# FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

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August 2, 2001

SECRETARY OF LABOR,	:	CIVIL PENALTY PROCEEDING
MINE SAFETY AND HEALTH	:	
ADMINISTRATION (MSHA),	:	Docket No. SE 2001-27
Petitioner	:	A. C. No. 01-00851-04092
V.	:	
	:	Oak Grove Mine
U.S. STEEL MINING COMPANY, LLC,	:	
Respondent	:	

### **DECISION**

Appearances: William Lawson, Esq., Office of the Solicitor, U.S. Department of Labor, Birmingham, Alabama, on behalf of Petitioner;
S. Andrew Scharfenberg, Esq., Ford & Harrison, LLP, Birmingham, Alabama on behalf of Respondent.

Before: Judge Zielinski

This case is before me on a Petition for Assessment of Civil Penalty filed by the Secretary of Labor against U.S. Steel Mining Co., LLC, pursuant to section 105 of the Federal Mine Safety and Health Act of 1977 (the "Act"). 30 U.S.C. § 815. The petition alleges a single violation of the then applicable noise standard, 30 C.F.R. § 70.501,<sup>1</sup> and proposes a civil penalty of \$399.00. A hearing was held in Hoover, Alabama on June 14, 2001. For the reasons set forth below, I affirm the citation and impose a civil penalty of \$225.00.

### Findings of Fact

On May 31 and June 1, 2000, John R. Craddock, an inspector and health specialist for the Secretary's Mine Safety and Health Administration (MSHA), conducted dust sampling and a noise survey during the midnight shift at U.S. Steel's Oak Grove Mine. The focus of his noise survey was the longwall mining operation.

<sup>&</sup>lt;sup>1</sup> The noise regulations applicable at the time were found in Title 30 C.F.R., Subpart F, §§ 75.000, et seq. Subpart F was removed from the regulations, effective September 13, 2000, and replaced with Subpart M, Part 62 — Occupational Noise Exposure. The original regulatory reference in the citation was to 30 C.F.R. § 70.510(a). Prior to the hearing, the citation was amended to cite a violation of 30 C.F.R. § 70.501.

The highest level of noise that a miner may be continuously exposed to for an entire 8 hour shift is 90 dB (decibels). Higher levels of noise, up to 115 dB, may be sustained for shorter durations. Exposures to varying levels of noise of 90 dB or higher over different time periods are computed using a formula set forth in 30 C.F.R. § 70.502. The result is a time weighted average (*TWA*) of exposure to noise expressed as a percentage of the maximum allowable exposure, with 100 being the equivalent of 8 hours of exposure to 90 dB. The standard is considered to have been violated if the *TWA* exposure exceeds 100. MSHA allows for an error reading of 2 dB. Consequently, the maximum allowable *TWA* used by health inspectors is 132, the equivalent of

8 hours of exposure at 92 dB. Under the regulatory scheme then applicable, if a miner wore some form of hearing protection, e.g., ear plugs, the *TWA* of the miner's noise exposure was multiplied by the device's noise reduction rating (*NRR*) to arrive at a final noise exposure level for that miner. For example, if a miner was exposed to noise with a measured *TWA* of 200, but wore ear plugs with a *NRR* of 0.25, his actual exposure would be only 50 (200 x 0.25 = 50), well below the allowable limit of 132.

MSHA inspectors use an electronic device called a dosimeter to measure noise levels. For this inspection, Quest model Q200, dosimeters were used. They had been approved as measuring devices and had been calibrated as required by regulation. Specific miners are designated to wear dosimeters for the entire shift. 30 C.F.R. § 70.500(f) described a dosimeter:

(f) *Personal noise dosimeter* means equipment worn by an individual, which performs noise level measurements along with exposure time measurements. The circuitry of the instrument is such that it automatically performs the computation of the multiple noise exposure specified in § 70.502.

The dosimeter continually monitors the noise levels to which the miner is exposed and calculates the level of exposure as a function of the noise level and time of exposure. The results are reported on a digital display as a percentage of the *TWA* of the maximum allowable noise exposure. Taking into account the error factor used by MSHA, readings above 132, after taking into account the *NRR* of any hearing protection worn by the miner, indicate exposure to excessive noise in violation of the standard.

Inspector Craddock followed his normal procedure in conducting the dust and noise surveys. He arrived at the mine site at about 10:00 pm on May 31, 2000, about an hour before the midnight shift began. He met with the longwall shift foreman, Steve Hayes, and designated the miners who were to wear the dosimeters and dust pumps. Five miners were designated to wear dosimeters; B. Boyd, a stage loader; D. Ingle, the longwall shearer operator; S. Reed and A. William, two shield operators; and, S. Bartges, an electrician. Dosimeters and dust pumps were distributed at a table near the dressing area shortly before the miners went underground.

The measuring devices were activated about 10 minutes before the start of the shift and

Craddock traveled underground with the men to monitor the testing. When they arrived below ground, he checked the dust pumps and dosimeters,<sup>2</sup> and walked approximately 1,000 feet with the longwall crew to the longwall operation. Before production began, parameters of dust control devices on the longwall mining machine had to be tested and the men were all in the relatively confined area at the head gate of the longwall while this was done. Craddock has extensive experience as a coal miner and over 30 years of experience as an inspector, including 15 years as a health inspector. He had inspected the mine in the past and knew many of the miners, including David Ingle. There was an ongoing exchange of conversation between Craddock and the miners, including considerable bantering and joking. Craddock recorded information necessary for the noise survey report, the miners' names, the serial numbers of the dosimeters, the miners' jobs and corresponding codes and the time the dosimeters were turned on. He asked each of the miners whether he wore hearing protection and, if so, he determined the type of hearing protection and its NRR, and also recorded that information. Whether the miner wears hearing protection is important information because noise exposure in a longwall operation will generally exceed allowable limits and the wearing of hearing protection with an adequate NRR would be essential to avoiding a violation of noise exposure regulations.

The light-hearted conversation and joking between Craddock and the miners continued throughout this process, including his efforts to obtain information about hearing protection. One miner stated in response to Craddock's inquiry that he just put tissue in his ears. Another responded that he had worms in his ears. Ingle responded that he didn't have any of that stuff in his ears, he just wore a "hood," an elastic neck warmer that he pulled up over his head. Despite the joking, the miners did eventually supply information about hearing protection to Craddock. As he explained, "they know you're serious and they will eventually give you a straight answer" about whether they wear hearing protection and what type it is. Craddock recorded their responses on his report form and examined the packaging of the ear plugs that the miners produced to obtain the NRR for that particular device. Notably, Ingle, the shearer operator, never provided Craddock with information different from his original response, to the effect that he did not wear hearing protection.<sup>3</sup> Ingle's foreman, Steve Hayes, was present during this banter, including Ingle's response to Craddock's inquiry about hearing protection, and did not contradict the information supplied by Ingle, although he may have smiled during the exchange.<sup>4</sup> After checking the parameters for dust control on the longwall shearer, e.g., the number and minimum pressure of sprays, and gathering the information from the miners, production commenced with the longwall shearer making a pass toward the tailgate.

<sup>&</sup>lt;sup>2</sup> MSHA's policy manual specifies that miners wearing dosimeters are to be observed "frequently' during the shift. In practice, observations are made at the beginning of the shift and as other miners wearing dust pumps are checked.

<sup>&</sup>lt;sup>3</sup> At some point, Ingle stated that he had ear plugs in his "bucket" in the "kitchen or dinner hole." Craddock questioned what good they were going to do him back there.

<sup>&</sup>lt;sup>4</sup> There was testimony on cross-examination of Craddock that Hayes smiled. However, it is unclear whether Craddock was referring to Ingle or Hayes.

Craddock stayed near the head gate to record air and gas measurements. He then caught up with the shearer about half way to the tailgate and again made air and gas measurements. He caught up to the shearer again near the tailgate and again took air and gas readings. After the longwall shearer reached the tailgate, Ingle performed a cut out operation and backed the shearer up, preparing to make another pass toward the head gate. He was facing the coal face, holding the remote control for the shearer in his hands, when Craddock approached him from his left side. Craddock pulled the "hood" on Ingle's head back to look into his left ear. Craddock did that because he wanted to check to see if Ingle was wearing hearing protection. Because of the joking that had gone on earlier, he felt that there was a possibility that Ingle was kidding him when he said that he didn't wear hearing protection.

In addition to the "hood," which miners wear for warmth and to reduce the amount of coal dust on their heads, Ingle wore an "airstream" helmet and face shield. The helmet extended over, or around, his ears, but did not prevent someone from looking into his ears. Ingle did not see Craddock as he approached and the attempt to check Ingle's hearing protection surprised him somewhat.<sup>5</sup> He turned toward Craddock when he felt the tug on his "hood" and Craddock, thereafter, left the area and had no further contact with Ingle. Craddock did not observe ear plugs or any other form of hearing protection in Ingle's left ear.

Craddock collected the dust pumps, which are required to be operated for no more than 8 hours, and went to the surface about 7:00 am. He encountered Hayes on the way out and responded "no" when Hayes asked him if he had found anything. Dosimeters, which must be operated for the entire shift, were collected when the shift ended and the miners came into the bathhouse/dressing area. Craddock checked and recorded the results of the dosimeter survey from the readout display on the machines. B. Boyd's dosimeter provided a reading of 213.2. However, the *NRR* of his ear plugs was 0.125, which reduced that reading well below the allowable limit of 132. S. Reed's dosimeter displayed a reading of 164.1. Applying the 0.0719 *NRR* of his ear plugs also reduced his exposure below the allowable limit. Ingle's dosimeter displayed a reading of 324.0, the equivalent of 8 hours of exposure to noise in excess of 98 dB.<sup>6</sup>

Because Ingle's dosimeter reading substantially exceeded the allowable limit of 132, and he had not worn hearing protection, Craddock issued Citation No. 7664187 for what he perceived to be a violation of noise standard regulations. He determined that it was highly likely

<sup>&</sup>lt;sup>5</sup> Ingle testified that he thought Craddock was joking and that he "didn't think anymore about the situation."

<sup>&</sup>lt;sup>6</sup> One of the dosimeters failed to record and the other, worn by the electrician, who likely did not spend a great deal of time in close proximity to the longwall shearer, displayed a reading of 102.6. A table showing the sound level which, if constant over 8 hours, would result in the same noise dose as measured and displayed by a dosimeter, is found in the Appendix to the current regulations, 30 C.F.R., Subchapter M, Part 62.

that a miner exposed to that noise level over his "working life" would suffer permanent hearing loss, classified the violation as "significant and substantial" and the degree of operator negligence as moderate. He served the citation on Gary McGough, Respondent's midnight shift safety inspector. At no time, including during the post inspection conference, did anyone protest or contradict Craddock's determination that Ingle was exposed to excessive noise because he was not wearing hearing protection.

### Conclusions of Law - Further Factual Findings

In an enforcement proceeding under the Act, the Secretary has the burden of proving an alleged violation by a preponderance of the evidence. *In re: Contests of Respirable Dust Sample Alteration Citations*, 17 FMSHRC 1819, 1838 (Nov. 1995), *aff'd., Secretary of Labor v. Keystone Coal Mining Corp.*, 151 F.3d 1096 (D.C.Cir. 1998); *ASARCO Mining* Co., 15 FMSHRC 1303, 1307 (July 1993); *Garden Creek Pocahontas Co.*, 11 FMSHRC 2148, 2152 (Nov. 1989); *Jim Walter Resources Inc.*, 9 FMSHRC 903, 907 (May 1987).

The determination of whether there was a violation in this instance tums upon the factual question of whether Ingle was wearing hearing protection. Ingle testified that he was, in fact, wearing hearing protection in the form of ear plugs issued by Respondent.<sup>7</sup> He confirmed that he told Craddock that he didn't wear anything in his ears, but explained that he knew Craddock quite well and was just joking with him, as the other miners were doing at the time. Respondent, also relying upon Ingle's testimony, challenges Craddock's determination that Ingle was not wearing ear plugs, arguing that the partial ear covering provided by Ingle's helmet and the "hood" he was wearing, as well as the angle at which Craddock had to look into Ingle's ear and the fact that the ear plugs Ingle was wearing, as well as Ingle's ear, were likely dirty from coal dust, would have made the ear plug difficult, if not impossible, to see in the brief opportunity provided by Craddock's pulling back of the "hood." Craddock, however, testified that he had an adequate opportunity to observe whether Ingle had an ear plug in his left ear and that he definitely did not.

I find that Ingle was not wearing ear plugs at the time Craddock checked his ear during the operation of the shearer. I accept the testimony of Craddock, a highly experienced miner and

<sup>&</sup>lt;sup>7</sup> After the citation was issued Ingle was questioned about it by James Bell, the union safety representative, and by Giovanni Buckarelli, Respondent's safety manager. Ingle told them that he put his ear plugs in before beginning production and would testify to that effect. Respondent issued hearing protection to its miners and its policy on hearing protection required that it be worn in noisy conditions, e.g., when the shearer or other loud mechanical equipment was operating. Respondent points out that the longwall miners were not obligated to wear hearing protection prior to beginning production and would not have had ear plugs in their ears when they were talking with Craddock. At the time Craddock looked into Ingle's ear, however, Ingle would have been required to wear hearing protection.

inspector, that he was able to determine by looking into Ingle's left ear, that he was not wearing an ear plug. He had a brief, but adequate, opportunity to observe Ingle's left ear. While a longwall operation undoubtedly creates a lot of dust, less than one-quarter of a shift's production had occurred and the hood would have provided some barrier to the accumulation of dust in the area of Ingle's ear. Respondent contends that Ingle may have been wearing ear plugs he had used for as much as several weeks and that they may have been more black than orange.<sup>8</sup> Even if Ingle had been wearing dirty ear plugs, however, they would have been observable to Craddock. I also find it highly unlikely that Ingle, knowing the serious nature of a noise survey, would not have eventually given Craddock a "straight answer," if he was going to wear hearing protection that day.

### Significant and Substantial

A "significant and substantial" (S&S) violation is described in Section 104(d)(1) of the Act as a violation "of such nature as could significantly and substantially contribute to the cause and effect of a coal or other mine safety or health hazard." A violation is properly designated S&S "if, based upon 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 Div., Nat'l Gypsum Co.*, 3 FMSHRC 822, 825 (Apr. 1981).

In Mathies Coal Co, 6 FMSHRC 1, 3-4 (Jan. 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 of Labor 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. (footnote omitted)

*See also, Buck Creek Coal, Inc. v. MSHA*, 52 F.3d 133, 135 (7<sup>th</sup> Cir. 1999); *Austin Power, Inc. v. Secretary*, 861 F.2d 99, 103-04 (5th Cir. 1988), *aff'g, Austin Power, Inc.*, 9 FMSHRC 2015, 2021 (Dec. 1987) (approving *Mathies* criteria).

In U.S. Steel Mining Co., Inc., 7 FMSHRC 1125, 1129 (August 1985), the Commission

<sup>&</sup>lt;sup>8</sup> Respondent also contends that the entire inspection was fraught with errors, questioning whether the dosimeters were approved devices and had been properly calibrated, the manner in which Craddock attempted to look into Ingle's ear and the failure to conduct a follow-up noise survey after submission of its hearing conservation plan. With the possible exception of the manner in which Craddock attempted to look into Ingle's ear, none of these criticisms are valid.

stated further as follows:

We have explained further that 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., Inc.,* 6 FMSHRC 1834, 1836 (August 1984). We have emphasized that, in accordance with the language of section 104(d)(1), it is the *contribution* of a violation to the cause and effect of a hazard that must be significant and substantial. *U.S. Steel Mining Co., Inc.,* 6 FMSHRC 1866, 1868 (August 1984); *U.S. Steel Mining Co., Inc.,* 6 FMSHRC 1873, 1574-75 (July 1984).

This evaluation is made in terms of "continued normal mining operations." U.S. Steel Mining Co., Inc., 6 FMSHRC at 1574. The question of whether a particular violation is significant and substantial must be based on the particular facts surrounding the violation. *Texasgulf, Inc.*, 10 FMSHRC 498 (Apr. 1988); *Youghiogheny & Ohio Coal Co.*, 9 FMSHRC 1007 (Dec. 1987).

I find that the Secretary has not carried her burden of proving that the violation was S&S. One could hardly dispute Craddock's assessment that exposure to the equivalent of 98 dB of noise over the course of a miner's working life, would result in permanent hearing loss if no hearing protection was provided or used. Ingle's *TWA* exposure was the equivalent of 8 dB above the permissible limit for an 8 hour period. That is a significantly high exposure. However, MSHA allows 2 dB, to account for reading errors. While it is no doubt true, as explained by Judy McCormick, MSHA's supervisory health specialist, that the chance of hearing loss increases as the *TWA* increases, there was no evidence to quantify the degree to which the risk increased due to Ingle's actual exposure.

More significantly, assessments of the risk of hearing loss associated with levels of exposure in the range of 98 dB appear to be predicated on long-term exposure, e.g. working life.<sup>9</sup> The duration of the exposure is an important factor in the risk analysis. The violation established that Ingle was exposed to a *TWA* of 324, but only for one shift. While he would typically be exposed to that level of noise, it appears that his not wearing hearing protection was the exception, rather than the rule. In the absence of evidence tending to show that Ingle rarely wore hearing protection, the Secretary has failed to establish that the relatively short duration of the violation here was highly likely to result in permanent hearing loss, or that it was reasonably likely that the hazard contributed to would result in an injury of a reasonably serious nature.

The Appropriate Civil Penalty

<sup>&</sup>lt;sup>9</sup> See the background and related discussion included in the publication, as a final rule, of the current noise regulations. *Health Standards for Occupational Noise Exposure; Final Rule*, 64 Fed. Reg. 49548 (September 13, 1999).

U.S. Steel's Oak Grove Mine is a very large producer, over two million tons per year, and its controlling entity is also very large, producing from five to ten million tons per year. It has a relatively good history of violations, having paid 570 violations issued in the two years preceding the citation here. Those citations were largely single penalty assessments and were issued in 853 days of inspections, yielding a relatively low ratio of violations to inspection days of 0.67. As noted above, I do not find that the violation was S&S, and consequently, would reduce the gravity to reasonably likely to result in lost work days or restricted duty. I also find that Respondent's negligence was somewhat lower than "moderate." Had Respondent's hearing protection policy been complied with, there would not have been a violation. Ingle's foreman, at least to that time, had reason to believe that Ingle was "pretty good" about wearing his hearing protection. He could, perhaps, be faulted for tolerating the light-hearted banter and joking that occurred as Craddock inquired about hearing protection. However, the majority of the miners provided the information, and Hayes may have been unaware that Ingle had not eventually supplied the information. The violation was promptly abated.

Considering all of these factors, I assess a civil penalty of \$225.00.

# ORDER

Based upon the foregoing, Citation Number 7664187 is **AFFIRMED** and Respondent is **ORDERED** to pay a civil penalty in the amount of \$225.00.

Michael E. Zielinski Administrative Law Judge

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