

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

OFFICE OF ADMINISTRATIVE LAW JUDGES

601 New Jersey Avenue, N.W., Suite 9500

Washington, D.C. 20001

April 30, 2003

SECRETARY OF LABOR,	:	CIVIL PENALTY PROCEEDING
MINE SAFETY AND HEALTH	:	
ADMINISTRATION (MSHA),	:	Docket No. SE 2002-126
Petitioner	:	A. C. No. 01-00329-03591
v.	:	
	:	
U.S. STEEL MINING COMPANY, INC.,	:	
Respondent	:	Concord Mine

DECISION

Appearances: Dane L. Steffenson, Esq., Office of the Solicitor, U.S. Department of Labor, Atlanta, Georgia, and Terry G. Gaither, Conference and Litigation Representative, U.S. Department of Labor, Mine Safety and Health Administration, Birmingham, Alabama, on behalf of the Petitioner; Anthony Jeselnik, Esq., United States Steel Corporation, Pittsburgh, Pennsylvania, on behalf of the Respondent.

Before: Judge Melick

This case is before me upon a petition for Civil Penalty filed by the Secretary of Labor pursuant to Section 105(d) of the Federal Mine Safety and Health of 1977, 30 U.S.C. § 801 (1994), *et seq.*, the “Act,” charging U.S. Steel Mining Company Inc. (U.S. Steel) with one violation of the mandatory standard at 30 C.F.R. § 77.404(a) and proposing a civil penalty for that violation. The general issue before me is whether U.S. Steel violated the cited standard and, if so, what is the appropriate civil penalty to be assessed in accordance with Section 110(i) of the Act. Additional specific issues are addressed as noted.

The citation at bar, No. 7672461, charges as follows:

The Granular Coal Injection (GCI) was not being maintained in safe operating condition because there was a ½ inch hole in the side of the enclosed flight conveyor located at the tail of the 250 conveyor right above the foot section, 10 feet above the walkway. This was a location where a bolt that attaches the wear plate to the inside of the conveyor had been sheared. Fine coal was running out of the hole when the hole was exhausting and would stop when the hole was intaking. For this system to operate safely the atmosphere inside must remain inert and separated from the air in the outside atmosphere.

The cited standard, 30 C.F.R. § 77.404(a), provides that “[m]obile and stationery machinery and equipment shall be maintained in safe operating condition and machinery or equipment in unsafe condition shall be removed from service immediately.”

U.S. Steel’s Concord preparation plant utilizes a thermal dryer and a granular coal injection (GCI) system to process and transport coal. Coal is dried in the preparation plant in the thermal dryer. The fine coal particles are then entrained as air passes through the coal on the thermal dryer’s fluidized bed. These entrained coal particles are then removed from the air by passing through either of two downstream cyclones. Coal particles drop to the bottom of each cyclone and are discharged through separate rotary airlocks into the enclosed GCI system. This coal is then transported through the GCI system to a retention bin and eventually into rail cars. During this process coal dust and methane are produced. To reduce the explosive hazard the oxygen content in the GCI system is reduced by injecting nitrogen into the system at various locations.

According to U.S. Steel safety procedures for the GCI system, the oxygen concentrations must be maintained well below 12% - - the level necessary for a fire or explosion (Operator’s Exhibit I). Oxygen levels are monitored by gas analyzers at sampling points within the system. When oxygen levels reach 7%, the sensors trigger a warning in the computer control room. When reaching 10% oxygen a higher alarm is signaled and the screw conveyors feeding the coal fines into the GCI system are reversed, thereby preventing additional coal from entering the system.

On March 7, 2002, Larry Richardson, an experienced coal mine inspector for the Department of Labor’s Mine Safety and Health Administration (MSHA), observed that the monitors at the preparation plant showed high oxygen levels at two locations within the GCI, *i.e.*, 7.2% oxygen at the 221 conveyor and 7.5% oxygen at the 250 conveyor. Upon inspection of the GCI system Richardson observed the cited ½ inch hole in the side of the enclosed flight conveyor at the tail of the 250 conveyor 10 feet above the walkway. According to the undisputed testimony of Richardson, this hole was located where a bolt that attaches the wear plate onto the inside of the conveyor had been sheared. Fine coal was running out of the hole when the hole was exhausting and would stop when the hole was intaking. The foreman who was present immediately arranged to have the hole plugged and, indeed, the cited condition was abated within 15 minutes.

Richardson found that the GCI system was not being maintained in safe operating condition because of the hole. He testified that coal dust and methane were contained within the system and that even though oxygen levels were monitored at the sensors, the nearest sensor was 150 feet away. According to Richardson, should oxygen entering through the hole reach a 12% level, the combination of methane, fine coal particles and the ignition source presented by the metal chain within the metal frame could result in an ignition or explosion.

Clete Stephan, MSHA's principal mining engineer and ventilation specialist, is a graduate civil engineer from the University of Pittsburgh, a licensed professional mining engineer and a certified fire and explosion investigator. He has presented over 100 lectures and training sessions in locations as far away as Australia and has authored a number of publications relating to fires and explosions. He has previously testified at trials or depositions 24 times as an expert in fires and explosions. Stephan had evaluated the subject GCI system on a number of occasions and was therefore familiar with it.

As Stephan noted, a fire or explosion can occur when you have the right mixture of fuel, heat and oxygen. He observed that methane and coal dust were present within the GCI system and an ignition source could arise from metal to metal contact exceeding combustion temperatures. He noted that methane needs 12% oxygen and coal dust needs 13% oxygen in order to ignite. He observed that oxygen is present in the system but nitrogen is injected at certain locations to keep those oxygen levels low. The system was enclosed to prevent the 20.9% oxygen content of the surrounding air from entering the system. Thus, Stephan noted that until such time as that oxygen entering the cited hole was diluted, an explosion hazard existed and the system was therefore unsafe.

U.S. Steel first claims in its post hearing brief that it did not have adequate notice of the Secretary's interpretation of the cited regulation. In determining whether notice is adequate the first consideration is whether the regulation is "plain or ambiguous." *Secretary v. Alan Lee Good d/b/a Good Construction*, 23 FMSHRC 998, 1004 (September 2001). When the language of a standard is clear, its terms must be enforced as "written unless the regulator clearly intended the words to have a different meaning or unless such a meaning would lead to absurd results." *Secretary of Labor v. Island Creek Coal Co.*, 20 FMSHRC 14, 18 (January 1998).

The standard cited in the present case, 30 C.F.R. 77.404(a), is not ambiguous. The wording of § 77.404(a) is identical to the wording of 30 C.F.R. § 75.1725(a). In examining the language of § 77.1725(a), in *Secretary of Labor v. Alabama By-Products Corporation*, 4 FMSHRC 2128, 2129 (December 1982), the Commission addressed and rejected the same argument, *i.e.*, that the standard was unconstitutionally vague and ambiguous. The Commission held that the fact that the standard is broad and can be applied to a myriad of different circumstances does not render it ambiguous.

In deciding whether machinery or equipment is in safe or unsafe operating condition under the cited standards, the alleged violative condition must appropriately be measured against the standard of whether a reasonably prudent person familiar with the factual circumstances surrounding the allegedly hazardous condition, including any facts peculiar to the mining industry, would recognize a hazard warranting corrective action within the purview of the applicable regulation. *Alabama By-Products*, 4 FMSHRC at 2129. Accordingly, the Secretary must prove that a reasonably prudent person familiar with the GCI system and the facts surrounding the allegedly hazardous condition, including facts peculiar to the mining industry, would have recognized that the single half-inch hole in the GCI system was a hazard warranting

corrective action. *Alabama By-Products*, at 2129. In that case, the Commission held that “[t]he danger posed in underground coal mining by a friction source that will lead to a heat buildup in an area where coal accumulations could occur is obvious.” 4 FMSHRC at 2131. “Where such dangers are present due to defects in the operating condition of equipment, that equipment cannot be considered in safe operating condition.” *Id.*

For the reasons set forth below I find similarly that the danger posed by oxygen levels of 20.9% entering the cited hole in the enclosed GCI system in the presence of coal dust, methane and a potential ignition source is also obvious. It is undisputed that the GCI system at issue herein was intended and designed to safely operate only as an enclosed system with an inert atmosphere. Although it is recognized that some oxygen may be present in the system it is also recognized that such oxygen must be controlled to ensure an inert atmosphere. Thus, the GCI system was designed with nitrogen injectors at every point that air was anticipated to enter the system in order to maintain oxygen at safe levels.

In this case there is no dispute that an unintended half-inch hole was created in the GCI system. In addition, I credit Mr. Stephan’s testimony, and it is reasonable for the objective reasonably prudent person to infer, that air containing 20.9% oxygen was entering the GCI system’s internal atmosphere through this hole. I also credit Stephan’s testimony, and it is reasonable for the objective reasonably prudent person to infer, that the air just inside the hole would contain 20.9% oxygen, as it would not immediately be diluted upon entering the internal atmosphere. I further credit his expert testimony, and it is reasonable for the objective reasonably prudent person to infer, that the half-inch hole permitted a sufficient amount of air to enter the GCI system to create an area with greater than 13% oxygen concentration and an area large enough to support a fire or explosion. Thus, a reasonably prudent person familiar with the operation of the GCI system would easily have identified an unplanned hole allowing air containing 20.9% oxygen to enter the system as a hazard warranting corrective action. *See Alabama By-Products*, 4 FMSHRC at 2131. The GCI system was not maintained in a safe operating condition and therefore there was a violation of the cited standard.

In reaching these conclusions I have not disregarded Respondent’s claims that the Secretary failed to prove that the oxygen at the cited hole was at an unsafe level. While it is true that no actual tests were taken inside the one-half inch hole to determine the oxygen levels inside the GCI system, I find that the inferences made by MSHA’s expert, Clete Stephan, were rational and were sufficient to prove that unsafe levels of oxygen were in fact entering the GCI system, and that the same inferences would be made by any objective reasonably prudent person. I also note, in response to U.S. Steel’s claims that the oxygen sensors would have detected any excess oxygen, that such sensors were located some 90 feet from the cited hole. It is therefore obvious that such sensors would not have provided sufficient warnings.

Civil Penalty Analysis

In assessing a civil penalty under Section 110(i) of the Act, the Commission and its judges must consider the operator's history of previous violations, the appropriateness of such penalty to the size of the business of the operator charged, whether the operator was negligent, the effect on the operator's ability to continue in business, the gravity of the violation, and the demonstrated good faith in the person charged in attempting to achieve rapid compliance after notification of a violation. U.S. Steel does not have a serious history of violations. It is a large size business and achieved rapid compliance (within 15 minutes) of the notice of the violation herein. The Secretary acknowledges that the violation was of low gravity and that U.S. Steel was not negligent in causing the violation. No evidence was presented to show what effect the penalty would have on the operator's ability to continue in business. Within this framework I find that the Secretary's proposed penalty of \$55.00, is appropriate.

ORDER

Citation No. 7672461 is hereby affirmed and U.S. Steel Mining Company Inc., is directed to pay a civil penalty of \$55.00, within 40 days of the date of this decision.

Gary Melick
Administrative Law Judge
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