

CCASE:  
SOL (MSHA) V. MOUNTAIN CEMENT  
DDATE:  
19930727  
TTEXT:

~1418

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION  
1244 SPEER BOULEVARD #280  
DENVER, CO 80204-3582  
(303) 844-5266/FAX (303) 844-5268

July 27, 1993

SECRETARY OF LABOR,	:	CIVIL PENALTY PROCEEDING
MINE SAFETY AND HEALTH	:	
ADMINISTRATION (MSHA),	:	Docket No. WEST 92-111-M
Petitioner	:	A.C. No. 48-00007-05562
	:	
v.	:	Mountain Cement Company
	:	
MOUNTAIN CEMENT COMPANY,	:	
a Wyoming Partnership,	:	
Respondent	:	

DECISION

Appearances: Robert J. Murphy, Esq., Office of the Solicitor,  
U.S. Department of Labor, Denver, Colorado,  
for Petitioner;

Philip Nicholas, Esq., NICHOLAS LAW OFFICE,  
Laramie, Wyoming,  
for Respondent.

BEFORE: Judge Morris

The Secretary of Labor, on behalf of the Mine Safety and Health Administration ("MSHA") charges Respondent Mountain Cement Company ("MCC") with violating a safety regulation promulgated under the Federal Mine Safety and Health Act, 30 U.S.C. 801, et seq. (the "Act").

A hearing on the merits was held in Laramie, Wyoming, on September 1, 1993. The parties submitted their respective cases on oral argument.

~1419

Citation No. 3635856, issued under Section 104(d) of the Act, alleges MCC violated 30 C.F.R. 56.12017.(Footnote 1) The Citation reads as follows:

The high voltage dc circuit to the "B" field of the electrostatic precipitator was not de-energized while two employees were attempting to repair the "A" field. Energized components from both fields were located in the same compartment. The circuit powering the "A" field was de-energized and locked out. One individual climbed into the compartment to retrieve a conductor connection that had been dropped earlier. He contacted the energized "B" field component and was electrocuted. The accident occurred at 2:55 p.m. on March 1, 1991. The victim was the working electrical foreman and was reportedly very familiar with the system. This practice was an unwarrantable failure.

#### STIPULATION

The parties stipulated as follows:

1. MCC is engaged in mining and selling of limestone in the United States, and its mining operations affect interstate commerce.

---

1 The cited regulation provides:

56.12017 Work on power circuits.

Power circuits shall be de-energized before work is done on such circuits unless hot-line tools are used. Suitable warning signs shall be posted by the individuals who are to do the work. Switches shall be locked out or other measures taken which shall prevent the power circuits from being energized without the knowledge of the individuals working on them. Such locks, signs, or preventive devices shall be removed only by the person who installed them or by authorized personnel.

~1420

2. MCC is the owner and operator of Mountain Cement Company Mill, MSHA I.D. No. 48-00007.

3. MCC is subject to the jurisdiction of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. 801 et seq. (the "Act").

4. The Administrative Law Judge has jurisdiction in this matter.

5. The subject citation was properly served by a duly authorized representative of the Secretary upon an agent of Respondent on the date and place stated therein, and may be admitted into evidence for the purpose of establishing its issuance, and not for the truthfulness or relevancy of any statements asserted therein.

6. The exhibits to be offered by Respondent and the Secretary are stipulated to be authentic but no stipulation is made as to their relevance or the truth of the matters asserted therein.

7. The proposed penalty will not affect Respondent's ability to continue business.

8. The operator demonstrated good faith in abating the violation.

9. MCC is a large mine operator with 568,861 hours worked in 1990.

10. The certified copy of the MSHA Assessed Violations History accurately reflects the History of this mine for the two years prior to the date of the Citation.

#### THE EVIDENCE

MSHA's accident investigation report encapsulates the basic facts as well as the technical aspects of the case. The parties have stipulated to the facts in the report. (Tr. 10). It states in part that the MCC mill was located at 5 Sand Creek Road in the southwest part of Laramie, Albany County, Wyoming. The mill was operated three shifts per day, seven days a week. The mill employed 107 people. Limestone, shale, and gypsum, which was mined at other locations and hauled to the mill, were processed into several types of Portland cement. Production at the mill averaged 400,000 tons a year.

A cement mill had been located at the site since 1927. MCC had purchased the facility in 1986 and had remodeled and upgraded

~1421

the operation in 1987. The mill was equipped with one dry-feed kiln. A two-stage preheater was used to heat the material to more than 1500 degrees F before entering the kiln. Dust generated within the kiln and preheater system was removed with a high voltage electrostatic precipitator located between the kiln and the emissions stack.

On March 1, 1991, LeRoy A. Robarge, victim, reported for work at MCC at 7 a.m., his normal starting time. Robarge, the working electrical foreman, initially received work assignments from James Lupton, chief electrician, and his immediate supervisor. Robarge also carried a company pager, through which he was notified of electrical problems and their priority as they occurred during the shift.

From 7 a.m. until approximately 11 a.m., Robarge had been working on miscellaneous jobs around the plant. At 11 a.m., Robarge was assigned by Lupton to troubleshoot an ongoing problem with one of the electrostatic precipitators. The kiln was temporarily down at this time while a trunnion was being repaired and the precipitator power could be shut off without causing the plant to be in violation of EPA stack emissions.

Greg Morrissey, a newly hired electrician, was contacted by Robarge to assist with the task of determining why A-field in the precipitator was not producing the dc voltage as it was designed to produce. Morrissey had been working with Robarge on several electrical jobs the past two weeks and was being trained by Robarge. The men went to the motor control center #4 where Robarge explained to Morrissey the control switches and disconnects for the four precipitator units. The A-field circuit breaker was switched off and locked out and they proceeded to the top floor of the nearby precipitator building where the transformer/rectifier units were located. Robarge began troubleshooting by draining the oil from the A-field transformer. The transformer was then dismantled and the transformer coils tested for possible damage. When it was concluded that the problem was not in this area, the transformer was reassembled and the oil replaced.

The high voltage power conductors for the A-field were located inside a 14-inch diameter isolating (air insulating) container tube. The tube was provided with an inspection cover located on the east horizontal section leading from the transformer. The cover was removed so the internal conductors could be visually inspected. Because the vertical conductor appeared to be misaligned and entered the bushings at an angle, they decided to correct this by extending the horizontal conductor approximately 1/2 to 3/4 inch by the addition of a nipple.

Morrissey, working through the inspection cover, disconnected the connection between the vertical and horizontal con-

~1422

ductors. At this time, the vertical section slipped and dropped inside the precipitator compartment.

Because of the time which was 2:15 p.m. (break time), and the need to get an extension nipple, the two men left the area by the south exit door and went to the electrical shop. After a short coffee break, the men returned with the nipple to the pre- cipitator floor.

Robarge went to the west side of the unit and opened the access hatch. It could not be determined whether Robarge entered the compartment head first or feet first but while trying to reach the fallen conductor, he contacted the energized B-field conductor.(Footnote 2)

Morrissey, working on the east side, heard the arcing caused by Robarge's contact with approximately 50,000 volts of dc current. He went around the compartment where he could see arcing and knew that he could not help Robarge until the power had been turned off. Going to the east side door he shouted for help. Joe Bigelow, electrician, working one floor below the accident scene responded. Bigelow ran down the stairs to the motor control center where he shut off the power to all four precipitator units. He then went back outside and shouted to Morrissey that all power was off and secured.

Ken Keirn, Stan Vialpondo, and Gary Cook, all mechanics, also responded to the calls for help. They assisted with removing Robarge from the interior of the precipitator unit. Robarge's jacket was on fire and they removed it. His shirt was also burning and the fire was put out. Vital signs could not be detected at this time and CPR was immediately initiated and continued until the arrival of emergency personnel from the Laramie Fire Brigade, County Sheriff's office, and three Emergency Medical Technicians with the Ivinson Memorial Hospital ambulance.

Robarge was placed on a back board and carried down the outside east stairway. CPR was continued at the different stairway landings on the way down.

The victim, under the care of EMTs, was transported to Ivinson Memorial Hospital where he was pronounced dead by the emergency room physician at 4:24 p.m. Cause of death was cardiac arrest caused by electrocution.

---

2 The west side of the compartment is shown in Exhibit M-1. The 22-inch access door is shown in Exhibit G-9 (if Robarge entered the compartment head first he would move in the direction shown by the worker in Exhibit G-8). (Tr. 52).

PHYSICAL FACTORS INVOLVED

The accident occurred on the upper level of the electrostatic precipitator inside a compartment that contained electrical components that were fed from two different power resources. The precipitator was a dust-collecting device located between the kilns and the emissions stack. The precipitator utilized groups of suspended wire electrodes charged with a positive polarity 50,000-volt direct current charge to attract dust and particulates generated in the kiln. These groups of suspended wire electrodes were called "fields." Periodically the electrodes were subjected to mechanically applied vibrations to shake down the attracted dust into hoppers located beneath the electrodes. The collected dust was then hauled away for disposal.

Exhibit G-12 shows the energized tube on the B field and insulated portions in the compartment. They are marked "energized" and "insulator." Burns on Robarge indicated his head touched the energized portion. (Tr. 37-40).

The electrostatic precipitator was approximately 80 feet high, 30 feet wide and 40 feet long. The upper level of the precipitator was covered with a gable-roofed metal building. Access to the upper level of the precipitator was provided by two outside stairways located on the east and south sides of the precipitator.

The electrode fields in the precipitator were divided into four groups. These groups were identified as A, B, C, and D fields. Each field was powered from a separate high voltage transformer/rectifier unit.

Three rows of compartments with four compartments in each row were located in the metal building on top of the precipitator. These compartments were used to enclose the electrical connections and parts of the suspension system for the fields. The A and B fields were located at the kiln end of the precipitator where the dust was the heaviest. Consequently, these fields required more power and less space. Both A and B fields were installed in the first (south) row of compartments.

C and D fields were suspended and connected individually in the next two rows of compartments. This nonstandard arrangement may have confused the victim and contributed to the accident.

The twelve compartments atop the precipitator were all constructed similarly. They were approximately 8' 6" long, 4' high and 2' 8" wide. Access to the interior of the compartment was through 22" diameter round hatches that extended 8" from the long side of the compartments near floor level. The access hatch to the compartment where the accident occurred was on the west side.

~1424

of the compartment located at the southeast corner of the precipitator.

Two support insulators were located in the compartments one at each end. The insulators were constructed of fiberglass tubing approximately 14" in diameter and approximately 18" high. A .25" thick steel plate was bolted to the top of each insulator.

A 2" diameter threaded steel rod extended upward from the top of the insulator. The steel plates and threaded rods were energized when the fields were energized. At the time of the accident the B-field was mistakenly left energized and the victim contacted the energized rod or plate while inside the compartment.

The primary power for the four precipitator fields was fed from motor control center #4 located in a ground level building on the west side of the precipitator. The primary power was 480 volts ac, single phase. The controllers for the fields were fed from circuit breakers mounted in the panel located in the center of the building. The controllers were located along the west wall of the building. Each controller was equipped with a disconnect and instruments to monitor voltages and currents of the fields.

The transformer/rectifier units for the fields were located between the compartments on the top of the precipitators. The transformer/rectifier units were equipped with tap changing rotary switches. The tap changers had five positions which could be set to isolate and ground the fields or could be set to change the intensity of the dc charges on the field. Other than the tap changers there was no way to disconnect the transformer/rectifier units on the upper level. Electricians stated that the primary power had to be deenergized before the tap changers could be operated to prevent damage to the transformer/rectifier unit.

The rotary tap changers were equipped with key operated interlocks that were designed to prevent persons from gaining access to the interior of the compartments or to the interior of the precipitator while the system was energized. Witnesses and others interviewed during the investigation stated that the lock to the compartment where the accident occurred had been disassembled and the interlocking system, was bypassed. No one knew or would say when the lock was disassembled. Further investigation found that the interlocking system required some maintenance and alignment but would operate. The system would have prevented access to energized components had the lock not been disassembled.(Footnote 3)

---

3 The lock is shown on the access door at approximately 2 o'clock in Exhibit G-9.



~1425

The victim, who was the working electrical foreman, and his assistant were engaged in troubleshooting the A-field components. They were attempting to locate the cause of an ongoing low output voltage problem. The assistant who had only worked two weeks at the operation stated that he knew very little about the precipitator and was following instructions of the victim. The circuit to the A-field transformer/rectifier unit was opened and locked out in the control house at ground level. The originally planned work did not require either of the two electricians to enter the compartments or the precipitator so probably no thought was given to the need to deenergize the B-field. As the trouble-shooting continued, the A-field conductor was uncoupled and part of the conductor and a piece of the coupling fell into the compartment. In attempting to retrieve the conductor and coupling part, the victim entered the compartment and was electrocuted.

A shorting stick with a clamp and 6' long conductor was available at the compartment to test for current and to discharge static from the components within the compartments. Evidently the stick was not used prior to the accident. The victim may have failed to use the shorting stick (Footnote 4) because he was in a rush to get the precipitator on line.

#### DISCUSSION AND FURTHER FINDINGS

The cited regulation 30 C.F.R. 56.12017 requires that power circuits "shall be deenergized before work is done on such circuits unless hot-line tools are used."

The Commission in *Ideal Cement Company*, 11 FMSHRC 2409, 2416 (November 1990) stated that in interpreting and applying broad-worded standards, the appropriate test is whether a reasonably prudent person familiar with the mining industry and the protective purposes of the standard would have recognized the specific prohibition or requirement of the standard, citing *Canon Coal Co.*, 7 FMSHRC 6676, 6678 (April 1987), *Quinland Coal, Inc.*, 1614, 1617-1618 (September 1987).

In this situation, the electrical foreman who was very knowledgeable about the electrical circuits, entered the compartment containing energized and deenergized circuits. There were multiple ways to shut off the power but these were ignored as was the by-passed lockout system.

---

4 The shorting stick is shown in Exhibit G-14.

~1426

It is common knowledge that if a person is in close proximity to energized circuits of 50,000 volts, he runs the risk of electrocution.

In support of his position, the Secretary cites Amax Coal Company 8 FMSHRC 1975 (August 1981) wherein Judge Joseph B. Kennedy considered a similar regulation, 77.500, to the one in contest here. I agree with Judge Kennedy when he stated that:

Even if Mr. Morris [electrician] did not intend to work on the upper energized circuits, he was in violation of Section 77.500. The MSHA Inspector's Manual states:

"[w]hen work is performed in close physical proximity to exposed electrical circuits or parts, they shall be deenergized . . . . All circuits within an electrical enclosure shall be deenergized before work is performed within the enclosure unless such energized circuits are guarded by suitable physical guards or adequate physical separation. 3 FMSHRC at 1982, 1983.

In the instant cases, both the energized and deenergized circuits were located in the same compartment. The very hazard presented by entering such compartments is the danger of contacting such circuits.

In addition, the Secretary's interpretation of his regulation is entitled to due deference; Secretary of Labor, o.b.o. Bushnell v. Cannelton Industries, Inc., 867 F.2d 1432 (D.C. Cir. 1989).

MCC contends its foreman was working on the "A" field. As a result, there was no violation because he was not working in the energized "B" field. I disagree. Once a situation of close proximity exists, a violation has occurred.

MCC further argues the standard should be interpreted as written. (Tr. 29). In short, the only evidence of work being done at the time was the foreman's efforts at retrieving the tools. Therefore, no "work" was being done "on such circuits." The record here illustrates that no work was being done on any circuit. However, if I accept MCC's argument to its ultimate conclusion, then no circuit would be deenergized merely to retrieve tools in the energized compartment. Such an interpretation of 56.12017 would hardly promote the safety and health of miners.

The citation should be AFFIRMED.

SIGNIFICANT AND SUBSTANTIAL

A violation is properly designated as being "Significant and Substantial" ("S&S") if, based on the particular facts surrounding the 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 (January 1984), the Commission explained:

In order to establish that a violation of a mandatory 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 injury in question will be of a reasonably serious nature.

See also *Austin Power Co. v. Secretary*, 861 F.2d 99, 103-104 (5th Cir. 1988), *aff'g*, 9 FMSHRC 2015, 2021 (December 1987) (approving Mathies criteria). The question of whether any specific violation is S&S must be based on the particular facts surrounding the violation. *Texasgulf, Inc.*, 10 FMSHRC 498, 500-501 (April 1988); *Youghiogheny and Ohio Coal Co.*, 9 FMSHRC 2007, 2011-2012 (December 1987).

The evidence establishes that a violation of 56.12017 occurred. A measure of danger to safety was contributed to by the violation. Since the hazard contributed to the fatality, the third and fourth formulations of Mathies were established.

The special allegations of S&S should be AFFIRMED.

UNWARRANTED FAILURE

The Secretary contends this violation was due to the unwarrantable failure of MCC to comply with the regulation.

The special finding of unwarrantable failure, as set forth in Section 104(d) of the Mine Act, 30 U.S.C. 814(d), may be made by authorized Secretarial representatives in issuing citations and withdrawal orders pursuant to Section 104. In *Emery Mining Corp.*, 9 FMSHRC 1997, 2004 (December 1987), and *Youghiogheny and Ohio Coal Company*, 9 FMSHRC 2007, 2010 (December 1987), The Commission defined unwarrantable failure as "aggravated conduct constituting more than ordinary negligence by a mine operator in relation to a violation of the Act." Emery examined the meaning of unwarrantable failure and referred to it in such terms

~1428

as "indifference," "willful intent," "serious lack of reasonable care," and "knowing violation." 9 FMSHRC 15 2003.

In this case, there were no written instructions posted for employees to review explaining the deenergizing and locking out of the circuits. In addition, no warning signs were posted on the compartment to show the circuits were fed by two different power sources. Further, a shorting stick was not used to check the current. Additionally, the interlock system was rendered ineffective and by-passed. An effective system would have prevented the accident. Finally, the working electrical foreman failed to insure that the B-field was deenergized before he worked in close proximity to it.

These factors establish high negligence and unwarrantability on the part of MCC.

#### CIVIL PENALTIES

Section 110(i) of the Act mandates consideration of certain criteria in assessing civil penalties.

MCC is a large operator with 568,861 hours worked in 1990. (Stipulation).

The proposed penalty will not affect the operator's ability to continue in business. (Stipulation).

The operator's prior history consisted of 67 assessed violations for the two-year period ending March 26, 1990. (Ex. G-1).

The operator's negligence was such that the violative condition could have been easily prevented.

The gravity was apparent. MCC abated the violation and is entitled to statutory good faith.

In this case, the Secretary proposes a civil penalty of \$30,000. Based on the record, I concur in this assessment.

For the foregoing reasons, I enter the following:

#### ORDER

Citation No. 3635856 is AFFIRMED and civil penalty of \$30,000 is ASSESSED.

John J. Morris  
Administrative Law Judge

~1429

Distribution:

Robert J. Murphy, Esq., Office of the Solicitor, U.S. Department  
of Labor, 1585 Federal Office Building, 1961 Stout Street,  
Denver, CO 80294 (Certified Mail)

Philip Nicholas, Esq., NICHOLAS LAW OFFICE, 221 Ivanson, P.O. Box  
928, Laramie, WY 82070 (Certified Mail)

ekRobert J Murphy Esq  
Office of the Solicitor  
U S Department of Labor  
1585 Federal Office Building  
1961 Stout Street  
Denver CO 80294  
Philip Nicholas Esq  
NICHOLAS LAW OFFICE  
P O Box 928  
Laramie, WY 82070