

CCASE:

MSHA V. ASARCO

DDATE:

19920603

TTEXT:

June 3, 1992

SECRETARY OF LABOR, Docket Nos. SE 89-24-RM

MINE SAFETY AND HEALTH SE 89-25-RM

ADMINISTRATION (MSHA) SE 89-26-RM

SE 89-37-RM

v. SE 89-60-M

SE 89-105-M

ASARCO, INC. SE 89-108-M

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

DECISION

BY THE COMMISSION:

This consolidated contest and civil penalty proceeding arises under the Federal Mine Safety and Health Act of 1977, 30 U.S.C. • 810 et seq. (1988)(the "Mine Act" or "Act"). It involves the validity of four citations issued at Asarco, Inc.'s ("Asarco") Immel Mine, two alleging violations of 30 C.F.R. □ 57.3401 for failing to examine and test for loose ground and two alleging violations of 30 C.F.R. • 57.3200 for failing to correct hazardous ground conditions.(Footnote 1) Two citations were issued as a result of an investigation of a

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1 The regulations are as follows:

□ 57.3401 Examination of ground conditions.

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, and as ground conditions warrant during the work shift.

Underground haulageways and travelways and surface area highwalls and banks adjoining travelways shall be examined weekly or more often if changing ground conditions warrant.

□ 57.3200 Correction of Hazardous conditions.

Ground conditions that create a hazard to persons shall be taken down or supported before other work or travel is permitted in the affected area.

Until corrective work is completed, the area shall be posted

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fatal accident and the other two citations were issued during the accident investigation, but do not allege that the violations contributed to the accident.

Administrative Law Judge William Fauver affirmed the four citations and concluded that the violations were the result of Asarco's highly negligent conduct. Asarco, Inc., 12 FMSHRC 2073 (October 1990)(ALJ).(Footnote 2) The Commission granted Asarco's petition for discretionary review and heard oral argument on February 20, 1992.

For the reasons set forth below, we affirm the judge's conclusion that Asarco violated section 57.3401 with respect to one citation and his related finding that Asarco was highly negligent. We reverse his findings of violation with respect to the other three citations.

I.

#### Factual and Procedural Background

Asarco operates the Immel Mine, an underground zinc mine located in Knox County, Tennessee. The zinc is removed by the selective open stope method.(Footnote 3) This method involves drilling blast holes into the ore body and blasting the drilled area, and then removing the ore.

George Norton, a jumbo drill operator and the accident victim, was assigned to drill blast holes in the heading of the 2C3 stope the morning of October 24, 1988. Carlyle Bales, his foreman, transported Norton, Richard Hubbard, and two other miners to their respective work areas. At about 7:25 a.m., Bales arrived with Norton and the others at the heading of the 2C3 stope, which was about 47 feet wide and 18 feet high. Bales testified that he conducted a visual examination of the area and found no cracks, discoloration, loose ground, or fallen material on the floor. Tr. 1203-04, 1214-15, 1225-26. During the course of his examination, Bales walked to the wall of the heading. Hubbard confirmed that Bales examined the work area that morning and that the ground looked good. Tr. 237, 312. Bales then travelled back down the 2C3 stope and dropped Norton off to pick up the jumbo drill, so that Norton could take it back to the heading of the 2C3 stope. Bales took the other three miners to their work areas.

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with a warning against entry and, when left unattended, a barrier shall be installed to impede unauthorized entry.

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2 The judge also dismissed two citations alleging violations of 30 C.F.R. • 57.3202 requiring the use of a scaling bar where manual scaling is performed. The Secretary did not seek review of these dismissals.

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3 "Stope" is defined as "[a]n excavation from which ore has been excavated in a series of steps.... The term is also applied to breaking ground by drilling and blasting or other methods." Bureau of Mines, U.S. Department of Interior,

A Dictionary of Mining, Mineral and Related Terms 1081-82 (1968) ("DMMRT").

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A jumbo drill operator drills holes in the face, rib, or back, to be filled with explosives and blasted. Norton was a veteran miner and drill operator with over 25 years of experience. He generally worked alone.

At about 10:50 a.m., Bales returned to the heading of the 2C3 stope and visited Norton for 20 to 25 minutes while Norton ate lunch. Bales testified that he saw no signs of loose ground.(Footnote 4) Tr. 1205-07. About 12:10 p.m., Richard Abdella, a haul man, serviced Norton's jumbo drill. Abdella testified that he observed no loose ground and did not hear any ground "working." Tr. 988-99. At about 12:25 p.m., Bales again visited Norton to bring water gaskets needed for drilling. Bales testified that he again looked at the ground in the area and found nothing wrong. Tr. 1208-10.

John Ellis, Jr., the general mine foreman, found Norton at about 1:25 p.m., crushed under a slab that had fallen from the mine roof about seven feet to the right and rear of the jumbo drill and outside the drill's protective canopy. Norton died of the injuries sustained. The drill had been shut down and the drill steel was found in holes that were the last or next to last row scheduled to be drilled in the face of the heading.

The ground failure extended from the right rib to the area above the jumbo drill, a distance of about 22 feet wide and 38 feet high. The fallen rock increased in thickness from less than an inch at the right rib to about two feet near the drill. The rock had been exposed to two blasting cycles, the last on the day shift of October 20, 1988. Norton's work area had not been roof bolted.

Mine Safety and Health Administration ("MSHA") Inspector Charles McDaniel arrived at the mine about 2:15 p.m. on the day of the accident. He went to the accident site to secure the area and issued a section 103(k) order (30 U.S.C. • 813(k)) to preserve it until MSHA's investigative team arrived. Inspector McDaniel saw chewing tobacco on fallen ground on the left side of the jumbo drill, which indicated to him that Norton had scaled the area.(Footnote 5) He also saw evidence that Norton had scaled the roof to the right of the jumbo drill near the face. McDaniel testified that Norton had scaled and probably thought the area was safe. Tr. 1363, 1366. However, McDaniel did observe loose ground in the area. He also saw several drill marks, including some near the fall site. McDaniel saw evidence that the ground fall had included a

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4 The term "loose ground" is defined as "[b]roken, fragmented, or loosely cemented bedrock material that tends to slough.... As used by miners, rock that must be barred down to make an underground workplace safe...." DMMRT at 658. In *Amax Chemical Company*, 8 FMSHRC 1146, 1148 (August 1986), the Commission interpreted the term "loose ground" to refer "generally to material in the roof (back), face, or ribs that is not rigidly fastened or securely

attached and thus presents some danger of falling."

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5 The term "scaling" is defined as the "[r]emoval of loose rocks from the roof or walls." DMMRT at 965.

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belly from the roof or back. He testified that drill marks near the fall site indicated that Norton had tried to get the belly down but was unsuccessful. Tr. 1354-55, 1363-64. Inspector McDaniel concluded that the ground fall that killed Norton was unpredictable. Tr. 1363, 1366, 1373. On the day after the accident, MSHA Supervisory Mine Inspector Vernon Denton and MSHA Mine Inspector William Erickson, the lead investigator, visited the mine to investigate the fatality. Erickson issued Citation No. 3253415 that same day, charging Asarco with a violation of section 57.3401 for its failure to examine and test for loose ground in the 2C3 stope prior to the accident. Denton modified the citation on December 8, 1988, to clarify the narrative section of the violation. At that time, Denton also issued Citation No. 3253702, charging Asarco with a violation of section 57.3200, for its failure to properly address the hazardous ground conditions with respect to the loose ground that fell and killed Norton. Erickson also wrote Citation No. 3253416 charging Asarco with a violation of section 57.3200 because loose ground had not been removed from the ribs and back in places along the driller's travelway between the 2C3 stope and the 2C3 heading (back stope). Further, Erickson wrote Citation No. 3253417, charging a violation of section 57.3401, because he observed two miners directly below and in close proximity to loose ground in the 3C4 stope.

The MSHA inspectors determined that each of these four violations were of a significant and substantial nature and that Asarco's negligence was high. In his decision, the judge concluded that Asarco violated section 57.3401 (Citation No. 3253415) at the accident site. 12 FMSHRC at 2087. The judge found that Norton and Bales failed to properly examine and test the roof in the heading of the 2C3 stope. 12 FMSHRC at 2083-84. The judge concluded that, had Norton and Bales properly examined the roof, they would have seen the belly and the loose ground observed by the Secretary's witnesses. 12 FMSHRC at 2083. The judge emphasized that, where loose ground is present and left uncorrected, there is a prima facie indication that the roof was not properly examined. 12 FMSHRC at 2084.

The judge further found that the roof should have been tested before the accident because loose ground was observed by the Secretary's witnesses and because the mine's blasting-mucking-drilling cycle created a duty to test the roof. 12 FMSHRC at 2084. The judge rejected Asarco's contention that its method of testing the roof with the jumbo drill was a competent method of testing a mine roof. The judge credited the testimony of the Secretary's witnesses that sounding the roof with a steel bar was the only effective method to test a mine roof. 12 FMSHRC at 2084-87. The judge found Asarco highly negligent in permitting and encouraging its drillers to use the jumbo

drill instead of a scaling bar to test the roof. 12 FMSHRC at 2087.

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6 The term "belly" is defined as "[a] bulge, or mass of ore in a lode." DMMRT at 95.

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With respect to the other section 57.3401 citation (No. 3253417), the judge found that the undisputed evidence supported the violation. 12 FMSHRC at 2091. He credited the inspectors' opinions that the loose material that they observed above the two miners in the 3C4 stope was hazardous and obvious. Id. He further found that the fact that the miners were sitting beneath loose, hazardous materials was a prima facie indication that the rib had not been properly examined. Id. He also found that the violation was the result of Asarco's high negligence. Id.

The judge also concluded that Asarco violated section 57.3200 (Citation No. 3253702) at the accident site. 12 FMSHRC at 2091. The judge credited the testimony and opinions of some of the Secretary's witnesses that the slab that killed Norton was hazardous, detectable, and should have been taken down, supported, or dangered off before the accident. Id. He found that Asarco was highly negligent in failing to take the necessary precautions to protect Norton from the danger of a roof fall in his work area. Id.

The judge found that the evidence fully supported the other section 57.3200 citation (No. 3253416), because the roof conditions in the travelway were hazardous and obvious. 12 FMSHRC at 2091-92. The judge credited Erickson's testimony that there were 40 to 50 pieces of loose material in the roof and ribs along the travelway weighing from 10 to 100 pounds. Id. He also found Asarco highly negligent in failing to correct the poor ground conditions. Id.

The judge assessed penalties of \$6,000 each for the citations issued with respect to the accident area and \$200 each for the other two citations.

II.

Disposition of Issues

A. Section 57.3401 accident citation (No. 3253415)

We conclude that the judge erred as a matter of law in his determination that Asarco failed to examine and test the roof in the heading of the 2C3 stope as required by section 57.3401. That section contains two important requirements. First, areas where work is to be performed must be examined for loose ground before work is started, after blasting, and as conditions otherwise warrant during the workshift. Second, where applicable, ground conditions in work areas must also be tested.

That the area where Norton was working, the 2C3 heading, was subject to examination is not in dispute. The judge interpreted the examination requirement of the regulation to require a careful visual inspection.

12 FMSHRC at 2083, 2084. This interpretation is also not in dispute.

The Secretary does not dispute that Bales and Norton looked at the roof in the heading. See Tr. 943-44, 948-51, 1044-45, 1202-10; S. Exh. 15; A. Exh.

3. Bales testified that he examined the area when he first arrived at the 2C3 heading with Norton about 7:25 a.m., the morning of the accident, and that he found no cracks, discoloration, loose ground, or any material on the floor.

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Tr. 1203-04, 1214-15, 1225-26. Richard Hubbard, an Asarco miner, confirmed that Bales examined the work area and, that he shared Bales' belief that the ground was good. Tr. 312. See also Tr. 943-44, 1045, 1304. At about 10:50 a.m., Bales visited Norton and again saw no signs of loose ground. Tr. 1205-07. Bales also looked at the ground in the area less than an hour before the accident and testified that he did not see anything wrong and did not hear any indication that the ground was "working." Tr. 1208-10. MSHA Inspector McDaniel, the first MSHA person to arrive at the accident scene, testified that he believed Norton had examined the area. Tr. 1299.

Moreover, it is undisputed that Norton scaled the roof in the area with the jumbo drill. MSHA Inspector Erickson, who issued the citation, as well as MSHA Inspectors Denton and McDaniel essentially acknowledged that the accident

site had been scaled with the drill. Tr. 66, 209, 212, 428, 432, 437, 508-09, 526-27, 1299. That the area had been scaled seems to confirm that the roof had been examined.

The Secretary introduced no evidence to show that the area was not examined before Norton started working there on the day of the accident. The only evidence that the roof was not examined is (a) the fact that part of the roof fell and (b) the testimony of MSHA inspectors that they observed some areas of loose roof in the heading at the time of the accident investigation. The language of the citation makes clear that the inspectors based their determination that the roof had not been examined primarily on the fact that a roof fall had occurred, rather than on evidence that an examination had not been conducted.

The judge concluded that "[w]here loose materials in a roof are present and left uncorrected ..., where miners work or travel, there is a prima facie indication that the roof was not properly examined within the meaning of □ 57.3401." 12 FMSHRC at 2084. That conclusion is incorrect as a matter of law. Neither the presence of loose materials, nor the fact that the roof fell, by themselves, indicate that the area was not properly examined. Roof conditions in a mine are dynamic; a miner can perform a thorough and competent examination as required by the standard and determine that the roof is secure and yet, at a later time, material can become loose and fall. We agree with the judge that examinations must be "careful, informed observations with appropriate accountability." 12 FMSHRC at 2084. We disagree, however, with the judge's conclusion that a prima facie indication of violation occurs if there has been a fall of ground and loose material is subsequently discovered in the area.

The judge relied, in part, on the existence of a "belly" in the roof of the heading to support his conclusion. 12 FMSHRC at 2083. The presence of a

"belly," however, does not necessarily indicate that the area had not been examined; Norton and Bales may have known that a belly was present, but determined that it was stable. Indeed, testimony from Asarco miners William Ellis and Richard Frazier, indicates that they attempted to remove a belly in the subject heading a week before the accident. After scaling the area, they concluded the area was safe. *Infra* at 11. Further, the fact that no action is taken to remove or support a belly does not, in itself, establish that the roof was not properly examined. A miner may observe an area of questionable

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roof, test the area and erroneously conclude that it is safe. Such conduct could constitute a violation of section 57.3200, requiring that loose roof be supported or taken down, but it would not by itself constitute a violation of section 57.3401. The judge's conclusion has the effect, in cases where there has been a fall of ground, of improperly shifting to the operator the burden of proving that an examination was conducted. We hold that it is the Secretary's burden to prove that a proper examination was not conducted. We turn to the testing requirement of the regulation. The judge found that Asarco failed to test the ground conditions in the heading because a jumbo drill was used to test the roof. The judge held that the drill was not an adequate device for testing a mine roof. 12 FMSHRC at 2084. For the reasons that follow, we reject the judge's finding that Asarco's use of the jumbo drill was not a permissible means of testing the roof.(Footnote 7) The standard does not specify how testing for loose ground is to be performed, nor has the Secretary described the procedure or set forth guidelines in her Program Policy Manual or other interpretative material. The Secretary has not prohibited mine operators from using jumbo drills to test for loose ground.(Footnote 8) See Oral Arg. Tr. 23. The preamble to this safety standard emphasizes that it was drafted to be "flexible enough to accommodate the variety of situations which may arise while assuring the safety of persons working in the mines." 51 Fed. Reg. 36192-93 (October 8, 1986). Counsel for the Secretary acknowledged this fact by stating that the standard is "performance-oriented" so that it could be applied to "a lot of different situations." Oral Arg. Tr. 23.

Section 57.3401 is not a detailed standard but rather is of the type made "simple and brief in order to be broadly adaptable to myriad circumstances." See, *Kerr-McGee Corp.*, 3 FMSHRC 2496, 2497 (November 1981);

*Alabama By-Products Corp.*, 4 FMSHRC 2128, 2130 (December 1982). Nevertheless,

such a broad standard must afford reasonable notice of what is required or proscribed. *U.S. Steel Corp.*, 5 FMSHRC 3, 4 (January 1983). The safety standard must "give the person of ordinary intelligence a reasonable opportunity to know what is prohibited, so that he may act accordingly." *Grayned v. City of Rockford*, 408 U.S. 104, 108 (1972); see also, *Phelps Dodge v. FMSHRC*, 681 F.2d 1189, 1192 (9th Cir. 1982).

Asarco asserts that it has been testing the roof at this mine with jumbo

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7 Although Asarco contends that the judge expanded the scope of the testing requirement of section 57.3401 beyond that set forth in the standard, on review, Asarco does not dispute that testing was necessary in the heading on the day of the accident. Consequently, we need not decide whether the judge's conclusions as to when testing is required by the standard are correct.

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8 Asarco's use of the jumbo drill in testing involves "rattling the back." Under this procedure, the jumbo drill is vibrated or pounded against the roof to detect loose material and to scale it. A. Br. 9 n.2. drills for a number ~948 drills for a number of years. Asarco contends that its testing method is safe and effective and that it reasonably believed that this method complied with the requirements of the standard. 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. The Commission recently summarized this test as "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." *Ideal Cement Co.*, 12 FMSHRC 2409, 2416 (November 1990). See also, *Lanham Coal Co.*, 13 FMSHRC 1341 (September 1991). "In order to afford adequate notice and pass constitutional muster, a mandatory safety standard cannot be so incomplete, vague, indefinite or uncertain that [persons] of common intelligence must necessarily guess at its meaning and differ as to its application." *Id.*, quoting *Alabama By-Products Corp.*, 4 FMSHRC at 2129 (citations omitted).

The Secretary seems to take the position in this case that a scaling bar is the proven and effective means of testing for loose ground and, if a mine operator wishes to use another method, it does so at its own risk. The language of the regulation, however, is not so limiting. If the Secretary intended to require the exclusive use of a scaling bar to test for loose ground in all but a few limited circumstances, she could have set forth that requirement in her regulation or in interpretative materials. Absent such an express requirement, we are not convinced that a reasonably prudent person familiar with the mining industry would have recognized that testing the roof with the jumbo drill fails to comport with the testing requirements of section 57.3401. The judge, in finding that testing with a jumbo drill was inappropriate because the noise from the drill would mask the test sounds coming from the roof, relied on testimony from Supervisory MSHA Inspector Denton, MSHA ground control expert Billy Owens, and MSHA noise expert Richard Goff. Neither Denton, Owens, or Goff, however, had ever used a jumbo drill to

test ground or for any other purposes. Tr. 106, 149, 182-83, 844-45, 1428, 1522-23. Denton acknowledged that he was not familiar with the jumbo drill and did not know how to test with it. Tr. 182, 183. Nor is there any indication that Denton, Owens, or Goff conducted noise tests of a jumbo drill testing for loose ground. See Tr. 182, 183, 1449, 1501, 1520, 1523. While Owens testified that investigations have found, in certain instances, that use of the jumbo drill for testing ground has not been accurate, he also conceded that testing with a scaling bar is not always accurate either. Tr. 774-75, 806-07. No objective evidence, such as test results, was presented by the Secretary as to the accuracy of either method.

Asarco presented evidence to establish the effectiveness and safety of using a jumbo drill to test the roof, which the judge did not directly address in his decision. Jack Parker, an independent expert in ground control experienced in the use of the jumbo drill, testified that using a jumbo drill to test is common, safe, and accepted throughout the mining industry. Tr. 1549, 1550-51, 1555-56, 1558-59. Patrick Garven, a representative of the largest manufacturer of underground drilling equipment, who was also qualified as an expert witness, testified that testing with a jumbo drill is a safe, common, and effective practice, and that one can distinguish between good and bad ground conditions when rattling the back based on the sound changes. Tr. ~949

1466, 1472-74. A number of Asarco miners, including Richard Hubbard, William Ellis, Richard Frazier, Richard Abdella and Carlyle Bales, testified as to the effectiveness of using the jumbo drill to test for loose ground. Hubbard, Ellis and Frazier, witnesses proffered by the Secretary, as well as Abdella, testified that the machine would make a much different sound on solid rock than on hollow rock typifying loose ground. Tr. 279-80, 323, 357, 554-56, 977-78. Asarco's mine safety director Hendrix testified that for at least three years the jumbo drill had been used for testing ground at the Immel Mine with MSHA's knowledge. Tr. 31.

Also, MSHA inspectors testified that using the jumbo drill to test was appropriate. MSHA Inspector Vincent D'Innecenzo, who also inspected the mine after the accident, testified that rattling the back was a common industry practice for testing for loose ground, and that it was a permissible practice. Deposition Tr. 27-28. MSHA Inspector McDaniel testified that he has observed the practice of "rattling the back" for purposes of testing and considers it safe, and a common practice. Tr. 1291-93, 1345.

The judge failed to directly address Asarco's evidence that drill operators can detect loose ground by differences in vibration and by visual observations of the rock being rattled, and that testing is not solely reliant on sound. Parker testified that in addition to differences in sound frequencies, one would look for dust dribbling from the roof, and observe whether water used to suppress dust would come out of the rock at a different location than where it was squirted in, suggesting a continuous crack. Tr. 1557. Parker further testified that the drill behaves differently when

going from hard to loose ground (Tr. 1557-58), and Frazier testified that, if there was bad ground, there would be dribbling or shaking in the area. Tr. 568-69. Hubbard emphasized the importance of sight when testing with the jumbo drill. Tr. 289-90.

Finally, the judge did not expressly address noise test data collected by independent noise expert James Barnes, supporting the claims by Asarco's miners that they are able to distinguish between solid and loose ground using a jumbo drill. Tr. 1631-33. Barnes testified that he was able to distinguish drummy, loose ground from solid ground by the difference in noise frequencies. Tr. 1632-33, 1640-42, 1644-45.

Expert witnesses testify to offer their scientific opinions on technical matters to the trier of fact. If the opinions of expert witnesses conflict in a proceeding, the judge must determine which opinion to credit, based on such factors as the credentials of the expert and the scientific bases for the expert's opinion. In such cases, the judge should set forth in the decision the reasons for crediting one expert's opinion over that of another. In the present case, a number of well qualified experts presented their opinions on the effectiveness of using a jumbo drill to test the roof, which the judge apparently rejected, but the judge did not set forth in his decision any reasons for rejecting their opinions. In fact, the judge rejected the opinion testimony of Jack Parker, a highly qualified roof control expert, without explanation or even any mention in the decision of his testimony.

Based on the evidence of record, we conclude that the Secretary has  
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failed to show that a reasonably prudent person familiar with the mining industry would have recognized that a jumbo drill could not be used effectively to test for loose ground under section 57.3401. Prior to the citation in question, Asarco was provided with no notice from the language of the regulation, from the Secretary's interpretive bulletins or other materials, or from earlier citations that the Secretary did not consider a jumbo drill to be a permissible means to test a roof.

Accordingly, we conclude that the judge erred in finding that Asarco violated section 57.3401 for failure to examine and test in the 2C3 heading.

B. Section 57.3401 stope citation (No. 3253417)

The judge held that because the inspectors found "hazardous and obvious" loose ground above the two miners sitting in an area of the 3C4 stope, there was a prima facie indication that the rib had not been examined in compliance with section 57.3401. 12 FMSHRC at 2091. The judge upheld the citation because Asarco failed to produce evidence that would contradict this prima facie indication. *Id.* We conclude that the judge erred as a matter of law.

Inspector Erickson, when he wrote the citation, determined that the loose ground was about fifteen feet above the two men and consisted of rocks of various sizes spread over an area about ten-feet wide. The appearance of loose ground does not by itself establish a violation of section 57.3401. The judge presumes that the presence of loose ground is sufficient to establish

that the ground had not been examined, a presumption we deem erroneous. The roof and rib in the area may have been examined prior to development of the hazardous condition. Moreover, the examiners may have determined, correctly or incorrectly, that the loose ground did not require barring down.

The burden of proving a violation is on the Secretary. The inspectors did not testify that the ground had not been examined, but that two miners were sitting beneath loose material (Tr. 138-39; See S. Exh. 6); when asked whether the loose material had been examined or tested, Inspector Denton replied: "Well, they hadn't taken any action to take it down." Tr. 139.

Inspector Erickson's testimony provides no additional detail. Tr. 439. The evidence falls short of that required to establish a violation.(Footnote 9)

Accordingly, the judge erred in finding that Asarco violated section 57.3401 in the 3C4 heading.

C. The section 57.3200 accident citation (No. 3253702)

Section 57.3200 states, as pertinent, that "[g]round conditions that create a hazard to persons shall be taken down or supported before other work or travel is permitted in the affected area." The judge found that the slab that killed Norton was hazardous, detectable, and should have been taken down,

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9 A citation for violation of section 57.3200 for hazardous ground may have been appropriate under the circumstances, but that question is not before the Commission.

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supported, or endangered off before the accident. 12 FMSHRC at 2091. Asarco argues that the judge erred because the fatal ground fall was unpredictable. 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. We conclude that the Secretary failed to meet this burden and that the judge's conclusion that the hazardous ground was detectable before the accident is not supported by substantial evidence.

As we have consistently recognized, the term "substantial evidence" means "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." See, e.g., *Mid-Continent Resources, Inc.*, 6 FMSHRC 1132, 1137 (May 1982) quoting *Consolidated Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938). While we do not lightly overturn a judge's factual findings and credibility resolutions (e.g., *Hall v. Clinchfield Coal Co.*, 8 FMSHRC 1624, 1629-30 (November 1986)), neither are we bound to affirm such determinations if only slight or dubious evidence is present to support them. See e.g., *Krispy Kreeme Doughnut Corp. v. NLRB*, 732 F.2d 1288, 1293 (6th Cir. 1984); *Midwest Stock Exchange, Inc. v. NLRB*, 635 F.2d 1255, 1263 (7th Cir. 1980).

We

are guided by the settled principle that in reviewing the whole record, an appellate tribunal must also consider anything that "fairly detracts" from the

weight of the evidence that may be considered as supporting a challenged finding. *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 487 (1951).

The testimony in the record, addressing the conditions in the 2C3 heading on October 24, 1989, before the accident, indicates that there did not appear to be loose ground and that the condition of the roof was good.

Carlyle Bales, Norton's foreman, was in the 2C3 heading at 7:25 a.m., 10:50 a.m., and 12:25 p.m. and saw no loose ground. Tr. 1203-04, 1205-07, 1208-10, 1214-15, 1225-27. Richard Hubbard, an Asarco miner was in the 2C3 heading at 7:25 a.m. and also testified that the ground in the area looked good. Tr.

312. Finally, Richard Abdella, another miner, was in the 2C3 heading at about 12:10 p.m. and saw no signs of loose ground. Tr. 987-88, 1000.

The testimony also indicates that in the days before the accident, the ground in the 2C3 heading was safe. About a week earlier, William Ellis and Richard Frazier, Asarco miners, noticed there was a belly in the heading and tried without success to take it down. After it had been scaled, Ellis and Frazier thought the area was safe. Tr. 318-19, 326-27, 330, 338-39, 364, 560-61, 590-91, 616. Ellis specifically testified that the belly "wasn't loose."

Tr. 330. In addition, while the heading had been blasted on October 20, 1988, Hobart Tucker, who mucked the heading on the evening of October 21 and morning

of October 22, testified that the ground looked good and the area was suitable for working. Tr. 378, 379-81, 389.

The evidence establishes that ground had been scaled. See, e.g., A.

Exhs. 16, 26; Tr. 168, 432, 505-10, 513. Inspector Denton, who issued the citation, acknowledged that the area had probably undergone at least some scaling. Tr. 66. Denton also conceded that early drafts of MSHA's accident investigation report stated that roof had been scaled with the jumbo drill, ~952

but that all mention of scaling or taking down loose roof was subsequently removed from the report. Tr. 209-12. Inspector Erickson also acknowledged that some scaling had evidently been done at the accident site. Tr. 428, 432, 437, 508-09, 526-27. Inspector McDaniel testified that he believed that Norton had scaled the area and that Norton probably considered the area to be safe. Tr. 1363, 1366. McDaniel specifically stated that drill marks he saw near the fall site indicated that Norton had tried to remove the belly but was unsuccessful and that Norton must have felt the area was safe. Tr. 1354-55, 1363-64, 1366. Indeed, McDaniel, who was the first MSHA official at the scene of the accident, testified that the ground fall was unpredictable. Tr. 1363, 1366, 1373.

The Secretary premises her case on the assumption that the rock that fell had been loose and could have been detected by proper testing. The judge held that Asarco's use of a jumbo drill to test the roof did not meet the requirements of section 57.3401. As we have concluded, a reasonably prudent person familiar with the mining industry would not have recognized that testing the roof with a jumbo drill did not fulfill the requirements of that

section. It is not disputed that Norton used the jumbo drill to test the roof in the accident area.

The Secretary's argument for affirming the citation relies mainly on the ground fall and the conditions that were observed after the accident. As previously discussed, the Secretary, to meet her burden of proof, must show that ground conditions creating a hazard were not taken down or supported. Thus, the Secretary must first show that hazardous ground conditions existed at the time Norton was working in the area. The Secretary's witnesses who were knowledgeable of the conditions in the heading before the accident, including Hubbard, Ellis, Tucker, and Frazier, believed that the accident site roof was safe at the time they were there. The judge apparently presumed that, because there had been a roof fall and some loose roof was observed during the accident investigation, predictable hazardous ground conditions could have been detected at the time Norton was working in the area.

Furthermore, to the extent the Secretary relied on Asarco's failure to roof bolt, we note that there is no roof bolting requirement for metal mines and Asarco was not charged with a failure to roof bolt. See 30 C.F.R. • 57.3360. Even though MSHA ground control expert Billy Owens, Inspector McDaniel, William Ellis, and Richard Frazier testified that the heading may have been too wide, Owens' ground control evaluation of the accident site did not mention the width of the heading as a factor. Ellis testified that the ground fall was a "freak accident", both he and Frazier testified that, when they worked in the heading, they felt it was safe, and McDaniel thought the accident was unpredictable. S. Exh. 12; Tr. 326-27, 329, 560-61, 616, 1363, 1366, 1373.

The Commission, in *Amax Chemical Corp.*, supra, 8 FMSHRC at 1149, stated that a variety of factors should be considered in determining whether loose ground is present, including but not limited to the results of sounding tests, the size of the drummy area, the presence of visible fractures and sloughed material, "popping" and "snapping" sounds in the ground, the presence, if any, of roof support, and the operating experience of the mine or any of its particular areas. In evaluating the facts of this citation against the Amax  
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Chemical criteria, we note that the area had been examined and tested. All of the testimony concerning the condition of the heading before the accident indicates that the ground conditions were not believed to be hazardous, and scaling had been performed. There was no indication of any "popping" or "snapping" sounds. In addition, the dolomite formation in the mine was stable and the mine was not experiencing massive ground failures. 12 FMSHRC at 2076. Accordingly, we conclude that the judge erred in finding that Asarco violated section 57.3200 for failing to take down or support ground in the 2C3 heading subsequently deemed to be hazardous.

D. Section 57.3200 travelway citation (No. 3253416)

The judge held that Asarco violated section 57.3200 because of his finding that the roof conditions in the travelway were hazardous and obvious.

12 FMSHRC 2092. Asarco argues that the judge ignored the particularity requirement of section 104(a) of the Mine Act, 30 U.S.C. • 814(a), asserting that the citation is vague and encompasses vast areas of the mine. Asarco also argues that at the hearing neither Inspector Denton nor Erickson could identify on a mine map the location of the loose ground in the travelway. Finally, Asarco argues that the roof in the travelway was safe. We find Asarco's contentions to be without merit.

Section 104(a) requires inspectors to issue citations to operators in written form describing the nature of the violation with particularity. *Jim Walter Resources, Inc.*, 1 FMSHRC 1827, 1829 (November 1979). This requirement

has two primary purposes. The first is to ensure that the operator is adequately advised of the conditions so that he can abate them. *Id.* The second is to give the operator fair notice of the charges. *Id.* The Commission held in *Jim Walter* that the lack of a citation's specificity does not affect its validity unless the operator is thereby prejudiced. *Id.* Asarco has not demonstrated any legal prejudice with respect to an inability to abate the violation or to defend against the citation.

We conclude that substantial evidence supports the judge's finding of violation. Erickson testified that while traveling to the accident site with Denton and Asarco officials, he observed 40 to 50 pieces of loose material in the roof and ribs along the travelway, each weighing from 10 to 100 pounds. Tr. 417, 419, 426. Denton also testified to the presence of loose material in the travelway between the 2C3 back stope and heading. Tr. 136-37. Erickson and Denton further testified that they pointed out the loose areas to Asarco officials as they proceeded to the accident site. Tr. 163, 419. The judge credited this testimony. 12 FMSHRC at 2092. In addition, McDaniel testified that as he was going to the scene of the accident, he saw loose ground in the travelway on pillars and ribs. Tr. 1359. The mine manager acknowledged that Denton and Erickson had pointed out loose ground generally. Tr. 1133. Accordingly, we affirm the judge's finding that Asarco violated section 57.3200 for loose ground in the travelway leading to the 2C3 stope heading. ~954

#### E. Negligence

Asarco argues that the judge erred in finding Asarco highly negligent with respect to the four violations. Because we are vacating all but one citation, our discussion is limited to negligence with respect to that violation, Citation No. 3253416.

The judge found Asarco highly negligent with respect to the section 57.3200 citation in the travelway based on Asarco's failure to take down or support loose material that was "hazardous and obvious." 12 FMSHRC at 2092. In this regard, the judge credited MSHA Inspector Erickson's testimony that there were 40 to 50 pieces of loose material in the roof and ribs along the travelway weighing from 10 to 100 pounds. *Id.* The judge also relied on Erickson's testimony that he saw more loose material in the travelway than he

had seen at any other underground mine for "quite a period of time." Id.; Tr. 418-19. We conclude that this testimony constitutes substantial evidence supporting the judge's finding. Accordingly, we affirm the judge's finding that Asarco was highly negligent with respect to Citation No. 3253416.

#### F. Other Issues

Asarco also alleges that: (1) Citation Nos. 3253415 and 3253702 (the accident citations) are impermissibly duplicative; (2) Inspector Denton was a biased witness; and (3) the judge intervened to a prejudicial degree in examining certain witnesses thereby improperly becoming an advocate for the Secretary. In view of our decision in this case, these issues are essentially moot.

With respect to the travelway citation (No. 3253416), Denton's testimony was either undisputed or, where disputed, corroborated by other independent testimony. While Asarco's objection to the judge's examination of witnesses relates solely to the two accident citations, we note that administrative law judges have considerable leeway in conducting a hearing and in developing a complete and accurate record. See Ruhlen, *Manual for Administrative Law Judges*, Administrative Conference of the United States, at 35 (1974).

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### III.

#### Conclusion

For the foregoing reasons, we reverse the judge's findings that Asarco violated section 57.3401 (Citation Nos. 3253415 and 3253417), and that Asarco violated section 57.3200 (Citation No. 3253702) in the 2C3 heading. Accordingly, we vacate citation Nos. 3253415, 3253417, and 3253702. We affirm the judge's finding that Asarco violated section 57.3200 (Citation No. 3253416) in the 2C3 travelway and his finding that Asarco was highly negligent.

Ford B. Ford, Chairman

Richard V. Backley, Commissioner

Joyce A. Doyle, Commissioner

Arlene Holen, Commissioner

L. Clair Nelson, Commissioner