#### FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

OFFICE OF ADMINISTRATIVE LAW JUDGES
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July 23, 1999

THE DOE RUN COMPANY, : CONTEST PROCEEDINGS

Contestant

v. : Docket No. CENT 98-81-RM

Citation No. 7859810; 2/24/98

SECRETARY OF LABOR,

MINE SAFETY AND HEALTH : Docket No. CENT 98-82-RM ADMINISTRATION (MSHA), : Citation No. 7859811; 2/24/98

Respondent

Casteel-Buick Mine Mine ID No. 23-00457

:

SECRETARY OF LABOR, : CIVIL PENALTY PROCEEDING

MINE SAFETY AND HEALTH

ADMINISTRATION (MSHA), : Docket No. CENT 98-277-M

Petitioner : A. C. No. 23-00457-05589

V.

:

THE DOE RUN COMPANY,

Respondent : Casteel-Buick Mine

### **DECISION**

Appearances: Kristi L. Floyd, Esq., Office of the Solicitor, U.S. Dept. of Labor,

Denver, Colorado, on behalf of Secretary of Labor:

R. Henry Moore, Esq., Buchanan Ingersoll, P.C., Pittsburgh,

Pennsylvania, on behalf of The Doe Run Company.

Before: Judge Melick

These consolidated cases are before me pursuant to Section 105(d) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 801 *et seq.*, the "Act," to dispute a citation and withdrawal order issued by the Secretary of Labor to The Doe Run Company (Doe Run). The Secretary has charged Doe Run with two violations of mandatory standards and seeks a civil penalty of \$100,000.00 for those violations. The general issue before me is whether Doe Run violated the cited standards as alleged and, if so, what is the appropriate civil penalty to be

A third violation, charged in Order No. 7859812, was vacated in a partial summary decision issued December 14, 1998.

assessed considering the criteria under Section 110(i) of the Act. Additional specific issues will be addressed as noted.

On January 19, 1998, Jeffrey Sadler, a senior surveyor for the Buick Mine was crushed and fatally injured by a ground fall in the center heading of the 81V20 stope. The charges herein arise from that incident. The Buick Mine is an underground room and pillar lead mine. It was originally developed separately but was later interconnected with the Casteel and Camino mines and consolidated into one mine operated by Doe Run. Material is removed at this mine by drilling and blasting. The blasted material or "muck" is then loaded out and the roof in the blast area is scaled, usually with a mechanical scaler, in stages. The entries are generally about 16 to 18 feet high and 32 feet wide.

The area of the accident had been mined in mid-November 1997. On January 16, 1998, the Saturday before the accident, the center heading, inby the 3113b intersection, had been drilled and shot. A crosscut to the right (or west) of the intersection had also been drilled and shot for ventilation purposes. The shot in the crosscut had not required the drilling of holes to the normal depth and only about half the normal amount of explosives were used.

On the day of the accident, Sadler, along with assistant surveyor Jason Wruck, proceeded underground to the 81V20 stope to update the mine map. Sadler and Wruck parked their truck in the 3101c crosscut and walked to the 3109a heading where drill operator Alvin McWilliams was moving his drill to the face in 3127a. Earlier that morning, scaler operator Thad Pettit had driven down the center heading examining for loose material and then scaled the center heading where it had been shot.

The surveyors returned to the center heading after Pettit's examination and scaling. Wruck was then elevated in a bucket so he could repair spad 4572 located in the roof of the subject intersection. In the process of repairing the spad, Wruck, who was wearing a cap lamp, examined the roof from only inches away. He was so close he hit his head on the roof. He found no conditions, such as cracks in the roof, dry spots or noise from the roof "working," which would have indicated that sounding the roof was necessary. It was his practice when observing signs of roof deterioration to sound the roof. After repairing the spad, Wruck moved the truck and Sadler set up his instrument under this spad. Shortly thereafter the roof fell in the immediate area of the spad, fatally injuring Sadler. Although Wruck was walking toward Sadler at the time, he did not see the actual fall. After the accident but before the Secretary's investigation, the fall area and adjacent areas were scaled to remove rock left hanging from the roof.

"significant and substantial" violation of the standard at 30 C.F.R. § 57.3401 and charges as follows: <sup>2</sup>

A fatal accident occurred at this operation on 1/19/98, when a large slab fell on a miner who was setting up a surveying instrument at intersection 3113b in stope 81V20. The slab was approximately 10 feet wide, 20 feet long and was up to 17 inches thick. The ground at this location had been visually examined, but testing for loose ground had not been done. Significant amounts of loose ground had been scaled in the intersections east and west of the fall during the weeks

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 and 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 the 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 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."

prior to the accident, which was indicative of loose ground conditions in this area of the mine. The mine operator was aware of the loose ground conditions in this part of the mine and failed to adequately test in the intersection where the accident occurred. This is an unwarrantable failure to comply with a mandatory safety standard.

The cited standard provides as follows:

"Persons experienced in examining and testing for loose ground shall be designated by the mine operator. Appropriate supervisors or other designated persons shall examine and, where applicable, test ground conditions in areas where work is to be performed, prior to work commencing, after blasting . . . "

The Secretary acknowledges in the citation and in her post-hearing brief that the cited area, i.e., intersection 3113b in Stope 81V20, had been visually examined in compliance with the cited standard. The parties also agree that no one "tested" the intersection of 3113b following blasting in the crosscut to the west of the intersection on January 17, 1998, and before the fatal accident on January 18, 1998. The issue is whether "testing" was required by 30 C.F.R. § 57.3401 in the cited intersection before the surveyors performed their work.

More particularly the Secretary maintains that it is the second part of the sentence of the cited standard that was violated, i.e., "appropriate supervisors or other designated persons shall examine and, where applicable, test ground conditions in areas where work is to be performed, prior to work commencing, after blasting, and as ground conditions warrant during the work shift" (emphasis added). As noted by Doe Run however, the insertion by the Secretary of the phrase "where applicable" creates such ambiguity in the language of the standard as to necessitate application of the "reasonably prudent person" test. I agree. When faced with a challenge to a safety standard on the grounds that it fails to provide adequate notice of prohibited or required conduct, the Commission has applied an objective standard, i.e., the reasonably prudent person test. Alabama By-Products Corp., 4 FMSHRC 2128, 2129-30 (December 1982), Secretary v. Asarco Inc., 14 FMSHRC 941 (June 1992). The Commission has summarized this test as "whether a reasonably prudent person familiar with the mining industry and the protective purpose of the standard would have recognized the specific prohibition or requirement of the standard." Ideal Cement Company, 12 FMSHRC 2409, 2416 (November 1990). The test establishes an objective standard of notice so that if an operator, based on the training, experience and information available to it, does not believe an unsafe condition exists and no other guidance or criteria is available, such as industry standards, proper notice has not been given. *Energy West* Mining Company, 17 FMSHRC 1313, 1318 (August 1995).

I note preliminarily that the testimony of the Secretary's experts, civil and structural engineer George Karabin and MSHA supervisory special investigator Daniel Haupt, that testing should always be conducted after blasting, completely ignores the qualification in the standard that such testing need be performed only "where applicable." In the context of the cited standard the term "where applicable" is not a location-related qualifier. If indeed, the Secretary intended

that testing always be performed after blasting, she could have easily provided for this in the cited standard by not adding the qualifying language.

Under the rules of statutory and regulatory construction the phrase "where applicable" must be given meaning and clearly such meaning is to qualify the requirement for testing to only those circumstances where conditions indicate it is warranted. On the facts of this case and based largely on the credible expert testimony of George Karabin, I conclude that such conditions existed in this case from which a "reasonably prudent person" would conclude that testing of the subject roof area was indeed warranted.

In this regard Karabin as well as Haupt, opined that testing was warranted herein because blasting had occurred in two areas adjacent to the fall area, on January 17, 1998, only two days before the fatal roof fall. Karabin also concluded that the slip found in the haulage drift in the 81V20 stope would have provided a warning. While the slip did not proceed into the center drift, Karabin explained that a slip or fracture is a discontinuity in the rock that greatly reduces the spanning capacity of the roof beam and provides a location for ground movement to occur. Karabin further indicated that while the slip was not observed in the back in the area of the fall, it nevertheless should be considered as a warning sign since it may have risen to a level above the immediate back elevation thereby affecting stability.

Karabin also believed that notice should have been taken from the existence of the transition zone in the 81V20 stope where the rock type changed from laminated to brecciated dolomite. These zones may be faulted, badly fractured and characterized by a feathered structure as one formation rides over or displaces the other and could lead to deteriorating ground. Karabin further opined that the brow areas that existed in the 81V20 stope and in particular, in the vicinity of the accident site, may be indicative of high stress and locally weak rock. According to Karabin these too provided some notice that testing should have been performed in the fall area.

Karabin also explained that the quartz or calcite intrusions present in the 81V20 stope represented a geologic change that could affect local ground conditions, particularly if the crystals formed in fractures and were not well bonded to the surrounding rock mass. According to Karabin these intrusions represented a discontinuity in the rock that could weaken it, concentrate stress or provide planes for rock movement. In particular Karabin cited the presence of quartz/calcite in and around the fatal fall area, in the domed cavity in 3112c, in the slip, and in the two outby high back/fall areas on the 81V20 stope. He associated this quartz/calcite with ground control difficulties in those areas and indicated that these also provided notice that testing was required.

Karabin believed that additional notice of localized bad ground conditions was provided by the cavity observed in the intersection directly east of the accident site. This cavity was growing in size and had been propagating toward the intersection where the accident occurred. According to Karabin, the formation of a cavity suggests locally weak ground and the concentration of stress or excessive ground deformation at that location. He further concluded

that continual expansion of the cavity indicated an actively deteriorating area. While acknowledging that water was not a major factor in the cause of the fatal fall, Karabin also opined that the presence of water in the stope nevertheless indicated the existence of fractures in the ground, and those fractures could be expected to affect ground stability.

Under these circumstances it is clear from the existence of any one of the conditions observed by Karabin that testing of the subject area was warranted. Accordingly the violation is proven as charged. In reaching this conclusion I have not disregarded the testimony of a number of Respondent's witnesses, that upon visual examination of the subject roof area they found no apparent evidence of defects in the roof such as cracks, dry spots or noise indicating that the roof was "working," and that therefore they believed further testing was not warranted. However, I conclude, based on the credible expert testimony of Karabin, that those witnesses did not give sufficient consideration to the other warning signs that Karabin described in his testimony.

The violation was also clearly significant and substantial and of high gravity. 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 -- that is, a measure of danger to safety -- contributed to by the violation, (3) a reasonable likelihood that the hazard contributed to will result in an injury, and (4) a reasonable likelihood that the injury in question will be of a reasonably serious nature.

See also Austin Power Inc. v. Secretary, 861 F.2d 99, 103-04 (5th Cir. 1988), aff'g 9 FMSHRC 2015, 2021 (December 1987) (approving Mathies criteria).

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).

I do not find however that the violation was the result of the Respondent's unwarrantable failure or significant negligence. In *Emery Mining Corp.*, 9 FMSHRC 1997, 2004 (December

1987), the Commission held that unwarrantable failure is aggravated conduct constituting more than ordinary negligence. This determination was derived, in part, from the plain meaning of "unwarrantable" ("not justifiable" or "inexcusable"), "failure" ("neglect of an assigned, expected or appropriate action"), and "negligence" (the failure to use such care as a reasonably prudent and careful person would use, and is characterized by "inadvertence," "thoughtlessness," and "inattention"). 9 FMSHRC at 2001. Unwarrantable failure is characterized by such conduct as "reckless disregard," "intentional misconduct," "indifference" or a "serious lack of reasonable care." 9 FMSHRC at 2003-04; *Rochester & Pittsburgh Coal Co.*, 13 FMSHRC at 189, 193-94 (February 1991).

While it is clear from Karabin's expert testimony that the operator should have known of the need for further testing, the Commission has held that use of a "knew or should have known" test by itself would make unwarrantable failure indistinguishable from ordinary negligence, and accordingly, rejected such an interpretation. Moreover, I give some credit to, and find some mitigation in, the testimony of the experienced miners who closely examined the roof in the area of the subject intersection and who found no evidence of deterioration and therefore found no need to perform testing.

In this regard assistant surveyor Jason Wruck was repairing a spad while elevated to the mine roof in a basket, only inches away from the area of roof that fell. In this location and with his cap lamp he examined and evaluated the roof visually only a short time before the roof fall and found no conditions which he believed would have indicated that testing was necessary. There were no cracks or dry spots, or noise indicating that the roof may have been "working." Wruck is also corroborated by other eyewitnesses. Thad Pettit also examined the same area for loose material. On the Saturday before the accident, Glen Bays, an experienced miner, loadedout of the heading and examined the area before he began work. Joe Stables, a substitute foreman with years of mining experience, also examined the area that morning from the top of the loader. They observed the roof from a distance of 4 to 5 feet with the aid of the loader lights and their cap lights. Keith Propst who charged the holes for blasting on Saturday morning also examined the roof on Monday and saw no change in the condition of the roof. Alvin McWilliams, who drilled the holes in the crosscut and who assisted Propst, also observed no difference in the roof between Saturday and Monday morning. Tim McFarland, a sub-foreman, also examined the intersection from his tractor with a spotlight that morning. None of these persons who had examined the cited intersection before the roof fall believed that the roof conditions warranted testing.

Order No. 7859811, 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. § 57.3200 and charges as follows:

A fatal accident occurred at this operation on 1/19/98, when a large slab fell on a miner who was setting up a surveying instrument at intersection 3113b in stope 81V20. The slab was approximately 10 feet wide, 20 feet long and was up to 17 inches thick. The ground at this location had been visually examined, but testing for loose ground had not been done. Significant amounts of loose ground had been scaled in the intersections east and west of the fall during the weeks prior to the accident, which was indicative of loose ground conditions in this area of the mine. There was no evidence to indicate that efforts had been made to take

down the loose rock or to support the ground in the fall area. This is an unwarrantable failure to comply with a mandatory safety standard.

The cited standard, 30 C.F.R. § 57.3200, provides as follows:

Ground conditions that create a hazard to persons shall be taken down or supported before other work or travelers permitted in the affected area. Until corrective work is completed, the area shall be posted with a warning against entry and, when left unattended, a barrier shall be installed to impede unauthorized entry.

In *Asarco Inc.*, 14 FMSHRC 941 (January 1992) the Commission stated, in reference to the proper interpretation of the standard at issue herein, as follows:

The purpose of Section 57.3200 is to require elimination of hazardous conditions. The fact that there was a ground fall is not by itself sufficient to sustain a violation. Rather, the Secretary is required to prove that there was a reasonably detectable hazard before the ground fall.

In the instant case I have found the testimony of the Secretary's experts Karabin and Haupt entitled to significant weight in regard to the extent warning signs of a hazard in the vicinity of the subject roof before the accident. The testimony of Karabin has been discussed in detail earlier in this decision. Notice of the potentially hazardous nature of the subject roof was provided by the surrounding conditions described by Karabin. That notice was sufficient to warrant further testing and/or corrective work. Under the circumstances the violation is proven as charged and was clearly "significant and substantial" and of high gravity. For the reasons previously advanced in regard to the prior citation I do not however find that the violation was the result of "unwarrantable failure" or significant negligence.

In assessing civil penalties in this case I also note that Respondent is a large operator. It had also been cited for violations of 30 C.F.R. § 57.3401 and § 57.3200 on 26 occasions prior to the roof fall in this case, although some of those citations were issued at the interconnected Buick mine. The Secretary does not question the good faith abatement of the violations and it has been stipulated that even the penalties proposed by the Secretary would not affect Respondent's ability to continue in business.

## **ORDER**

Citation No. 7859810 and Order No. 7859811 are hereby modified to citations under Section 104(a) of the Act and The Doe Run Company is directed to pay civil penalties of \$10,000 for each of the violations therein.

# Administrative Law Judge

## Distribution:

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