

CCASE:  
MSHA V. EXPLOSIVES TECHNOLOGIES

DDATE:  
19920123

TTEXT:  
SECRETARY OF LABOR,  
MINE SAFETY AND HEALTH  
ADMINISTRATION (MSHA)

v.

Docket No. CENT 90-95-M

EXPLOSIVES TECHNOLOGIES  
INTERNATIONAL, INC.

BEFORE: Ford, Chairman; Backley, Doyle, Holen and Nelson, Commissioners  
DECISION

BY THE COMMISSION:

This civil penalty proceeding arises under the Federal Mine Safety and Health Act of 1977, 30 U.S.C. • 801 et seq. (1988)("Mine Act"). The issue is whether Commission Administrative Law Judge James Broderick erred in finding that Explosives Technologies International, Inc. ("ETI") violated two mandatory surface metal/non-metal safety and health standards: 30 C.F.R.

□ 56.5050(b) requiring the use of feasible administrative or engineering controls to reduce employees' exposure to excessive noise (Footnote 1) and 30 C.F.R.

1 30 C.F.R. • 56.5050 states:

(a) No employee shall be permitted an exposure to noise in excess of that specified in the table below. Noise level measurements shall be made using a sound level meter meeting specifications for type 2 meters contained in American National Standards Institute (ANSI) Standard SI.4-1971, "General Purpose Sound Level Meters,"

\* \* \* \* \*

PERMISSIBLE NOISE EXPOSURES

Duration per day, Sound level dBA,  
hours of exposure slow response

8 -----	90
6 -----	92
4 -----	95
3 -----	97

~60

□ 56.7002 requiring that equipment defects affecting safety be corrected before the equipment is used.(Footnote 2) 13 FMSHRC 161 (January 1991)(ALJ). The Commission granted ETI's petition for discretionary review. For the

reasons that follow, we affirm the judge's conclusion that ETI violated section 56.5050(b)(1), but reverse his conclusion that it violated section 56.7002.

ETI is an independent contractor at a crushed granite surface mine located in Johnston County, Oklahoma. ETI performs drilling and explosives work at the mine.

I. Factual Background and Procedural History

On November 21, 1989, Norman LaValle, an inspector with the Department of Labor's Mine Safety and Health Administration ("MSHA"), conducted an inspection at the mine. The inspection included a noise survey of drill operators employed by ETI, including the operator of an Atlas hydraulic drill. In conducting the noise survey, LaValle used a dosimeter to measure the noise

Duration per day, Sound level dBA, hours of exposure slow response	
2 -----	100
1 1/2 -----	102
1 -----	105
1/2 -----	110
1/4 or less -----	115

No exposure shall exceed 115 dBA. Impact or impulsive noise shall not exceed 140 dB, peak sound pressure level.

\* \* \* \* \*

(b) When employees' exposure exceeds that listed in the above table, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce exposure to within permissible levels, personal protection equipment shall be provided and used to reduce sound levels to within the levels of the table.

(Emphasis added.)

2 30 C.F.R. • 56.7002 states:  
Equipment defects affecting safety shall be corrected before the equipment is used.

~61

reaching the drill operator. (Footnote 3) After three hours had elapsed, LaValle found that the driller had been exposed to noise levels 2.94 times the exposure limit, equivalent to 98 dBA for an 8-hour period. (Footnote 4) LaValle also found that feasible engineering or administrative controls were not being used to control the noise. LaValle ordered the drill operator to stop drilling and issued Citation No. 3283281 for a violation of section 56.5050(b).

On January 10, 1990, LaValle inspected ETI's Robbins RRT-35 DTH Drill.

The drill was out of service for repair of the transmission clutches. LaValle found cracks in the boom support structure of the drill, which he thought could cause its failure. The cracks were packed with oil and grease, suggesting to LaValle that they had existed for some time. LaValle issued Citation No. 3271867 alleging a violation of section 56.7002 by ETI. MSHA proposed civil penalties of \$20 for each violation.

Before the administrative law judge, the Secretary maintained that section 56.5050(b) had been violated because ETI had not used feasible engineering or administrative controls to reduce the noise from the Atlas drill. ETI conceded that the drill operator had been exposed to excessive noise, but argued that pneumatic drills with feasible engineering controls expose miners to higher noise levels than those emitted by its hydraulic drill

---

3 A dosimeter is an electronic device that measures noise exposure. The dosimeter is attached to the miner and the microphone is placed as close to the miner's ear as possible. The dosimeter reads unity (100%) if the noise level is at the maximum level permitted under the standard.

---

4 The regulations do not define the terms "dBA" or "decibel". The term "decibel" is defined in A Dictionary of Mining, Mineral, and Related Terms 305, U.S. Department of the Interior (1968), as:

The unit for measuring sound intensity.... When sound or noise is created it gives off energy which is measured in decibels.

In *Marshall v. West Point Pepperell, Inc.*, 588 F.2d 979, 982 n.5 (5th Cir. 1979), the court explained the term "decibel" as follows:

Decibels, the basic unit of measurement of sound levels, are recorded on sound level meters according to several scales. On the A scale [dBA], the meter is more sensitive to higher pitched tones than those of a lower pitch, just as the human ear is. The "slow" response is another setting of the instrument by which it averages out high level noises of brief duration (such as hammering), rather than responding to the individual impact noises. See U.S. Dept. of Labor, *Guidelines to the Department of Labor's Occupational and Noise Standards*, p.3 (1971).

~62

without engineering controls. In ETI's view, its choice of the Atlas drill constituted its feasible engineering control.

The Secretary also maintained that section 56.7002 was violated, arguing that the fact the drill was down for transmission repairs was irrelevant, since the cited defect was unrelated to the transmission and existed prior to the drill's removal from service. ETI argued that the Robbins drill did not violate section 56.7002 because the drill was down for repairs and the

inspector incorrectly assumed that ETI would not have discovered the problem and repaired it before it was used.

Judge Broderick sustained the alleged violations. 13 FMSHRC at 163. He found that ETI's Atlas drill operator was exposed to noise levels in excess of those set forth as permissible in section 56.5050, and that feasible administrative and engineering controls existed that could have been used to reduce the noise level of the drill. Id. The judge also found that there were cracks in the metal of the Robbins drill boom support structure and, although the drill was not being operated at the time the condition was discovered, the cracks had existed for some time. Id. The judge found that neither violation was serious and that both resulted from ETI's ordinary negligence and were abated within the time set for termination. He assessed a civil penalty of \$50 for each violation. Id.

On review, ETI asserts that the judge erred in finding violations of sections 56.5050(b) and 56.7002. ETI again argues that its choice of a quieter hydraulic drill constitutes its feasible control, and that its use of the drill without additional feasible engineering controls does not violate the standard. It submits that MSHA's interpretation and application of the standard is arbitrary. ETI argues that the cracked drill boom should not have been cited because the drill was being repaired when the deficiency was found. Finally, ETI argues that the judge erroneously assessed \$50 penalties for the alleged violations.

## II. Disposition of Issues

### A. Violation of section 56.5050.

Section 56.5050(a) establishes permissible noise exposure levels based on a time-weighted average. Section 56.5050(b) requires that feasible administrative or engineering controls be used when noise exposure exceeds the permissible level. If these measures fail to reduce noise exposure sufficiently, personal protective equipment must be used to reduce noise levels to within permissible limits.

In *Callanan Industries, Inc.*, 5 FMSHRC 1900 (November 1983), the Commission held that the Secretary establishes a prima facie case of violation by providing: (Footnote 5)

---

5 30 C.F.R. • 56.5-50, the noise standard involved in *Callanan Industries*, is identical to section 56.5050.

~63 (1) sufficient credible evidence of a miner's exposure to noise levels in excess of the limits specified in the standard; (2) sufficient credible evidence of a technologically achievable engineering control that could be applied to the noise source; (3) sufficient credible evidence of the reduction in the noise level that would be obtained through implementation of the engineering control; (4) sufficient credible evidence supporting a reasoned

estimate of the expected economic costs of the implementation of the control; and (5) a reasoned demonstration that, in view of the elements 1 through 4 above, the costs of the control are not wholly out of proportion to the expected benefits.

5 FMSHRC at 1909.

With respect to element one of the Callanan Industries test, the judge found, and ETI does not dispute, that the drill operator was exposed to noise levels in excess of the limits specified in the standard. 13 FMSHRC at 163. Nor does ETI dispute the judge's finding that there were feasible administrative and engineering controls that could have been used to reduce the noise level to which the employee was exposed. 13 FMSHRC at 163. Inspector LaValle testified that such controls included sound deadening devices or sound deflecting devices, mufflers, and cabs. Tr. 20, 28-29, 39. MSHA District Health Specialist Steve Viles testified that a barrier shield could also serve as a feasible engineering control. Tr. 95-96. MSHA engineer Richard Goff also testified that a barrier or a partial barrier made from belting material or safety glass as well as a cab or partial cab could reduce the noise. Tr. 49-50, 60-62, 64, 66, 69. See also Tr. 38, 73; S. Exh. 10; ETI Exhs. 5, 6.

The judge did not address elements three, four, or five of the Callanan Industries test, although the Secretary presented unrebutted testimony relevant to those elements. In addressing the reduction in the noise level that would be obtained through implementation of engineering controls, Goff testified that, by putting a partial barrier on the control panel of the Atlas drill, "you should be able to get about a 10 dBA reduction." Tr. 50. Goff said that a partial cab at the control station would result in noise reduction of about 5 to 15 dBA. Tr. 69. Goff testified that the cost to construct a barrier made from belting material was approximately \$100, that it could usually be put on in about three to four hours, and that there would be a reduction of about 10 dBA on smaller drills. Tr. 61-62. Goff further stated that more effective barriers constructed from safety glass cost approximately \$1,000, including materials and labor. Tr. 66. He estimated that this barrier control would provide a 10 to 15 dBA reduction. Tr. 62. Goff testified that retrofitting an Atlas drill with a cab would cost approximately \$50,000 to \$70,000. Tr. 63-64. The cited drill was valued at \$300,000. Tr. 82; ETI Exh. 2.

In Callanan Industries, 5 FMSHRC at 1911-12, the Commission concluded that a 5 dBA reduction at a cost of approximately \$2,672 to a drill valued

~64  
under \$2,500 was sufficient for purposes of establishing that the costs of the controls were not out of proportion to the expected benefits. (Footnote 6) In A.H. Smith, 6 FMSHRC 199 (February 1984), the Commission found that noise control costs ranging between \$600 and \$1400 for a diesel shovel were not unreasonable. Accordingly, in view of the evidence discussed above, we

conclude that the Secretary established the prima facie case outlined in Callanan Industries.

ETI nonetheless contends that MSHA is arbitrarily applying the standard because pneumatic drills that generate a significantly higher noise level with feasible engineering controls in place are permitted to operate. ETI argues that, logically, it should be able to rely on personal protection equipment because its drill is quieter than a pneumatic drill with engineering controls. We conclude that ETI is not being treated arbitrarily under the standard because all mine operators are required to use feasible engineering controls to reduce the noise on all equipment that exceeds the levels permitted. If such controls fail to reduce the exposure to within permissible levels, personal protection equipment must then be provided and used to reduce the sound emitted to permissible levels. A mine operator, as well as its employees, benefits from using a quieter drill because it enables the standard's exposure limit to be attained more easily. Additionally, feasible engineering controls on quieter drills may reduce the noise sufficiently to obviate the need for protective equipment. In any event, the fact that pneumatic drills with engineering controls may expose miners to higher noise levels than ETI's hydraulic drill without engineering controls is irrelevant to the issue of whether ETI violated the standard. We conclude that substantial evidence supports the judge's finding that ETI violated section 56.5050(b).

B. Violation of Section 56.7002.

Section 56.7002 requires that "[e]quipment defects affecting safety be corrected before the equipment is used." ETI does not dispute the existence of the cracks in the support structure of the boom of the Robbins drill but argues that it did not violate the standard because the drill was out of service for repairs when the citation was issued. (Footnote 7) In Mountain Parkway Stone, Inc., 12 FMSHRC 960 (May 1990), the Commission construed the identical safety standard for underground metal/nonmetal mines (30 C.F.R. • 57.9002). The Commission held that a violation of

---

6 In MSHA's Program Policy Manual, it is suggested that a 3 dBA reduction is significant. Volume IV, Part 56/57 at 40 (08/30/90 Release IV-5).

"[R]educing the noise only three dBA's will reduce the sound power to one half of its previous level." Mining Enforcement and Safety Administration, U.S. Department of the Interior, Programmed Instruction Workbook No. 11, Noise Control, at 27 (1976). (Emphasis in the original).

---

7 Because ETI did not dispute whether the cracks in the boom support affected safety, we do not address this matter.

~65

the standard can occur even if the equipment is not in actual use at the time the citation is issued. 12 FMSHRC at 962-63. In that case, a boom truck with

numerous defects was parked at the mine in turn-key condition and had not been removed from service. (Footnote 8) There was no evidence that anyone was engage

in repairing the truck or that any employee had been assigned to repair it.

12 FMSHRC at 963. Moreover, the MSHA inspector testified that he believed the tire tracks around the truck were fresh and that the truck was used whenever there was a need to load. 12 FMSHRC at 961. The inspector further testified that a mechanic employed by Mountain Parkway informed him that the truck had been used during the night shift immediately before the inspection. Id.

The circumstances in this case are distinguishable from those in Mountain Parkway. Here, it is undisputed that the Robbins drill was out of service and undergoing repair. See 13 FMSHRC at 162. Moreover, the record does not establish that the drill had been used in a defective condition.

In affirming the citation, the judge apparently relied on LaValle's testimony in finding that the cracks on the drill boom support structure had existed "for some time." 13 FMSHRC at 163. See Tr. 32, 33-34. LaValle's testimony concerning the age of the cracks, however, was speculative, because, by his own admission, he had no knowledge of structural engineering. In addition, the standard requires that safety defects be corrected "before the equipment is used," and it is, therefore, incumbent upon the Secretary to prove such use or availability for use. The Secretary failed to prove that the drill had been used in the defective condition and failed to present any evidence addressing its past use. The lack of evidence on this important element of the safety standard is significant in the present case because the drill was being repaired at the time the citation was issued and was therefore not then available for use. We conclude that substantial evidence does not support a finding that ETI violated section 56.7002 and, accordingly, we vacate the citation.

#### C. Assessment of Civil Penalty

Finally, we address whether the judge's assessment of a \$50 civil penalty for the violation of section 56.5050(b) was appropriate. Under the Mine Act, review is limited to questions raised in the Petition for Discretionary Review. Section 113(d)(2)(A)(iii) of the Mine Act, 30 U.S.C.

□ 823(d)(2)(A)(iii). This issue was raised for the first time in ETI's brief

In any event, the judge did not err.

When a judge's penalty assessment is put in issue on review, the Commission must determine whether it is supported by substantial evidence and whether it is consistent with the statutory penalty criteria. Pyro Mining Co., 6 FMSHRC 2089, 2091 (September 1984). The judge found that the violation

of section 56.5050(b) was not serious, resulted from ETI's ordinary

---

8 Among the defects cited by the inspector in Mountain Parkway were: lack of stabilizing jacks on the truck to prevent it from overturning; leaks in the boom's hydraulic system; missing doors, seat belts, and front and rear lights;

and a rag used as a cap on the gas tank. 12 FMSHRC at 961.

~66

negligence, and was abated within the time set for termination.

13 FMSHRC at 163.

We find that the \$50 civil penalty is supported by the record and is consistent with the statutory penalty criteria. ETI does not question any of the judge's penalty criteria findings, including his finding of ordinary negligence by the operator. ETI only suggests that the judge raised the civil penalty to \$50, using the recently increased MSHA minimum penalty as a benchmark. There is no indication in this record that the judge's action was so motivated. Accordingly, ETI has presented no persuasive reasons why we should overturn the penalty assessment of the judge. Shamrock Coal Co., 1 FMSHRC 469 (June 1979).

### III. Conclusion

The judge's decision is affirmed in part and reversed in part. We affirm the judge's finding that ETI violated section 56.5050(b) and his assessment of a civil penalty of \$50. We reverse the judge's finding that ETI violated section 56.7002, vacate his assessment of civil penalty, and dismiss the Secretary's petition for civil penalty.

Ford B. Ford, Chairman

Richard V. Backley, Commissioner

Joyce A. Doyle, Commissioner

Arlene Holen, Commissioner

L. Clair Nelson, Commissioner