judge affirmed the order.

#### B. <u>The Judge's Decision</u>

The Judge held that McDonald did not abuse his discretion by finding an imminent danger at the roof cavity. He concluded that McDonald reasonably believed that an ignition of the methane in the cavity was likely to occur. Specifically, the Judge credited McDonald's testimony that the Lo Trac was reasonably likely to enter the long crosscut, arc and spark, and ignite the methane in the roof cavity. 31 FMSHRC at 242-44.

The Judge credited McDonald's testimony that he had observed the Lo Trac travel in the long crosscut before he issued the imminent danger order, and that this constituted a reasonable basis for issuing the order. The Judge also found that, even if McDonald were mistaken about the Lo Trac entering the long crosscut, it was reasonable to conclude that the Lo Trac was reasonably likely to enter the long crosscut in the foreseeable future. This finding was based on the Lo Trac's exposed components, its lack of explosive proof enclosures, its proximity to the long crosscut, and its mobility. *Id.* at 242.

In finding that the Lo Trac was an ignition source, the Judge rejected the operator's argument that it was unlikely that the Lo Trac would spark at exactly the right angle to ignite the methane. *Id.* at 243-44. The Judge stated that the issue was whether the inspector reasonably believed that the Lo Trac was likely to enter the crosscut and spark, igniting the methane. The Judge emphasized that the long crosscut was the source of some activity that day, and that there were materials stored in the crosscut. *Id.* Citing *Utah Power & Light Co.*, 13 FMSHRC 1617, 1622 (Oct. 1991), for the proposition that the Secretary does not have to establish the "percentage of probability that an accident will happen," the Judge found that it was not "improbable" that the Lo Trac would ignite the methane. 36 FMSHRC at 242-43.

The Judge also rejected JWR's argument that it was improbable that the Lo Trac would ignite the methane because the Lo Trac had been "tagged out" for repair. Noting that the operator, and not MSHA, had "tagged out" the Lo Trac for a minor issue, the Judge found that nothing prevented the Lo Trac from being used by mine personnel for its intended purpose. Based on these reasons, the Judge found that McDonald reasonably believed that an ignition of methane was likely to occur, and that he did not abuse his discretion in issuing the section 107(a) withdrawal order. *Id.* at 243.

# II.

## **Disposition**

# A. <u>The Judge Properly Concluded that the Inspector Did Not Abuse His Discretion</u> in Issuing the Imminent Danger Order.

Section 107(a) of the Act provides in relevant part that if an MSHA inspector "finds that an imminent danger exists, [the inspector] shall . . . issue an order requiring the operator of such mine to cause all persons . . . to be withdrawn from" the relevant area until the danger no longer exists. 30 U.S.C. § 817(a). Section 3(j) defines an "imminent danger" as a condition "which could reasonably be expected to cause death or serious physical harm before such condition or practice *can be abated*." 30 U.S.C. § 802(j) (emphasis added).<sup>5</sup>

An inspector's issuance of a section 107(a) imminent danger order is reviewed under an "abuse of discretion" standard. *Island Creek Coal Co.*, 15 FMSHRC 339, 345-47 (Mar. 1993) (citations omitted); *Utah Power & Light Co.*, 13 FMSHRC at 1622-23 (Oct. 1991). A section 107(a) order will be upheld if the Secretary proves by a preponderance of the evidence that the inspector reasonably concluded, based on information known or reasonably available to the inspector, that an imminent danger existed. *Island Creek*, 15 FMSHRC at 346-47 (citations omitted).

Here, substantial evidence supports the Judge's finding that the inspector reasonably concluded that the methane in the roof cavity was reasonably expected to cause death or serious physical harm before it could be abated.<sup>6</sup> Inspector McDonald based his imminent danger determination on two factors: (1) he relied on the fact that the Lo Trac is a non-permissible piece

<sup>&</sup>lt;sup>5</sup> The parties offer two different interpretations of what constitutes an "imminent danger." The Secretary claims that he need not prove that death or serious injury is reasonably expected to occur within a "short period of time," and that the Commission caselaw setting forth this requirement conflicts with the statutory definition of "imminent danger" in section 3(j). The operator, by contrast, argues that the requirement of a "short period of time" is correct and that an actual, ready ignition source is required to sustain an imminent danger order in the context of methane accumulations. I need not reach this issue in this case, however, because the result will be the same under either interpretation.

<sup>&</sup>lt;sup>6</sup> When reviewing a Judge's factual determinations, the Commission is bound by the terms of the Mine Act to apply the substantial evidence test. 30 U.S.C. § 823(d)(2)(A)(ii)(I). "Substantial evidence" means "such relevant evidence as a reasonable mind might accept as adequate to support [the Judge's] conclusion." *Rochester & Pittsburgh Coal Co.*, 11 FMSHRC 2159, 2163 (Nov. 1989) (quoting *Consolidated Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938)). In reviewing the whole record, an appellate tribunal must consider anything in the record that "fairly detracts" from the weight of the evidence that supports a challenged finding. *Midwest Material Co.*, 19 FMSHRC 30, 34 n.5 (Jan. 1997) (quoting *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 488 (1951)).

of equipment that could arc or spark; and (2) he knew that the Lo Trac is a mobile piece of equipment that commonly delivered materials and supplies to and from the long crosscut.<sup>7</sup> Furthermore, the fact that the area surrounding the long crosscut was the source of some activity was information reasonably available to McDonald. Thus, McDonald was justified, based on information known or reasonably available to him, in concluding that the Lo Trac was reasonably likely to ignite the methane in the roof cavity before the methane could be abated.<sup>8</sup>

It was reasonable for McDonald to surmise that the Lo Trac could wind up in a position where it could ignite the methane in the roof cavity. McDonald knew that Lo Tracs do not have explosive-proof enclosures. Tr. 88-89, 209-10. Rather, Lo Tracs contain electrical connections that are open, exposed alternators, and frictional brakes that can cause sparks. Tr. 209-210. McDonald also knew that the Lo Trac is a mobile piece of equipment. Moreover, Connellan testified that the Lo Trac is typically used to take supplies to the long crosscut. Tr. 315. Thus, the record establishes that the Lo Trac was certainly capable of traversing the long crosscut, and passing beneath the roof cavity containing methane in an explosive range.

There is also substantial evidence in the record that the area surrounding the long crosscut was the source of some activity, and that materials were stored in the crosscut. Tr. 315, 317-20. Therefore, it was reasonable for McDonald to assume that the Lo Trac could enter the crosscut to retrieve or move such materials in the foreseeable future. Accordingly, I conclude that substantial evidence supports the Judge's conclusion that McDonald did not abuse his discretion in finding the existence of an imminent danger.<sup>9</sup>

<sup>8</sup> The Judge's factual finding that the Lo Trac was tagged out is non-dispositive because the Judge found that the Lo Trac was tagged out by the operator, and not by MSHA. 36 FMSHRC at 243; Tr. 265. The record shows that the operator tagged out the Lo Trac in order to fix a minor oil leak "that would occur down the road." Tr. 265, 311. Nothing in the record indicates that the operator would have been prevented from putting the Lo Trac back into use for its intended purpose during the time that the methane pocket existed.

<sup>9</sup> Citing to the fact that subsequent to the issuance of the order the excessive methane was abated within 20 minutes by extending an existing line curtain 25 feet to the area of the cavity, the dissent argues that it was not reasonable for the inspector to expect an ignition before the condition was abated. I disagree. A determination of whether an inspector reasonably concluded that an imminent danger existed is based upon a review of the information known or reasonably available to the inspector at the time of issuance of the order. *Island Creek*, 15 FMSHRC at 348. Here, the inspector testified that when he inserted his gas detector to within 14 inches of the top of the cavity it registered "over range," so that while he knew that the methane level exceeded five percent, the level could be significantly higher by some unknown quantity deeper in the cavity. Tr. 97, 104-05. Given the state of his knowledge, the inspector did not abuse his discretion in issuing the order based on his conclusion that an ignition was reasonably likely to occur before the explosive concentration of methane could necessarily be abated.

<sup>&</sup>lt;sup>7</sup> McDonald testified that he observed roof bolts, a pallet of blocks, cans of motor gear and hydraulic oil, bags of rock dust, fire extinguishers, timbers and other miscellaneous supplies stored in the crosscut. Tr. 115.

# III.

# **Conclusion**

For the reasons stated above, I affirm the Judge's finding of an imminent danger.

Patrick K. Nakamura, Commissioner

Chairman Jordan and Commissioner Cohen, concurring:

We agree with the opinion of Commissioner Nakamura that there is substantial evidence to support the Judge's conclusion that the MSHA inspector was justified in issuing an imminent danger order because of the potential of the Lo Trac machine to ignite the methane in the roof. However, we believe that it is not necessary to reach that issue. Rather, we conclude that the detection of an explosive concentration of methane, by a mine inspector, in an area of an underground coal mine in which miners work or travel, justifies the issuance of an imminent danger order requiring the immediate withdrawal of miners, without the need to determine the presence of a ready ignition source.

#### **Factual Background**

On August 13, 2012, MSHA Inspector Larry McDonald conducted a quarterly inspection of the No. 8 section of JWR's No. 7 mine. Inspector McDonald was accompanied by JWR safety supervisor John Connellan and the miners' representative Steve Pendley. As he proceeded towards the face of the mine, McDonald turned into the No. 2 entry, whereby he noticed his methane detector began to fluctuate. Continuing through the entry, the inspector turned into a long crosscut located between the No. 2 and 3 entries. As he came through a man door into the crosscut, he observed that his methane detector indicated an increase of 0.4 percent. McDonald went to a line curtain that was hanging in the long crosscut to make another methane reading. When the Inspector reached the right corner of the curtain, he observed a cavity in the roof of the long crosscut. He raised his detector into the cavity in order to obtain a methane reading. The reading exceeded five percent. Tr. 97. McDonald corroborated his methane reading by asking Pendley and Connellan to take readings in the cavity using their detectors. Both detectors indicated the presence of methane in levels greater than five percent. Methane in the 5-15% range is explosive.

McDonald issued an imminent danger withdrawal order under section 107(a) of the Mine Act, directing the operator to cease mining operations in the area. 30 U.S.C. § 817(a). The order alleged that "[m]ethane was allowed to accumulate in a high cavity on #8 section (MMU-008) in between the #2 intake entry and the #3 intake belt entry, which is the long crosscut." Sec'y. Ex.  $9.^{1}$ 

#### **Analysis**

It is well-established that an inspector's issuance of a section 107(a) order will be upheld if the Secretary proves by a preponderance of the evidence that the inspector reasonably concluded, based on the evidence reasonably available to him, that an imminent danger existed. *Island Creek Coal Co.*, 15 FMSHRC 339, 346-47 (Mar. 1993) (citations omitted). Traditionally,

<sup>&</sup>lt;sup>1</sup> Although he could not recall their precise location, the Inspector testified to the presence of eight additional miners in the area, in addition to the individuals accompanying him. Tr. 182-3. Moreover, earlier in his inspection, while taking a series of dust surveys, McDonald observed a Lo Trac machine. Tr. 92-3. The Lo Trac is a non-permissible piece of mobile equipment, which means it does not have an explosion-proof enclosure. Tr. 88-89, 116.

in cases where an inspector issues an imminent danger order as a result of a methane accumulation, the Commission has required the Secretary to demonstrate the presence of an ignition source that might be reasonably expected to cause an explosion. See *Island Creek*, 15 FMSHRC at 346-48. However, as we explain below, those cases have not confronted the issue presented here, in which an explosive concentration of methane is detected in active workings of a mine.<sup>2</sup> We conclude that if an inspector encounters an explosive level of methane (i.e., five percent or greater) in active workings of an underground mine, he or she is justified in issuing a section 107(a) order without further determining the existence of an ignition source.

Section 3(j) of the Mine Act defines an "imminent danger" as a "condition or practice . . . which could reasonably be expected to cause death or serious physical harm before such condition or practice can be abated." 30 U.S.C. § 802(j). We conclude that once an accumulation of methane in active workings reaches the explosive range, it becomes imminently dangerous.

The drafters of the 1969 Coal Act referred to the accumulation of methane gas in explosive amounts as "[t]he most hazardous condition that can exist in a coal mine and lead to disaster-type accidents . . ." H.R. Rep. No. 91-563, at 21 (1969), *reprinted in* Senate Subcomm. on Labor, Comm. on Labor and Pub. Welfare, 94th Cong., Part I *Legislative History of the Federal Coal Mine Health and Safety Act of 1969*, at 1051 (1975).<sup>3</sup> "Explosive mixtures are formed when methane concentrations in the mine atmosphere range from 5 to 15 percent. The energy required for ignition is minute." S. Rep. No. 91-411, at 25 (1969), *reprinted in* Senate Subcomm. on Labor, Comm. on Labor and Pub. Welfare, 94th Cong., Part I *Legislative History of the Federal Coal Mine Health and Safety Act of 1969*, at 151 (1975). In enacting the Coal Act, Congress recognized that numerous potential ignition sources are "always present" in a coal mine "even under the best mining conditions." H.R. Rep. No. 91-563 at 21.

In light of this legislative history, we conclude that an explosive accumulation of methane "could reasonably be expected to cause death or serious physical harm" at *any* moment in time, including the time before the condition can be abated. 30 U.S.C. § 802(j). Hence, permitting an inspector to issue a section 107(a) order upon the finding of explosive methane in active workings, without finding a specific ignition source, is consistent with the statutory language.

The history of coal mining in the United States is replete with examples of the tragic consequences associated with methane.

For example, in 1940, 257 coal miners died in four separate methane gas explosions. This provided the impetus needed to enact Federal legislation which had been pending for several years. In 1941, Congress quickly passed the Coal Mine Health and Safety Act. In December, 1951, 119 coal miners died in another explosion

<sup>2</sup> The Secretary's regulation at 30 C.F.R. § 75.2 defines "active workings" as "[a]ny place in a coal mine where miners are normally required to work or travel."

<sup>3</sup> The Federal Coal Mine Health and Safety Act of 1969, 30 U.S.C. § 801 et seq. (1976), was the predecessor to the 1977 Mine Act.

of naturally occurring methane gas in a coal mine in West Frankfort, Ill. The following year Congress amended and strengthened the 1941 act. Again, in November of 1968 still another methane gas explosion in a coal mine in Farmington, W. Va., killed 78 men. Within a year, Congress passed the new Federal Coal Mine Health and Safety Act of 1969.

H. R. Rep. No. 95-312, at 4 (1977), *reprinted in* Senate Subcomm. on Labor, Comm. on Human Res. 95th Cong., *Legislative History of the Federal Mine Safety and Health Act of 1977*, at 360 (1978). Even in recent years, we have witnessed horrific methane explosions which have taken the lives of 13 miners at JWR's No. 5 Mine in 2001, *Jim Walter Res., Inc.*, 28 FMSHRC 579 (Aug. 2006); 12 miners at the Sago Mine, S. Rep. No. 109-365 at 2 (2006) (legislative history of the Mine Improvement and New Emergency Response Act of 2006, P.L. 109-236); and 29 miners at the Upper Big Branch Mine, *DQ Fire & Explosion Consultants, Inc.*, 36 FMSHRC 3090, 3091 (Dec. 2014), *appeal docketed*, No. 15-1008 (D.C. Cir. Jan. 15, 2015).

Congressional concern regarding the danger associated with methane is further evidenced by the mandatory tests for methane that must be conducted at specified locations and intervals, and the immediate withdrawal of miners required when such examinations reveal the presence of methane in amounts much lower than the explosive level detected in the present case. To illustrate, section 303(h)(1) of the Act requires tests for methane "at the start of each shift . . . at each working place." 30 U.S.C. 8 863 (h)(1). Testing is also required at each working place every 20 minutes during the shift. *Id*. The Act further provides, in section 303(h)(2), that "if at any time the air at any working place, when tested . . . contains 1.5 volume per centum or more of methane, all persons [except those needed to abate the condition] shall be withdrawn from the area of the mine endangered thereby to a safe area, and all electric power shall be cut off from the endangered area of the mine, until the air in such working place shall contain less than 1.0 volume per centum of methane." 30 U.S.C. 8 863 (h)(2). Testing is also required under section 303(i)(1). These tests must occur at four hour intervals at a "split of air returning from any working section." 30 U.S.C. 8 863(i)(1). If it contains 1.5 volume per centum or more of methane, miners must be withdrawn. 30 U.S.C. 8 863 (i)(2).<sup>4</sup>

<sup>4</sup> Sections 303(h) and 303(i)(1) and (2) state:

(h)(1) At the start of each shift, tests for methane shall be made at each working place immediately before electrically operated equipment is energized. Such tests shall be made by qualified persons. If 1.0 volume per centum or more of methane is detected, electrical equipment shall not be energized, taken into, or operated in, such working place until the air therein contains less than 1.0 volume per centum of methane. Examinations for methane shall be made during the operation of such equipment at intervals of not more than twenty minutes during each shift, unless more frequent examinations are required by an authorized representative of the Secretary. In conducting such tests, such person shall use means approved by the Secretary for detecting methane. That Congress identified areas in which regular methane testing be done, and specified conditions under which withdrawal of miners must occur, could lead one to conclude that the immediate withdrawal of miners is justified only if accumulations of methane are detected in certain amounts in those specific areas, to wit: the working place or a split of air returning from a working section. Since the methane accumulation at issue here was not detected in either of those areas, the argument could be made that the Secretary needs to demonstrate more than the presence of methane to justify the imminent danger order; that he needs evidence of an available ignition source. We do not believe such an argument would be well founded.

(2) If at any time the air at any working place, when tested at a point not less than twelve inches from the roof, face, or rib, contains 1.0 volume per centum or more of methane, changes or adjustments shall be made at once in the ventilation in such mine so that such air shall contain less than 1.0 volume per centum of methane. While such changes or adjustments are underway and until they have been achieved, power to electric face equipment located in such place shall be cut off, no other work shall be permitted in such place, and due precautions shall be carried out under the direction of the operator or his agent so as not to endanger other areas of the mine. If at any time such air contains 1.5 volume per centum or more of methane, all persons, except those referred to in section 104(d) of this Act, shall be withdrawn from the area of the mine endangered thereby to a safe area, and all electric power shall be cut off from the endangered area of the mine, until the air in such working place shall contain less than 1.0 volume per centum of methane.

(i)(1) If, when tested, a split of air returning from any working section contains 1.0 volume per centum or more of methane, changes or adjustments shall be made at once in the ventilation in the mine so that such returning air shall contain less than 1.0 volume per centum of methane. Tests under this paragraph and paragraph (2) of this subsection shall be made at four-hour intervals during each shift by a qualified person designated by the operator of the mine. In making such tests, such person shall use means approved by the Secretary for detecting methane.

(2) If, when tested, a split of air returning from any working section contains 1.5 volume per centum or more of methane, all persons, except those persons referred to in section 104(d) of this Act, shall be withdrawn from the area of the mine endangered thereby to a safe area and all electric power shall be cut off from the endangered area of the mine, until the air in such split shall contain less than 1.0 volume per centum of methane.

30 U.S.C. § 863(h)(1)(i)(2).

Congress specified how methane testing should be carried out at working places and at splits of air returning from working sections, and required that operators must withdraw miners if the methane concentration in those areas was 1.5% or more. This should not lead to the conclusion that a methane accumulation in other active workings would not require the same precautionary measure, i.e., the immediate withdrawal of miners, when the amount of methane detected has reached the explosive level of 5% -- more than three times the methane level required for withdrawal in sections 303(h) and (i)(1)-(2).

The testing required under section 303(h) at the start of the shift occurs at "each working place." This is defined at 30 CFR § 75.2 as: "[t]he area of a coal mine inby the last open crosscut." It is logical that Congress would focus on this area because of its proximity to where the mining process is actually occurring. Methane is released during the extraction of coal and the working place is an area where equipment may be in operation which could pose an ignition source. Hence, this testing is required before any equipment is energized. Similarly, testing at a split of air returning from any working section, as required by section 303(i), is done because the detection of a certain level of methane at that location "indicates that considerably larger amounts of methane may be accumulating in the air at places in the mine through which the current of air in such split has passed." S. Rep. No. 91-411 at 59, reprinted in Legis. Hist. 1969 Act at 185.

It is notable that withdrawal of miners is required when the air measured at these areas contains 1.5 volume per centum or more of methane. Although that methane level is below the level required for an explosion, Congress recognized that "[o]nce it reaches 1.5% it can accumulate rapidly. Thus, action must be taken promptly before it reaches 1.5 percent and men must be withdrawn when it reaches 1.5 percent." *Id.* (discussing statutory language that became section 303(h) of the Act). Although the area where the methane was detected in this case was not in a location that fit within the definition of "working place," the amount of methane detected was already in the explosive range. Given that fact, we believe it was eminently reasonable for the inspector to require the immediate withdrawal of miners, without continuing to investigate to determine the existence of potential ignition sources.

We note also that, although the miners are withdrawn from a working place when methane levels reach 1.5%, the power to electric face equipment must be cut off when methane is at one percent. One could posit, therefore, that the statute requires the withdrawal of miners from a working place at a significantly lower methane level than the explosive amount present here, and such withdrawal would be required even though potential ignition sources, in the form of equipment, might have already been required to be de-energized at the lower level of methane.

That a dangerous level of methane in a location within the active workings of the mine could justify the withdrawal of miners is further supported by requirements contained in section 303(t) of the Act. Under that provision, when any mine fan stops, miners must be withdrawn

from the working sections and power in the mine is cut off.<sup>5</sup> Power can be restored and work resumed if ventilation is restored within a reasonable period but only after "the working places *and other active workings* where methane is likely to accumulate are reexamined by a certified person to determine if methane in amounts of 1.0 volume per centum or more exists therein." 30 U.S.C. § 863(t) (emphasis added). If a methane level of less than 1.0% in active workings is a prerequisite for resuming work after a disruption in ventilation due to a fan stoppage, we conclude that it is reasonable to consider the detection of methane in the explosive range of 5% or more at a location in active workings an adequate basis for requiring the withdrawal of miners from the affected area.

Furthermore, the action required under the imminent danger order in question was no different from the withdrawal mandate the operator would have had to obey under 30 C.F.R. § 75.323 when methane reaches a level of 1.5% or more.<sup>6</sup> Section 75.323 applies not only to "working places" but also to "intake air courses." 30 C.F.R. § 75.323(b)(2). The operator's

<sup>5</sup> Section 303(t) provides:

Each operator shall adopt a plan within sixty days after the operative date of this title which shall provide that when any mine fan stops, immediate action shall be taken by the operator or his agent (1) to withdraw all persons from the working sections, (2) to cut off the power in the mine in a timely manner, (3) to provide for restoration of power and resumption of work if ventilation is restored within a reasonable period as set forth in the plan after the working places and other active workings where methane is likely to accumulate are reexamined by a certified person to determine if methane in amounts of 1.0 volume per centum or more exists therein, and (4) to provide for withdrawal of all persons from the mine if ventilation cannot be restored within such reasonable time. The plan and revisions thereof approved by the Secretary shall be set out in printed form and a copy shall be furnished to the Secretary or his authorized representative.

30 U.S.C. § 863(t).

<sup>6</sup> 30 C.F.R. § 75.323(b)(2) provides in relevant part:

(2) When 1.5 percent or more methane is present in a working place or an intake air course, including an air course in which a belt conveyor is located, or in an area where mechanized mining equipment is being installed or removed—
(i) Everyone except those persons referred to in §104(c) of the Act shall be withdrawn from the affected area; and
(ii) Except for intrinsically safe AMS, electrically powered equipment in the affected area shall be disconnected at the power source.

counsel admitted during oral argument that the area in question was on intake air. Oral Arg. Tr. 31-32. Therefore, it would have been required to comply with the protocol mandated by section 75.323. Given the danger of methane that exists in intake air courses,<sup>7</sup> it is appropriate to withdraw miners from such areas when they contain more than three times the quantities of methane than are required under section 75.323 (as was the case here). In sum, declaring the inspector's decision to withdraw the miners pursuant to the imminent danger order an abuse of discretion, as JWR urges, is particularly inappropriate here, when this is the very action JWR would have been required to implement under the mandatory standard at section 75.323.

The standard we propose does not conflict with Commission precedent. In *Island Creek*, the Commission affirmed a finding that MSHA inspectors had abused their discretion in issuing imminent danger orders upon determining that there were explosive accumulations of methane located in the gob, without also determining that there were ready ignition sources present. 15 FMSHRC at 346-47. It was significant to the Commission, however, that the inspectors had not observed explosive levels of methane in active workings of the mine. *Id.* at 347. Thus, in affirming the Judge, the Commission declined to mandate that whenever an inspector identifies explosive accumulations of methane in a mine he must also identify a potential ignition source before issuing an imminent danger order pursuant to section 107(a). Rather, the Commission explicitly stated: "We need not and do not reach the issue of whether, in another case, the Secretary may support an imminent danger order by showing that an explosive accumulation of methane is present without proving a specific ignition source." *Id.* at 348.

In *Cumberland Coal Res.*, 28 FMSHRC 545, 558 (Aug. 2006), the Commission vacated a Judge's affirmance of an imminent danger order. The Commission concluded that a MSHA directive to the inspector to issue an imminent danger order if methane measures above 4.5% at a measuring point location alone left no discretion for the inspector to make an independent judgement. *Id.* at 555-58. Critically, the measuring point locations in question were in the gob, and not active workings of the mine. *Id.* 549-50. Moreover, the Commission made clear that its conclusion was "based on the unique circumstances of this case." *Id.* at 558.

In Wyoming Fuel Co., 13 FMSHRC 1210 (Aug. 1991), a MSHA inspector issued an imminent danger order after detecting methane in excess of 1.5% in a return airway entry. The Commission concluded that substantial evidence supported the Judge's finding that no imminent danger existed. *Id.* at 1213. Significantly however, the Commission stated that "[t]he record clearly demonstrates that at the time the section 107(a) order was issued, the concentration of methane had not reached an explosive level, [and] mining activity had been suspended." *Id.* 

For all the aforementioned reasons, we would hold that because the inspector credibly testified in this proceeding that he measured methane levels above five percent in a place where

<sup>&</sup>lt;sup>7</sup> See Safety Standards for Underground Coal Mine Ventilation, 61 FR 9764-01, 9778 (Mar. 11, 1996) (amending 30 C.F.R. § 75.323) ("the presence of methane in . . . [a working place, an intake air course, or an area where mechanized mining equipment is being installed or removed] . . . can pose a significant risk to miners and therefore their withdrawal from the affected area is essential to their safety").

miners are normally required to work or travel, his belief that there was an imminent danger was reasonable and the 107(a) order was not an abuse of discretion.

Mary Lu Jordan, Chairman

Robert F. Cohen, Jr., Commissioner

Commissioners Young and Althen, dissenting:

The evidence demonstrates that an inspector detected an explosive level of methane in a small roof cavity in an inactive crosscut where neither miners nor equipment were present and in which the means for rapid abatement was both obvious to, and known by, the inspector. No ignition source was in the crosscut. Given the obvious and nearby means for rapid abatement and the absence of any ignition source, not only was there clearly time to consider whether there was a reasonable expectation of injury before abatement could be completed but also such abatement clearly was available. Nonetheless, the majority upholds the instantaneous issuance of an imminent danger order. We respectfully dissent.

### A. Imminent Danger

Inspectors must have considerable discretion in determining whether an imminent danger exists. *Rochester & Pittsburgh Coal Co.*, 11 FMSHRC 2159, 2164 (Nov. 1989). This right applies with special force in the context of the buildup of an explosive level of methane.

At the same time, the Commission must give effect to all the words of the statute so that "no part will be inoperative or superfluous, void or insignificant." *In re Surface Mine Regulation Litigation*, 627 F.2d 1346, 1362 (D.C. Cir 1980) quoting 2A Norman J. Singer, *Sutherland Statutory Construction* § 46:06 (4th ed. 1973). *See also Commercial Union Ins. Co. v. United States*, 999 F.2d 581, 587 (D.C. Cir. 1993); *American Fed'n of Gov't Emp. v. Fed. Labor Relations Auth.*, 834 F.2d 174, 177 (D.C. Cir. 1987). In reviewing imminent danger orders, therefore, the Commission must apply all the words of the definition of an imminent danger.

The Mine Act sets forth a clear statutory definition of an imminent danger. An imminent danger is "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." 30 U.S.C. § 802(j). Therefore, substantial evidence must support each element of an imminent danger: (1) a condition or practice in a mine (2) which could reasonably be expected to cause (3) death or serious physical harm (4) before such condition or practice can be abated.

In *Island Creek Coal Company*, 15 FMSHRC 339 (Mar. 1993), the Commission focused upon the statutory requirement that the reasonable expectation of death or serious injury must be "before such condition or practice can be abated." Finding the inspector was required to make a reasonable investigation, the Commission vacated the imminent danger order stating:

The Commission has held that, in imminent danger cases, the judge must determine "whether a preponderance of the evidence showed that the conditions or practices, as observed by the inspectors, could reasonably be expected to cause death or serious physical harm, before the conditions or practices could be eliminated.". . . We explained that, in making such a determination, a judge "should make factual findings as to **whether the inspector made a reasonable** 

**investigation of the facts, under the circumstances**, and whether the facts known to him, or reasonably available to him, supported issuance of the imminent danger order."

Id. at 346, citing Wyoming Fuel Co., 14 FMSHRC 1282, 1291 (Aug. 1992) (emphasis added).

The Commission has very recently confirmed *Island Creek's* holding that a Judge need not accept an inspector's subjective perception that an imminent danger existed. Instead, "[t]he Commission has explained that a Judge is not required to accept an inspector's subjective perception that an imminent danger existed but, rather, **must evaluate whether it was objectively reasonable for the inspector to conclude that an imminent danger existed**." *Mill Branch Coal Corp.*, 37 FMSHRC \_\_, slip op. at 7, No. VA 2012-435-R et. al. (July 23, 2015), citing *Island Creek*, 15 FMSHRC at 346 (emphasis added). Therefore, looking at the objective facts, we review the Judge's determination of whether the inspector abused his discretion under a substantial evidence standard. *See Connolly-Pacific Co.*, 36 FMSHRC 1549, 1555 (June 2014).

In *Cumberland Coal Resources, LP*, 28 FMSHRC 545 (Aug. 2006), the Commission unanimously vacated an Administrative Law Judge's affirmance of two imminent danger orders issued upon an inspector's detection on separate days of rapid buildups of methane in crosscuts to the levels of 4.8% and 5%, respectively. In reversing the Judge, the Commission found that the inspector failed to conduct the "requisite reasonable investigation of the facts in exercising his discretion." *Id.* at 556. The Commission further noted that the inspector did not know whether there was any buildup of methane in the area of the face. Affirmance of an imminent danger order, therefore, requires evidence demonstrating the inspector based the order upon a reasonable investigation supporting a conclusion of a reasonable expectation of death or serious injuries before abatement of the hazard. The Commission's decision was not based upon the location of the measuring points, but instead upon the inspector's abuse of discretion in failing to make any reasonable investigation or determination of imminent danger. *Id.* at 556. The holding in *Cumberland* should be outcome determinative in this case.

In *Utah Power & Light Company*, 13 FMSHRC 1617, 1622 (Oct. 1991), the Commission observed that, if any hazard that has the potential to cause a serious injury is an imminent danger, the distinction between an imminent danger and a significant and substantial violation is lost. The outcome determinative difference is that, for an imminent danger, the expectation must be for a serious injury or death "before the condition or practice can be abated." We should continue to abide by Commission precedent that gives meaning and substance to this definition of an imminent danger.

Obviously, the extent of the "investigation" necessarily depends upon the circumstances. If the danger is obvious and extreme, such as an explosive level of methane in a working face area with working miners present, the investigation and hence, the decision may be virtually instantaneous.<sup>1</sup> However, a more considered approach is available when no activity is occurring, no miner or equipment is in the area, and there is an obvious means of abatement at hand.

<sup>&</sup>lt;sup>1</sup> For this reason, we have joined our colleagues in unanimously finding an imminent danger in *Jim Walter Res.*, No. SE 2011-407-R (being issued concurrently with this decision).

Most recently, the United States Court of Appeals for the District of Columbia Circuit reinforced the nature, and limits, of imminent danger orders in contrast to other remedies available to inspectors,

Most obviously, section 103(k) safety orders allow inspectors to impose whatever restrictions or requirements they judge appropriate to deal with the accident in question, while section 107(a) withdrawal orders simply close the mine. In short, section 107(a) is an emergency blunderbuss, unsubtle and extreme, for circumstances in which getting miners out and away is the only appropriate response. Section 103(k), which the inspectors used here, is a subtler instrument that can be tailored to any situation.

## American Coal Co. v. FMSHRC, 796 F.3d 18 (D.C. Cir. 2015).

We agree with the Court's characterization of imminent danger orders as an "extreme" measure taken when exigencies warrant. Chairman Jordan and Commissioner Cohen assert, without any supporting reference, that an explosive level of methane can be expected to cause serious injury "at any moment in time." Slip op. at 2. The Mine Safety and Health Administration ("MSHA"), the agency entrusted by Congress with the right and duty to establish safe mining rules and policies has not made such a finding. The Secretary has not argued for, or pursued through rulemaking, an approach that would require inspectors to issue imminent danger orders under the circumstances described by Chairman Jordan and Commissioner Cohen.<sup>2</sup> Inspectors have a duty to exercise discretion in determining whether there is a reasonable expectation of death or serious injury "before the condition can be abated." Apparently, our colleagues would continue to allow inspectors to exercise discretion but would make the discretionary decision to issue an imminent danger order in the described circumstances unreviewable by the Commission. Such an abdication of responsibility would not be consistent with the Mine Act, the obligations of the Commission, or the rights of operators for review.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Nobody – least of all us – questions the danger posed by methane in underground mines, or that such danger was among the Act's animating purposes. But methane and imminent dangers are both specifically addressed in the original Act, which further imposes on the Secretary a duty to promulgate improved standards by rule to protect miners. The Secretary has not done so by declaring explosive methane in active workings to be a *per se* imminent danger in the absence of an ignition source despite Commission decisions.

<sup>&</sup>lt;sup>3</sup> Chairman Jordan and Commissioner Cohen write at length in support of a proposition with which everyone involved in mining agrees – methane is very dangerous. Their support for their imminent danger approach to this case, however, comes down to a one sentence assertion that methane may explode "at any time" – an assertion for which they cite no support and in which they do not consider the need for an ignition source. They also state that their approach – an approach that would automatically "justify" – that is, require Commission approval, of any imminent danger order issued by an inspector for explosive methane in active workings despite the factual circumstances and without substantive review would not conflict with Commission precedent. While they have limited the application of this new suggestion of a Commission rule

# B. <u>The evidence does not demonstrate a reasonable expectation of death or serious injury</u> <u>before abatement</u>.

As the inspector entered an inactive crosscut, he observed a curtain the purpose of which he knew was to "ventilate and remove methane gas." Tr. 101. No miners were present in the crosscut, and there was no equipment in the crosscut. Obviously, therefore, no work was being performed. After traveling just approximately 25 feet further into the crosscut, he noticed a cavity in the roof. Tr. 100. The cavity was approximately 7'(l) x 5'(w) x 2'(h). Tr. 104.

Standing on a pallet, the inspector put his methane monitor into the cavity. As he lifted it toward the high point, the reading was over 5% methane. Tr. 97. He immediately issued the imminent danger order. To abate the violation, miners simply advanced the curtain already known by the inspector to be ventilating the crosscut by about 20 feet. As the mine inspector should have expected, advancement of the curtain and the consequent immediate dilution of the methane was easily and quickly accomplished – that is, the entire process took less than twenty minutes in total and dissipation of the methane took no more than 15 seconds after the curtain was advanced. Tr. 206-07. Indeed, the inspector actually delayed abatement somewhat by not permitting movement of the curtain until power was cut and miners were removed from areas substantially inby the cavity. Tr. 113-14.

The inspector testified about the presence of four specific pieces of equipment as possible ignition sources.<sup>104</sup> 36 FMSHRC 235, 241 (Jan. 2014) (ALJ) (citing Tr. 113-14, 117). Three of the suggested sources were inby the cavity, located in intake air, and remote from the crosscut and cavity. The Judge convincingly rejected them as possible ignition sources.

As the fourth possible source, the inspector suggested an out of service Lo Trac parked outside the crosscut at a distance of at least 200 feet from the cavity in the crosscut. The Judge found that the inspector believed he had seen it there. However, the Judge then found that mine

to active workings, as a practical matter there was no greater danger of a methane explosion in this case than there was in the *Island Creek* and *Cumberland Coal Resources* cases. *See supra*. The danger of an explosion could not arise "at any time" here, because there was no likelihood of an ignition of explosive methane without a plausible ignition source. Further, the Commission has long held that an inspector must make a reasonable investigation of the facts before issuing an imminent danger order – a principle we recently re-affirmed in *Cumberland Coal*, 28 FMSHRC at 556-58. Their suggestion of automatic deference to the discretionary decision of an inspector would obliterate that requirement and is thus in direct conflict with an established line of our precedent. And finally, *Island Creek* specifically focused on the unavailability of an ignition source, not merely the fact that the methane was located in the gob. *See* 15 FMSHRC at 347-48 (noting Secretary's acknowledgment that methane accumulation in the gob did not create an imminent danger in the absence of an ignition source).

<sup>4</sup> The inspector did not suggest any general mine hazard, such as the flaking of a piece of roof, as a possible ignition source.

witnesses had refuted the inspector's testimony that he had seen the Lo Trac in the crosscut earlier in the day. Accordingly, there was no objective evidence that the Lo Trac had been in the crosscut. 36 FMSHRC at 242.<sup>5</sup> It was undisputed that at the time the inspector issued the imminent danger order the Lo Trac was out of service, was not in the crosscut, and was at least 200 feet from the cavity. Nonetheless, the Judge accepted that the Lo Trac constituted a possible source for ignition of the methane in the cavity before abatement.

In sum, the situation encountered by the inspector was a small roof cavity in a vacant crosscut without the presence of miners and with an obvious resource for quick and easy abatement. Not only was no work underway but also no equipment, working or otherwise, was in the crosscut. The methane was in a roof cavity well above the mine floor and the evidence showed no hazard from possible flow of methane from the cavity. *Id.* at 242; Tr. 400. The obvious step to abate the condition was to direct air into the cavity by advancing a nearby already hanging brattice cloth 25 feet.

Based upon the record, therefore, it cannot be disputed that, for the Lo Trac to have ignited the methane in the cavity before completion of the rapid abatement, it would have to: (1) have been put back in service; (2) traveled into the crosscut where it would have been forbidden to travel by virtue of 30 C.F.R. § 75.323(b) requiring all persons other than those performing abatement to have been withdrawn until completion of abatement;<sup>116</sup> (3) traveled approximately 200 feet up the crosscut; (4) gone through the area where the curtain was being moved 25 feet to eliminate the presence of methane; (5) traveled directly underneath the cavity; (6) sparked at the precise moment of being under the cavity; and (7) the spark traveled several feet upward into the cavity. All of this would have to occur before dilution of the buildup by extending the curtain 25

<sup>&</sup>lt;sup>5</sup> As noted above, the Commission does not review an imminent danger order based upon the inspector's subjective belief but rather the objective facts that actually existed. *Mill Branch*, 37 FMSHRC \_\_\_\_, slip op. at 7, VA 2012-435-R et. al. (July 23, 2015) *citing Island Creek*, 15 FMSHRC at 346.

<sup>&</sup>lt;sup>6</sup> The concurrence notes the hazards of methane in intake air courses and the requirement that the operator withdraw miners pursuant to 30 C.F.R. § 75.323(b). Slip op. at 7 and n.7. They do not note, however, that the operator was practically in compliance with the requirements of this subsection, nearly from the moment that the problem was discovered. There was no electronically-powered equipment in the area where the methane was discovered. Changes to the ventilation system were undertaken immediately upon discovery of the methane. While there were two other miners in the general vicinity of the long crosscut, nobody was present in the immediate area of the cavity where the methane was confined except those persons working to solve the problem, including the inspector. Nor does the record establish that the mine was in production or that any other work was being performed. While the concentration in this case was greater than the one percent level triggering section 75.323(b), the conditions and circumstances show that even without the ordered withdrawal, the operator was nearly in what the regulations have deemed an appropriate safety posture pending the reduction in methane to a level below one percent – which, again, was nearly instantaneous. Those conditions must be taken into account, were known or should have been known to the inspector, and refute the assertion that a methane explosion could have occurred "at any time" before it could be abated.

feet – a quickly and easily completed process. The likelihood of the occurrence of all these events is not reasonably expectable; indeed, it is wholly improbable.

Because reasoned discourse cannot give rise to a "reasonable expectation" of the sequential occurrence of all these events before dilution of the methane, it is unsurprising that the Secretary did not present any evidence of an expectation that the Lo Trac would be placed in service before the methane in the cavity could be diluted, or that it had been sparking at any point before it was taken out of service. The underlying conditions of this specific methane buildup did not necessitate a snap decision to issue an imminent danger order when the crosscut was vacant and an obvious means for rapid abatement was at hand. In this inactive crosscut, the inspector had sufficient time to recognize that there was not a reasonable basis to expect an ignition before the rapid movement of the brattice forward.

As described above, there was not a reasonable basis to expect the Lo Trac could pass underneath the cavity and spark upwards prior to abatement. Thus, the problem with the granting of unreviewable discretion suggested by our colleagues Chairman Jordan and Commissioner Cohen is that it reads the word "imminent" out of the statute. We have noted repeatedly that an imminent danger is one that could arise "at any time." *See, e.g., Utah Power & Light Co.,* 13 FMSHRC at 1622; *Connolly Pacific,* 36 FMSHRC at 1555. However, absent an ignition source nearby, the hazard could not have arisen at any time. The only source relied upon by the judge was too far away and was not actively engaged in mining activities. There was no imminent danger, as defined by the statute and decades of Commission case law.

In closing, we emphasize that an explosive level of methane in a mine is a highly dangerous circumstance. Inspectors must react quickly to such a circumstance. However, the need for a quick reaction does not justify instantaneous over-reaction. Quick reaction does not always mean instantaneous reaction. The Commission must enforce all the words of the Mine Act. Commission precedent correctly establishes that an investigation reasonable to the circumstances must precede issuance of an imminent danger order and that a condition which may be abated before a reasonable expectation of the occurrence of death or serious injury may arise is not an imminent danger. Here, the facts establish that there was not a reasonable basis for expecting an ignition before dilution of the methane. Therefore, under these specific circumstances there was not an imminent danger.

We dissent.

Michael G. Young, Commissioner

William I. Althen, Commissioner