FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

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November 9, 2006

SPENCER QUARRIES, INC., : CONTEST PROCEEDINGS

Contestant :

Docket No. CENT 2005-123-RMCitation No. 7938295; 03/01/2005

v. :

Docket No. CENT 2005-124-RM Citation No. 7938296; 03/01/2005

SECRETARY OF LABOR,

MINE SAFETY AND HEALTH : Docket No. CENT 2005-145-RM ADMINISTRATION (MSHA), : Citation No. 7938298; 03/18/2005

Respondent :

Docket No. CENT 2005-146-RM Citation No. 7938299; 03/18/2005

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Spencer Quarries Id. No. 39-00024

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SECRETARY OF LABOR, : CIVIL PENALTY PROCEEDINGS

MINE SAFETY AND HEALTH

ADMINISTRATION (MSHA), : Docket No. CENT 2004-227-M

Petitioner : A.C. No. 39-00024-33174

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Docket No. CENT 2004-245-M A.C. No. 39-00024-36233

A.C. No.

Docket No. CENT 2005-182-M

v. : A.C. No. 39-00024-55582

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Docket No. CENT 2005-215-M A.C. No. 39-00024-58174

A.C. No. 39-00024-581/4

Docket No. CENT 2005-256-M A.C. No. 39-00024-65865

SPENCER QUARRIES, INC.,

Respondent : Docket No. CENT 2006-056-M

A.C. No. 39-00024-71018

:

Spencer Quarries

28 FMSHRC 1005

DECISION

Appearances: Jennifer Casey, Esq., Office of the Solicitor, U.S. Department

of Labor, Denver, Colorado, Denver, Colorado for Petitioner; Jeffrey A. Sar, Esq., Baron, Sar, Goodwin & Lohr, Sioux City,

Iowa, for Respondent.

Before: Judge Manning

These cases are before me on four notices of contest and six petitions for assessment of civil penalty filed by the Secretary of Labor, acting through the Mine Safety and Health Administration ("MSHA"), against Spencer Quarries, Inc., ("Spencer"), pursuant to sections 105 and 110 of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. §§ 815 and 820 (the "Mine Act"). The cases involve eleven citations issued at the quartzite quarry operated by Spencer in Hanson County, South Dakota. An evidentiary hearing was held in Sioux Falls, South Dakota. The parties presented testimony and documentary evidence.

I. FINDINGS OF FACT AND CONCLUSIONS OF LAW

A. MSHA Inspection of May 12-13, 2004.

On May 12-13, 2004, MSHA Inspector John King inspected the quarry. He was accompanied by his field office supervisor, Joe Steichen. Bob Weber, the mine superintendent, also accompanied the inspector. The quarry is a full-time operation subject to semi-annual inspections by MSHA. (Tr. 19). King described the quarry as a "multiple bench open pit quartzite quarry with crushing and screening and wash plants." (Tr. 20). The quarry was operating at the time of his inspection.

1. Citation No. 7915361

Inspector King issued Citation No. 7915361 under section 104(a) of the Mine Act alleging a violation of section 56.15005 as follows, in part:

Two (2) employees were observed changing screens on the screen deck of the Deister tower without wearing safety harnesses with safety lines secured. There was a potential for one or both of them to fall nearly ten feet (10') on the inside and nearly forty feet (40') on the outside.

Inspector King determined that an injury was reasonably likely and that any injury could reasonably be expected to be fatal. He determined that the violation was of a significant and substantial nature ("S&S") and that Spencer's negligence was moderate. The safety standard provides, in part, that "[s]afety belts and lines shall be worn when persons work where there is a danger of falling." The Secretary proposes a penalty of \$165.00 for this citation.

Inspector King testified that when the inspection party approached the Deister tower, he could see two employees on the screen deck changing out the screens at the top and that neither employee was provided with fall protection. (Tr. 23). These employees were on their hands and knees the entire time that he observed them. (Tr. 78). Crushed rock passes over vibrating screens on the Deister tower to sort the rock by size. The screens are about six by eight feet and the screen deck is sloped at about a 20 percent angle. There are side walls around the screen deck that are about 18 to 24 inches high. (Tr. 27; Ex. G-4). Two employees are required to remove the screens. Safety belts and lines were available at the quarry. (Tr. 25; Ex. G-4). Inspector King estimated that a miner could fall about 40 feet to the ground on the south side of the screen deck and 10 feet on the north side. *Id.* Because these miners would be required to move heavy, awkward screens when performing this function, "common sense would tell you that you have to have fall protection to preclude someone from accidently going over." (Tr. 73).

The men gained access to the screen deck via a manlift and had just started working when the inspection party arrived. Inspector King estimated that it takes about 30 minutes to remove an old screen and replace it with a new one. (Tr. 28). MSHA has issued guidance to mine operators concerning the falling hazards associated with changing screens. (Tr. 30; Ex. G-5). The only structure that Inspector King observed that could be used as a tying off point was the handrails for the manlift. (Tr. 66). In addition, Spencer could install handrails around the edge of the screen deck in lieu of using safety belts. (Tr. 31). Brackets would need to be welded to the frame and removable guardrails could be fabricated. (Tr. 72). Brackets could also be installed at each end of the deck and piping could be inserted into the brackets with a wire stretched between them. The wire could be used by the miners when tying off their lanyards. (Tr. 79-80, 125-26).

Inspector King testified that it was reasonably likely that the conditions he observed would result in a serious injury. He took into consideration the fact that the working surface was sloped at a 20 percent angle and there were significant drop-offs around the deck. (Tr. 32). Inspector King stated that he has investigated fatal accidents where miners have fallen from screen decks. (Tr. 128-29). He admitted that he is not aware whether any miner has ever fallen from a Deister tower. (Tr. 69-70).

Richard Waldera, Spencer's general manager, testified that MSHA conducted a compliance assistance visit ("CAV") in 1998 soon after the company updated its plant. (Tr. 607). Waldera testified that the MSHA inspector thoroughly examined the Deister tower during the CAV and he did not suggest that fall protection was necessary. Waldera further testified that using safety belts and lines is not practical for the tower because there is nothing that a miner can tie off to. (Tr. 609-10). When changing the screens, one miner is between the first and second deck and the other miner is on the top. The man on top is on his hands and knees. (Tr. 609-10, 612). There are side walls around the top of the screen deck that are 18 inches high. (Tr. 613). He also stated that it is not practical to install a guardrail around the screen deck because of the heavy vibration during operation. (Tr. 610-11). After the citation was issued, the company welded eyelets along the top of the side walls on the screen deck that can be used by miners to attach their lanyards. (Tr. 669). A crane is used to remove the old screens and to bring up new

screens. The miners must stand on the screen deck to maneuver the screens to get them in the correct position for removal by the crane and when new screens are brought up with the crane. (Tr. 672). There are four screens on each deck. (Tr. 673).

Spencer argues that there was no evidence that anyone has fallen from a Deister tower when screens are changed. (Tr. 543-44). In addition, there was nothing for a miner to hook a lanyard up to and the miners were working on their hands and knees. The inspector who conducted the CAV on the tower did not mention the need for fall protection. Spencer also argues that the miners on the tower at the time of King's inspection had years of experience changing screens without any accidents or injuries.

I find that the Secretary established a violation. There was a danger that one of the miners would fall when he was removing the old screen and getting it ready to be lifted by the crane or when the crane operator was bringing in a new screen. Miners must stand up at least part of the time while changing the screens. Falling from a screen deck is a known hazard. (Ex. G-5). MSHA has issued safety alerts to mine operators about this hazard. *Id*.

I also find that the violation was S&S. A violation is classified as S&S "if based upon the 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." National Gypsum Co., 3 FMSHRC 822, 825 (April 1981). In Mathies Coal Co., 6 FMSHRC 1, 3-4 (January 1984), the Commission set out a four-part test for analyzing S&S issues. Evaluation of the criteria is made assuming "continued normal mining operations." U. S. Steel Mining Co., 6 FMSHRC 1573, 1574 (July 1984). The question of whether a particular violation is S&S must be based on the particular facts surrounding the violation. Texasgulf, Inc., 10 FMSHRC 498 (April 1988). The Secretary must establish: (1) the underlying violation of the safety standard; (2) a discrete safety hazard, a measure of danger to safety, contributed to by the violation; (3) a reasonable likelihood that the hazard contributed to will result in an injury; and (4) a reasonable likelihood that the injury in question will be of a reasonably serious nature. The Secretary is not required to show that it is more probable than not that an injury will result from the violation. U.S. Steel Mining Co., 18 FMSHRC 862, 865 (June 1996). I credit the testimony of Inspector King on this issue. It was reasonably likely that the hazard contributed to by the violation would result in an injury of a reasonably serious nature, assuming continued mining operations. One of the miners would be maneuvering screens in and out of the screen deck via the crane while standing on the deck. The chance of falling is relatively great. Given the height of the tower, any injury would be reasonably serious.

I find that Spencer's negligence was moderate. The hazard was obvious and the fact that no miner had ever been injured does not obviate that fact. A penalty of \$200.00 is appropriate for this violation.

2. Citation No. 7915362

Inspector King issued Citation No. 7915362 under section 104(a) of the Mine Act alleging a violation of section 56.11001 as follows, in part:

A safe means of access was not provided for the two (2) employees working on the screen deck of the Deister tower. One was observed climbing on the hand rails and then stepping up onto the frame to access the work area. There was a potential for a slip and fall of about ten feet (10') to the deck or nearly forty feet (40') to the ground.

Inspector King determined that an injury was reasonably likely and that any injury could reasonably be expected to be fatal. He determined that the violation was S&S and that Spencer's negligence was moderate. The safety standard provides, in part, that "[s]afe means of access shall be provided and maintained to all working places." The Secretary proposes a penalty of \$165.00 for this citation.

Inspector King testified that he issued this citation because he observed one of the two employees working on the Deister tower climb over the side of the screen deck down to the frame where King and Steichen were standing. (Tr. 35-36). Climbing over the side was not safe because "it was not designed as a means of access either to or from the top of the Deister tower." (Tr. 37). The employee could have fallen while climbing down from the deck. (Tr. 38). If he had lost his grip while climbing down, he could have fallen a sufficient distance to sustain fatal injuries. *Id.* The other Spencer employee used the manlift to come down from the screen deck. King testified that the safety standard is violated if a safe means of access is provided but a miner uses an unsafe means of access because the company has the responsibility to ensure that employees use the safe means of access. (Tr. 131-32).

Mr. Waldera testified that Spencer provides a safe means of access to the top of the tower. Employees are required to use the manlift to access the screen decks. (Tr. 611-12, 670-71). Spencer installed a ladder on the tower after the inspection. Based on this testimony, Spencer argues that it did provide safe access. The miners were required to use the manlift to get to the screen deck and to get down from the screen deck. (Tr. 544-45). Consequently, Spencer states that it complied with the safety standard.

The safety standard provides that safe access to all working places must be "provided and maintained." The Commission has held that the "inclusion of the word 'maintain' in [section 56.11001] incorporates an on-going responsibility on the part of the operator to ensure that a means of access is utilized, as opposed to a purely passive approach in which the operator initially provides safe access and then has no further obligation." *Lopke Quarries, Inc.*, 23 FMSHRC 705, 708 (July 2001). Thus, a violation may be established if a mine operator provides a safe means of access to a working place but does not ensure that miners use the safe means that was established. In this case, the evidence establishes that Spencer bought a manlift in large part

to provide miners with a safe means to get up to the screen deck on top of the Deister tower. The miners used the manlift to get up onto the screen deck, but one miner got off the deck by climbing down the structure that supports the tower. This miner climbed down in the presence of the MSHA inspectors and Spencer management. Based in part on his actions, I find that the miners who worked on the tower did not consider it to be a violation of company policy to climb down from the screen deck by scrambling over the side of the tower. Spencer assumed that miners would only use the manlift to access the top of the screen deck. I find that the Secretary established a violation of the safety standard.

I also find that the violation was S&S. It was reasonably likely that a miner would fall and seriously injure himself when climbing down from the top of the tower. I find that Spencer's negligence was less than moderate because it provided the manlift for miners to use. A penalty of \$150.00 is appropriate for this violation.

3. Citation No. 7915363

Inspector King issued Citation No. 7915363 under section 104(a) of the Mine Act alleging a violation of section 56.12004 as follows:

An extension cord was observed in the hydraulic pump room located under the HP 400 Nordberg cone crusher that had the female end pulled loose from the bushing. This exposed the inner insulation and contact points to the elements. A potential electrical shock or burn hazard existed with this condition.

Inspector King determined that an injury was unlikely and that any injury could reasonably be expected to result in lost workdays or restricted duty. He determined that the violation was not S&S and that Spencer's negligence was moderate. The safety standard provides, in part, that "[e]lectrical conductors exposed to mechanical damage shall be protected." The Secretary proposes a penalty of \$60.00 for this citation.

Inspector King testified that he observed that the outer jacket around the cord at the female end had pulled loose from the bushing and exposed the inner insulation. This violation would allow moisture to come into contact with the contact points. (Tr. 40, 42). There was also a potential for a short circuit. Someone could also be electrocuted as a result of the violation. (Tr. 43). The cord was an electrical conductor and it was exposed to mechanical damage as a result of the violation. (Tr. 41; Ex. G-9). The cord was not in service at the time of the inspection; it was hanging with other electrical cords in a pump room. (Tr. 87, 90). The inspector does not know when the cord was previously used. (Tr. 88). The copper conductors were not exposed. (Tr. 91).

Waldera testified that the brown tape that was wrapped around the extension cord indicated that the cord had been inspected for defects about 11 months prior to the inspection and that it was due for another inspection. (Tr. 614-15). The cord was only used in the winter for a

portable heater and it would not have been used again until it was inspected. (Tr. 615, 617, 674). Waldera testified that the cord would have been discarded and not used. (Tr. 616). He does not know why the cord was not removed from service at the time it became damaged. Spencer argues that the cited extension cord was out of service. The cord was only used in the winter and it would have been replaced before it was used again. (Tr. 545). The cord would have been inspected for safety defects before use.

There is no dispute that the cited electrical cord was defective in that the outer insulation had pulled away from the inner insulation at one end of the cord. Bare copper conductors were not exposed. The insulated conductors were exposed to mechanical damage and were not protected by the outer jacket. The electrical cord was available for use. I find that the Secretary established a violation. The violation was not serious and Spencer's negligence was low. The cord was due for its annual inspection so it was likely that the damage would have been detected before the cord was used again. A penalty of \$50.00 is appropriate.

4. Citation No. 7915364

Inspector King issued Citation No. 7915364 under section 104(a) of the Mine Act alleging a violation of section 56.14100(b) as follows:

The brake lights were not functional when inspected on the Cat 988-B front end loader, unit B1. This unit is used in all areas of the mine. Defects affecting safety shall be corrected in a timely manner.

Inspector King determined that an injury was unlikely and that any injury could reasonably be expected to result in lost workdays or restricted duty. He determined that the violation was not S&S and that Spencer's negligence was moderate. The safety standard provides, in part, that "[d]efects on any equipment, machinery, and tools that affect safety shall be corrected in a timely manner to prevent the creation of a hazard to persons." The Secretary proposes a penalty of \$60.00 for this citation.

Inspector King stated that the brake lights were not working on the cited loader and that the standard "requires that mechanical equipment be maintained in a functional and safe condition at all times." (Tr. 43-44). The loader was in the pit loading rock into haul trucks from the most recent shot. (Tr. 44). Two or three haul trucks were operating in the pit. This was the only loader operating. There were no pedestrians in the area. King testified that brake lights are considered to be safety equipment. The operator of the unit, Jim Zens, told Inspector King that he had performed a pre-shift examination on the loader. (Tr. 45, 123-24; Ex. G-11). When the inspector asked Zens to depress the brake, the lights did not operate. (Tr. 46). The inspector testified that he does not know how long the brake lights were not working. (Tr. 47-48). The condition was abated by replacing a fuse. (Tr. 93).

Waldera testified that Spencer requires employees to perform a pre-shift examination of mobile equipment and that checking brake lights is part of the examination process. (Tr. 617-18). Mr. Zens performed his pre-shift examination on the loader about half an hour before the citation was issued. His shift report shows that the brake lights were working at the beginning of his shift. (Tr. 618; Ex. G-11). No vehicles follow behind the loader when it is operating.

Mr. Zens testified that he did a preshift examination on the loader at about 8:00 a.m. (Tr. 782). Another miner stood behind the loader when he tested the brake lights. (Tr. 783). He then drove into the pit to load trucks. He would have no way of knowing if the brake lights stopped working. (Tr. 785). At about 8:25 a.m., Inspector King told Zens that his brake lights were not working. A fuse had to be replaced to abate the citation. (Tr. 786). It is not unusual for a fuse to blow during a shift.

Spencer maintains that the fuse blew in the 25 minutes between the time Zens performed his pre-shift examination and the inspector examined the loader. The record establishes that the brake lights were working at the time of Zens' inspection. (Tr. 545-46). Because no other miners drive vehicles behind the loader, Zens could not have known that his brake lights were no longer working.

I find that a violation was not established. The fuse could have easily blown between the pre-shift examination and Inspector King's inspection. There has been no showing that the defect was not corrected in a timely manner. I credit the testimony of Mr. Zens on this issue. Consequently, I vacate this citation.

5. Citation No. 7915366

Inspector King issued Citation No. 7915366 under section 104(a) of the Mine Act alleging a violation of section 47.41(a) as follows:

The 1000 gallon propane tank located behind the mechanical shop did not have the container labeled. The contents of all hazardous material containers must be labeled to identify the contents.

Inspector King determined that an injury was unlikely and that any injury could reasonably be expected to result in lost workdays or restricted duty. He determined that the violation was not S&S and that Spencer's negligence was moderate. The safety standard provides, in part, that "[t]he operator must ensure that each container of hazardous chemicals has a label." The Secretary proposes a penalty of \$60.00 for this citation.

Inspector King testified that he issued the citation because the cited propane tank was not labeled to indicate its contents. (Tr. 49-50; Ex. G-13). The only label on the tank said "Danger" and warned against smoking and open flames. (Tr. 54). He stated that the term "container" in the safety standard covers anything that holds a hazardous substance. (Tr. 51). Excluded from the definition of container at section 47.11 are engine fuel tanks. The inspector testified that

propane tanks are not excluded from the definition of container. *Id.* A hazardous chemical is "anything that could create a hazard to life or limb, or the quality of life of an individual." (Tr. 52). Inspector King testified that propane qualifies as a hazardous chemical under the definition at section 47.11 because it is highly flammable and explosive in the correct fuel/air environment. *Id.* The inspector agreed that the cited tank is readily identifiable as a large propane tank. (Tr. 98). The propane tank is part of an "in-line" system. (Tr. 98, 104). The citation was terminated when Spencer added a second label which identified the contents as propane. (Tr. 54; Ex. G-13).

Waldera testified that the cited propane tank is behind the maintenance shop and it is used to provide fuel for the heater in the shop. (Tr. 621). The propane tank was present when Waldera started working for Spencer twelve years ago and he was told that the tank has been in the same location since the late 1950s. No MSHA inspector has ever issued Spencer a citation for the propane tank. (Tr. 622). The tank is part of an "in-line system" in that the tank is connected to the burners in the maintenance shop with copper piping. The tank is not used for any other purpose. It has the familiar shape of a horizontal propane tank. It would not be mistaken for anything other than a propane tank by first responders. It is labeled with a sign that reads "Dangerous - No Smoking, No Open Flames." (Tr. 623; Ex. G-13). Waldera considers the propane tank to be part of an "operating system" as that term is used in the definition of "container" in section 47.11. (Tr. 624).

Spencer argues that the safety standard is vague and ambiguous. (Tr. 546-47). The propane tank was part of an in-line, closed system that is not covered by the safety standard. The cited tank was obviously a propane tank so any label would be unnecessary.

As stated above, the safety standard provides that containers of hazardous chemicals are required to be labeled. The standard goes on to state that "[i]f a container is tagged or marked with the appropriate information, it is labeled." In this instance, the appropriate information on the label would be the contents of the tank. This standard is part of the Secretary's hazard communication regulations. Section 47.11 contains definitions that are applicable to this standard. The term "container" is defined as "(1) Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank or the like; (2) The following are not considered to be containers for purposes of compliance with this part: (*i*) Pipes or piping systems; (*ii*) Conveyors; and (*iii*) Engines, fuel tanks, or other operating systems or parts in a vehicle." A "hazardous chemical" is defined as "any chemical that can present a physical or health hazard."

Spencer believes that the second part of the definition of "container" should be read to exclude all "operating systems," which it interprets to mean closed or in-line systems. Because the propane tank is directly connected to the heater in the shop and propane from the tank cannot be used for any other purpose, it is part of an operating system that is excluded from the labeling requirement in the regulation.

The "language of a regulation . . . is the starting point for its interpretation." *Dyer v. United States*, 832 F.2d 1062, 1066 (9th Cir. 1987) (citing *Consumer Prod. Safety Comm'n v.*

GTE Sylvania, Inc., 447 U.S. 102, 108 (1980)). Where the language of a regulatory provision is clear, the terms of that provision must be enforced as they are written unless the regulator clearly intended the words to have a different meaning or unless such a meaning would lead to absurd results. See id.; Consolidation Coal Co., 15 FMSHRC 1555, 1557 (Aug. 1993); Utah Power & Light Co., 11 FMSHRC 1926, 1930 (Oct. 1989).

I find that the language of subpart (2)(*iii*) of the definition clearly applies only to containers on vehicles. It provides that fuel tanks and other operating systems or parts in a vehicle are not required to be labeled. Thus, although a gasoline storage tank at a mine would have to be properly labeled, the gas tank on a front loader at the mine would not require a label. Likewise, the tank holding transmission fluid on a truck would not be required to be labeled under the standard. I hold that the under the plain language of the definition, the term "other operating system" in subsection (2)(*iii*) in the definition of "container" in section 47.11 applies only to operating systems in vehicles. This interpretation of the plain language of the definition is consistent with that offered by the Secretary through Inspector King. (Tr. 101, 113). Spencer's interpretation of the term "operating system" in subsection 2(*iii*) to apply to containers that are not on vehicles is illogical and is inconsistent with the plain language of the definition.

Spencer also relies on the testimony of Inspector King indicating that MSHA inspectors are not entirely clear about how the cited regulation should be interpreted. (Tr. 136, 141-44). King testified that he has discussed the application of section 47.41(a) with his peers at the Mine Safety and Health Academy when he was there for a training course and discovered that other inspectors have differing interpretations of its application. (Tr. 143-44). Nevertheless, Inspector King testified that he believes that the standard applies to the cited propane tank.

I take note of the fact that, as a general matter, MSHA inspectors prefer to work in an environment where the regulations they are enforcing have been interpreted by MSHA or the Commission. It is quite natural that MSHA would like to know the parameters of a regulation's requirements. The Secretary's hazardous communication regulations only became effective in 2002. I was unable to find any Commission decisions on this issue. MSHA inspectors are not legally trained. I find that the plain language of the definition of the term "container" makes clear that fuel storage tanks at mine sites are not excluded from the definition, even where these tanks are part of a closed in-line system. My finding is consistent with regulatory history and the Secretary's interpretation. See 67 Fed. Reg. 42314, 42328 (June 21, 2002). Indeed, the regulatory history makes clear the pipes and piping systems were excluded from the definition of container because labeling all pipes would be impractical and because a pipe carries the chemicals stored in the container that it is connected to. Id. Thus, in a closed system, the tank that holds the chemical needs be labeled under the standard.

I agree with Inspector King's determination that the violation was not S&S because an accident or injury was unlikely. I find that Spencer's negligence was low because it genuinely believed that the labeling on the propane tank was sufficient to meet MSHA's standards. A penalty of \$50.00 is appropriate.

6. Citation No. 7915368

Inspector King issued Citation No. 7915368 under section 104(a) of the Mine Act alleging a violation of section 47.41(a) as follows:

The hydraulic fluid tank near the tail pulley in the Supply Conveyor Belt Conveyor did not have the contents labeled. Hazardous material containers shall be labeled to identify the contents.

Inspector King determined that an injury was unlikely and that any injury could reasonably be expected to result in lost workdays or restricted duty. He determined that the violation was not S&S and that Spencer's negligence was moderate. The Secretary proposes a penalty of \$60.00 for this citation.

Inspector King testified that the cited hydraulic fuel tank was not labeled. (Tr. 56; Ex. G-15). The tank contained automatic transmission fluid. He stated that this tank was required to be labeled because automatic transmission fluid is a known carcinogen. *Id.* Inspector King testified that when he examined the tank, nobody indicated that it was labeled. The condition was abated by writing the letters "ATF" on the side of the tank. (Tr. 58). The tank is directly connected to a pump that is used to operate the door to the tunnel and, as such, it is part of a closed system. (Tr. 105). The transmission fluid recirculates and the tank is not used for any other purpose. (Tr. 106). The pump and tank are located in a tunnel under the conveyor. The area is extremely dusty. (Tr. 109).

Waldera testified that the cited tank is located at the far end of the tunnel under the surge pile. (Tr. 624). The tunnel is 110 feet long. The tunnel is not a work area and the tunnel is very noisy and dusty. The hydraulic fluid is part of an operating, recirculating system. (Tr. 626). The tank containing the hydraulic fluid is directly below the motor that pumps the fluid to the cylinder that controls the door. (Tr. 627; Ex. G-15). The cited container was labeled on the top with the letters "ATF" prior to the inspection. The letters "ATF" stand for automatic transmission fluid. The writing was covered with dust at the time of the inspection. (Tr. 627-28, 682). The pump and container have been in the same location for 12 years. Waldera testified that he did not tell Inspector King that the tank was labeled because he did not enter the tunnel with him and he did not know that King was going to issue a citation until much later.

Ward Tuttle, production foreman, testified that the pump and hydraulic fluid container is a closed system. (Tr. 770). Because the system operates the doors to the tunnel, it is only used for a short time twice every workday. Because considerable dust drifts down from the belt, it only takes a short period of time for the pump and container to become covered with dust. The transmission fluid in the container has never been changed. (Tr. 771). Tuttle was not with the inspector during the examination of the tunnel. Tuttle remembers labeling the top of the tank with the letters "ATF" before the inspection because he was told to do so. (Tr. 778). Later that day he went into the tunnel, wiped dust off the container, and saw that it was labeled with the

letters "ATF." (Tr. 772-73). He did not know that a citation was issued for this condition until a few days later.

This citation was terminated after someone wrote the letters "ATF" on the side of the container. I find that this container is subject to the requirements of section 47.41(a) for the reasons set forth with respect to the previous citation. The container contained a hazardous chemical that was required to be labeled. I credit the testimony of Waldera and Tuttle that the container had been marked on the top but that the marking was covered with dust. The environment was extremely dusty in the tunnel under the conveyor. Consequently, I vacate this citation.

7. Citation No. 7915369

Inspector King issued Citation No. 7915369 under section 104(a) of the Mine Act alleging a violation of section 56.14100(b). At the hearing, Spencer withdrew its contest of this citation. (Tr. 548-49). I find that the Secretary's proposed penalty of \$60.00 is appropriate.

B. The Highwalls at the Quarry.

1. Background Evidence on the Highwalls

On March 31, 2004, Eric J. Gottheld and Donald T. Kirkwood visited the quarry to examine the highwalls. Mr. Gottheld is a civil engineer with MSHA's Mine Waste and Geotechnical Engineering Division at the Pittsburgh Safety and Health Technology Center. Mr. Kirkwood is the supervisory civil engineer at the same facility. They were accompanied by Joe Steichen, MSHA's field office supervisor. The purpose of the site visit was to "assess the general conditions of the highwalls and to make recommendations that might improve safety with respect to highwalls." (Ex. G-17 p. 2; Tr. 154). Gottheld, Kirkwood, Steichen, and Bob Weber of Spencer traveled throughout the quarry looking at the highwalls. Gottheld was told that the footprint of the quarry itself is about 45 acres and that Spencer owns or leases about 450 acres. (Tr. 160). Some of the highwalls were active in March 2004 and others had not been mined in some time. The active face is marked as the "Outside Corner" in the diagram prepared by Gottheld. (Tr. 161; Ex. G-17 p. 12). The highwall was about 35 feet high at that location and there was shot material piled against it that was being loaded out. Gottheld testified that he was at the mine to examine the highwalls that were going to be mined in the near future that were higher than 35 feet. The section of the highwall south of the outside corner ranged between 80 and 94 feet high. Gottheld estimated that in a few months, once the "jaw level" was mined out, the highwall labeled the "Western South Highwall" on the diagram would be up to 125 feet in height. (Tr. 164). The material mined at the quarry is Sioux quartzite, which is a hard metamorphic rock. (Tr. 165).

Gottheld prepared a report that sets forth his concerns about the highwalls. (Ex. G-17). The north highwall and the northern west highwall were old, relatively rough with "lots of fractures in them and loose material." (Tr. 165). The youngest highwalls were the southern west

highwall and the western south highwall. They were relatively smooth and nearly vertical. The eastern south highwall was not as old as the north highwall but it was rough with fractures.

Gottheld testified that there are two hazards associated with highwalls: mass instability and localized rock fall hazards. (Tr. 166). He found localized mass instability problems in several areas at outside corners where the highwall changed direction and some areas where vertical fractures were intersecting. (Tr. 168). He also observed overhanging rock in some locations. Gottheld testified that the upper left corner of photo 3B in his report shows an area of mass instability. (Tr. 168; Ex. G-17 p. 14). Photo 3C shows the same area from the other side. The top right corner of photo 3B shows an area that he considers to be overhanging rock. (Tr. 169). Photo 3D shows more of what Gottheld considered to be mass instability. He testified that he was concerned that additional cracking would occur in areas of mass instability causing rock to separate from the other rock in the area. (Tr. 174). The resistance to sliding is greatly reduced where there is cracking in the rock structure.

Areas of mass instability feature highly broken rock with "cracks propagating up to the top of the highwall," especially where the cracks widen at the top. (Tr. 182). Gottheld testified that there are two ways to address this problem. One technique is to remove the areas of mass instability back to solid material. The other solution is to make sure that mining operations are away from those areas to limit the exposure of miners. (Tr. 182, 190-91). Isolated loose rock can be scaled. (Tr. 187-88, 189-90). Gottheld testified that he was concerned that miners working at or near the base of the highwalls could be injured or killed by falling rock. (Tr. 185; Ex. G-17 p. 7). Benching the highwalls can also reduce the risk that rock will injure miners. (Tr. 194).

At the conclusion of his visit to the pit, Gottheld made several recommendations to Spencer. He recommended that Spencer incorporate scaling in their normal mining cycle and that the highwalls be regularly inspected from many angles to look for areas of mass instability. (Tr. 199-200; Ex. G-17 p. 9). He also recommended that miners not work at the base of a highwall when drilling operations are occurring at the top of that area of the highwall.

Daniel J. Kuper testified on behalf of Spencer. Mr. Kuper is the production and safety manager for L.G. Everist, a mining company that operates three quartzite mines in the area. Kuper has worked at Everist for over 30 years. He testified that scaling highwalls is neither necessary nor desirable at quartzite mines. (Tr. 557). He said that quartzite is inherently hard and compressed and that scaling would create safety hazards. Kuper testified that, on the Mohs scale used to measure the hardness of rock, diamond is rated at 10 and talc is rated at 1. Quartzite is rated in the range of 7 to 8, granite is rated at 6 to 7, and limestone is rated at 4 to 5. (Tr. 558). He testified that quartzite is 98 to 99 percent silica, which is very abrasive. Kuper said that nobody has ever been injured by rock falling from a highwall at any of Everist's three mines. (Tr. 559). Everist also has not sustained any equipment damage from falling rock. The highwalls at one of these mines are 200 feet high. The highwalls are 42 feet and 30 feet high at its other two mines.

Kuper testified that quartzite is not subject to sloughing, crumbling, or flaking. He stated that the "material is so hard and it's so dense that [if a rock was protruding from the face], something would have to make it move the material itself it just . . . doesn't move." (Tr. 561). "It was built by heat and pressure and it's tight in the face." *Id.* Kuper also testified that the freeze-thaw cycle will not cause rock to fall from the highwall. Quartzite does not absorb much water, as compared to limestone, so there is very little moisture present that is subject to freezing. (Tr. 561). More importantly, water does not collect in the cracks and crevices in the rock; it simply dissipates. (Tr. 561-62). All quartzite mines have cracks in the highwalls, but those cracks do not present a safety hazard. Kuper testified that Mr. Gottheld visited one of Everist's pits and determined that one area was very unstable. Kuper testified that the particular area of concern had been in the same condition for at least 33 years. (Tr. 568-69).

Kuper further testified that he is in contact with other quartzite operators through trade associations. He stated that he knows of no instances where a miner was injured by falling rock at a quartzite mine or where equipment was damaged by falling rock. (Tr. 563).

Austin Powder Company performs the blasting at Spencer. It blasts after holes have been drilled at the top of the highwall by another contractor. The holes are about five inches in diameter and are drilled to the depth of the highwall. (Tr. 586). Ronald J. Hermansen, a salesman and technical manager with Austin Powder Company, testified that it is very tough to blast quartzite. He has been blasting at the quarry for about 15 years. (Tr. 584-85). He is unaware of any problems at the quarry with loose rock falling from the highwall, sloughing rock, or walls collapsing. (Tr. 585). Quartzite tends to interlock with itself so it does not fall or slough without being blasted. (Tr. 585, 591). He blasts at a number of quartzite mines in South Dakota and no problem of sloughing or falling rock has been reported to him. (Tr. 588). There are always visible cracks and fissures in highwalls at quartzite mines. (Tr. 591).

2. Highwall Citations, March 1, 2005

MSHA Inspector Shane Julien inspected the quarry on March 1, 2005. The quarry was operating at the time of his inspection. He issued two citations for conditions along the highwalls.

a. Citation No. 7938295

Inspector Julien issued Citation No. 7938295 under section 104(a) of the Mine Act alleging a violation of section 56.3131 as follows:

Hazardous ground conditions, at the south-west highwall, were not corrected. Several cracks, large rocks, and loose unconsolidated material was observed in the area. The highwall is approximately ninety (90) feet high and located in an area where a front end loader operated during the shift. If the highwall were to suddenly

slough off and fall, a fatal crushing injury could occur to the loader operator.

Inspector Julien determined that an injury was reasonably likely and that any injury could reasonably be expected to be fatal. He determined that the violation was S&S and that Spencer's negligence was moderate. The Secretary proposes a penalty of \$154.00 for this citation. The safety standard provides that:

In places where persons work or travel in performing their assigned tasks, loose or unconsolidated material shall be sloped to the angle of repose or stripped back for at least 10 feet from the top of the pit or quarry wall. Other conditions at or near the perimeter of a pit or quarry wall which create a fall-of-material hazard to persons shall be corrected.

Inspector Julien testified that he issued this citation because he observed ground conditions that he considered to be hazardous. (Tr. 283). He saw cracks, large rocks, and loose, unconsolidated material in the southwest highwall. This highwall was the production face on the day of his inspection. Through discussions with the operator, he determined that the highwall was about 90 feet high. (Tr. 284).

An area selected for mining is first drilled and blasted from the top of the highwall. The holes are drilled to the depth necessary to blast the entire height of the highwall. Spencer contracts this part of the operation out to an independent contractor. After the highwall is shot, a front end loader loads the shot material into haul trucks. The trucks dump the material in the primary crusher, which is a jaw crusher in the pit. From there, the crushed rock is taken by a conveyor to the finishing plant which is up on top of the east highwall near the mine office.

At the time of Julien's inspection, shot material was being loaded into haul trucks. He estimated that about half of the shot material had been removed. (Tr. 287). Inspector Julien testified that "anytime there's loose, unconsolidated material that causes a fall hazard," the material "must be either sloped back to the angle of repose or stripped back for ten feet away from the top of the highwall to prevent any cap rock or loose rock from accumulating at the top of the highwall." (Tr. 288). Loaders had been removing the shot rock in this area an hour before his inspection. Typically just one loader operates at a time and two haul trucks transport the rock to the jaw crusher. (Tr. 289).

Julien testified that he observed loose rock and unconsolidated material on the highwall during his inspection. The inspector stated that unconsolidated material is rock that has separated from the host rock by cracks or fissures. (Tr. 291). Rock is unconsolidated if cracks are present in the rock that are separating the rock from the highwall. *Id.* Loose rock is isolated rock on the highwall that appears to be leaning out rather than "hooked into the highwall." *Id.* He issued the citation because he believed that Spencer violated the second sentence of the safety standard. (Tr. 481). He believed that the conditions he observed created a hazard to persons.

(Tr. 482). Material at the top was also overhanging and could reasonably be expected to fall. (Tr. 485-86).

Inspector Julien took photographs of the highwall to document his citation. (Ex. G-20). He was particularly concerned about the fissures in the rock shown on the upper left side of the photo. (Tr. 292). He was concerned about a crack near the center of the photo that is open further at the top than at the bottom, "which indicates that it is . . . a fall hazard." (Tr. 292-93). Moisture and the freeze-thaw process can easily loosen the rock further and cause it to fall. Finally, Julien described an area of frozen material that was of concern to him. (Tr. 295). He said that there was a "cavern about halfway down [the photo] where the material is falling out." *Id.* Julien was concerned that this material could either slough off or come down in one big section because it was frozen together. The inspector was also concerned about hanging rock at the top of the highwall where there is no support under the rock. (Tr. 300). He believes that the photo shows rock that has fallen from that area.

Inspector Julien determined that the violation was S&S because, during the normal mining cycle, Spencer will be removing the shot rock near the hazardous area, thereby exposing miners to the risk of being injured by falling rock. (Tr. 303). He testified that it is reasonably likely that a serious injury or a fatality will result from such conditions. MSHA has investigated fatal accidents where rocks have fallen from highwalls onto equipment, killing the driver. (Tr. 308, 311-13; Ex. G-21). The rocks could be loosened by the freeze-thaw cycle or by vibrations from equipment or blasting. Spencer abated the citation by blasting the highwall in the cited area, thereby removing the rocks that were of concern to the inspector.

On cross-examination, Inspector Julien admitted that he has no particular expertise in geology and that he has not had any training with respect to the characteristics of quartzite. (Tr. 414). He never inspected the quarry before this inspection. He also admitted that he is unaware of any instance in which a miner has been injured by falling rock in a quartzite mine. (Tr. 417-18). He also does not know if any quartzite mine in South Dakota scales its walls. (Tr. 428). He also admitted that if a miner worked around or under a highwall for 10 to 15 years, he would have a pretty fair knowledge of the characteristics and properties of that highwall. (Tr. 443). He is not aware of any quartzite mines in South Dakota that have berms at the base of their highwalls. (Tr. 445). This citation was abated when Spencer took down the highwall using explosives. (Tr. 448). Inspector Julien disagreed with the proposition that "whether material has fallen [from the highwalls in the past] is an indicator of whether it's likely to fall [in the future]." (Tr. 451). He does not know the angle of repose for quartzite. (Tr. 453-54).

As stated above, Mr. Gottheld visited the pit about a year earlier and the conditions observed by Inspector Julien did not exist when Gottheld was present. (Tr. 203). The working face had moved during the intervening year. Gottheld reviewed this citation and Inspector Julien's photographs during his testimony in these cases. He testified that the top left of the photographs at Exhibit G-20 appear to be an outside corner and it has "similar brokenness, similar vertical cracking and horizontal cracking to the other outside corners that we observed when I was there in 2004." (Tr. 206). He stated that "if that area is unstable, that's a large mass

of rock." *Id.* Gottheld also expressed concern about the material in the center of the photographs that appears to be frozen. He felt that it was "standing very steeply." (Tr. 207). He was concerned that as the material below this frozen area is removed, it could fall. He also noted "dislodged and loose rock" along the left side of the photo. He believes that if the area had been scaled, this rock would no longer be present. (Tr. 210).

Mr. Waldera testified that he is unaware of anyone being injured by falling rock at the quarry. (Tr. 606, 630). He also is unaware of any rock falling and damaging equipment. In the 12 years he has worked at the quarry, there was one instance where a miner was concerned about rock in the highwall. Spencer blocked the area off until the area was blasted again. (Tr. 630, 687-88). Waldera disagrees with Gottheld's characterization that certain areas of the highwalls suffer from "mass instability." He testified that when the mine tried to shoot down an area that Gottheld believed to be an area of "mass instability," the rock did not move. (Tr. 631-32, 638-39). Highwalls at the quarry do not slough off and large boulders do not fall from the highwall. (Tr. 632). When quartzite fractures, the surfaces remain very rough and abrasive. (Tr. 633). As a consequence, it is a "binding material, an interlocking material." *Id.* In areas that are not being blasted, the appearance of the highwalls does not change from day to day. The cracks and fissures in the highwalls give the impression that the rock is leaning, but these rocks have not moved over the years. (Tr. 636-37). He has never measured the cracks to make sure that they are not getting wider. (Tr. 689).

Waldera also testified that the conditions cited by Inspector Julien, as depicted in Exhibit G-20, did not present a hazard. (Tr. 641). The rock that Julien believed to be frozen did not create a hazard. (Tr. 644). In addition, the loader operator was not going to load the shot rock under that area until the area was blasted again. (Tr. 644). On cross-examination, Waldera testified that Spencer has never had a professional engineer or geologist examine its highwalls to ensure that they are stable. (Tr. 685-86). Although he has never seen a rock fall from a highwall at the quarry, he cannot say that a rock has never fallen.

Robert Weber, the quarry superintendent, testified that he has worked at the quarry for 36 years. (Tr. 703). He has also operated a loader at the quarry. He stated that he has never seen rock fall from the highwall and that nobody has ever been injured by falling rock. *Id.* He admitted, however, that he is in the pit only about one hour per day at the present time. (Tr. 720). Weber also testified that rock does not slough off the highwalls at the quarry. (Tr. 704). The quarry has been regularly inspected by MSHA since the Mine Act was passed and the highwalls are usually examined by the inspection team. Although MSHA inspectors have expressed concerns from time to time about specific conditions along the highwall, no citations have ever been issued for these conditions. (Tr. 705). Weber testified that he inspects the highwalls every day prior to the start of shift. He documents his inspections in a log book. (Tr. 706; Ex. R-104). When inspecting the highwalls, Weber looks for rocks overhanging from the top of the highwall and unstable rock. (Tr. 708, 722-25). If he sees unstable rock, he warns the loader operator and Spencer does not load rock from that area. *Id.* He has never seen rock in the face itself that was of concern to him. (Tr. 725-26). If he does see any rock stability problems, he does not berm off the area but "blast[s] through it." (Tr. 726). The material from the previous shot prevents access

to the area under unstable rock. Scaling is not performed at the quarry and it would not be very effective. Except along the active sections of the highwall where blasting occurs, he has not observed any significant changes in the highwalls. (Tr. 706).

Weber testified that the photographs taken by Inspector Julien do not depict hazardous conditions. (Tr. 710). The rock on the upper left corner of the first photo in Exhibit G-20 had remained in place after the previous blasting. The rock did not move despite the blast. (Tr. 711). Loader operators always load so that their vehicle is perpendicular to the face of the highwall. (Tr. 714). No additional loading was going to take place in the cited area before the area was blasted again. (Tr. 174, 727-28).

Lynn Putzier, a loader operator, has worked at the quarry for about 15 years. Before he starts loading material from a shot, he examines the highwall. (Tr. 733). He looks for overhanging rock or rock that looks like it could come down. If he sees something that looks unsafe, he calls Jim Zens and he does not load in that area. Nobody at the quarry has been injured by falling rock. The loader he uses is about 41 feet long and the distance between the tip of the bucket and the front of the cab on the loader is 21 feet. (Tr. 735). His loader has never been damaged by falling rock.

Putzier loads by operating perpendicular to the wall. He starts loading the blasted material that is the furthest from the wall and then works his way in. (Tr. 738). The shot rock is hard, so the loader operator cannot scoop along the ground as he loads rock. He must scoop up material from the top and works his way down. (Tr. 740). In addition, loader operators do not scoop up rock that is within 15 to 20 feet of the highwall. (Tr. 731, 754, 794). As a consequence, the cab of the loader does not normally get any closer than about 40 feet from the highwall. (Tr. 738). He does not believe that the highwall shown in Exhibit 20 presents a hazard of falling rock. (Tr. 742-46). Putzier was the loader operator on the day of the inspection. Putzier testified that he had removed some shot rock in the area cited by Inspector Julien before the photo was taken. (Tr. 755). The rock that was of concern to the MSHA inspector was at least 30 feet away from his loader. (Tr. 747). On at least one occasion after a blast, he has asked that rock be removed from the top of a highwall because it did not look stable to him. (Tr. 753).

Ward Tuttle, the production foreman, testified that he has worked at the quarry for about 17 years and that he spends about half of his time in the pit. (Tr. 762). He also testified that the rock from the highwalls does not slough and that no equipment has been damaged by falling rock. (Tr. 762). Tuttle further testified that cracks and fissures have always been present in the highwalls at the quarry. (Tr. 763).

Mr. Zens has worked at the quarry for 32 years. He has never seen rocks fall from the highwalls. (Tr. 787). He also is not aware of any injuries or equipment damage from falling rocks. He also testified that cracks have always been present in the highwalls and that these cracks do not change in any significant way over time. (Tr. 788). Occasionally, if there is overhanging rock following a blast, a crew will go to the top of the highwall and use equipment to clear it off. (Tr. 791). If rock lower down on the highwall looks like it could fall, Spencer

would not load any shot rock below the area of concern but would wait until the area is blasted again to remove the shot rock. (Tr. 792-93).

As stated above, the Secretary primarily relied on the second sentence of the standard to establish a violation. The Commission has not issued any decisions on this safety standard. Two recent administrative law judge decisions used the Commission's "reasonably prudent person test" to analyze the cited safety standard. (*Martin Marietta Aggregates*, 26 FMSHRC 847, 848 (Nov. 2004); *Chino Mines Co.*, 23 FMSHRC 223, 226 (Feb. 2001)). As with many standards, the language of section 56.3131 is simple and brief in order to be broadly adaptable to myriad circumstances. Such a broadly written standard must give a person of ordinary intelligence a reasonable opportunity to know what is prohibited, so that he may act accordingly. *Alabama By-Products Corp*, 4 FMSHRC 2128, 2130 (December 1992). The mine operator need not have actual notice of a specific requirement, but the standard must provide adequate notice of prohibited or required conduct. *Lanham Coal Co.*, 13 FMSHRC 1341, 1343 (September 1991). The Commission developed the "reasonably prudent person test" to be applied in such circumstances. The 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. *Id.*

The issue here is whether a "reasonably prudent person" would have recognized that the conditions on the highwall cited by Inspector Julien created a fall-of-material hazard. In determining whether a "reasonably prudent person" would have found that the conditions of the highwall were such as to create a hazard, the testimony of "experienced observers" is relevant. *Martin Marietta*, 26 FMSHRC at 848 (*citing Ideal Cement Co.*, 12 FMSHRC 2409, 2416 (November 1990)).

For the reasons set forth below, I find that the Secretary did not establish a violation of the safety standard. Inspector Julien acknowledged that he does not have any special expertise in highwall stability. In addition to high school, Inspector Julien took two years of diesel mechanic training before he started working for MSHA. (Tr. 276, 413). His only work experience in an open pit mine with highwalls was at an aggregates mine. He worked at that mine for a few weeks operating a loader. (Tr. 412). Julien started working for MSHA in 2002. (Tr. 275). He completed the usual new mine inspector training at the Mine Safety and Health Academy before he became an inspector in March 2003. He is also trained to investigate accidents for MSHA. Inspector Julien had never inspected Spencer's quarry before March 1, 2005, but he had accompanied another inspector to quartzite mines in South Dakota prior to this inspection. (Tr. 416). He had never been in the pit at this quarry prior to March 1, 2005.

Quartzite is a very hard, metamorphic rock that is mostly made up of quartz grains that are so completely cemented together that any fracture occurs through the grains rather than around them. (Am. Geological Institute, *Dictionary of Mining, Mineral, and Related Terms* 439 (2nd. Ed. 1997)). A highwall in a quartzite mine has different characteristics than a highwall in an aggregates mine or a limestone mine. Inspector Julien had never been in the pit of the quarry

until the day he issued this citation. He saw the cracks that are typical in a quartzite mine and concluded that certain areas of the highwalls were not stable.

Inspector Julien testified that he based his citation on the second sentence of the safety standard, which provides that "[o]ther conditions at or near the perimeter of a pit or quarry wall which create a fall-of-material hazard to persons shall be corrected." He believed that rock presented a fall-of-material hazard. The citation states that "[s]everal cracks, large rocks, and loose unconsolidated material was observed in the area." He was concerned because "[i]f the highwall were to suddenly slough off and fall, a fatal crushing injury could occur to the loader operator." Inspector Julien did not have any experience or specific knowledge of the characteristics of quartzite or of the history of the highwalls at this quarry. Julien's citation was solely based on his visual observations on the day of the inspection.

The issue is whether a reasonably prudent person would have recognized that the conditions on the highwall cited by Inspector Julien created a fall-of-material hazard. Inspector Julien looked at the rock shown along the top and on the upper left corner of Exhibit G-20 and concluded that it was unstable and could easily fall and hit the loader. Inspector Julien was also concerned about an area in the highwall where it appeared that frozen material could slough and hit the loader. This area is depicted in the center of Exhibit G-20. He reached this conclusion without any knowledge of the pit and its highwalls, without any understanding of the properties of quartzite, and without discussing the matter with management or hourly workers at the quarry. If he were inspecting an aggregates pit or a limestone quarry, such a quick assessment might be warranted, but in this instance the evidence establishes that a more thorough investigation was necessary.

Spencer's witnesses credibly testified that the highwalls at the quarry do not slough and rock does not have the tendency to fall. Rock that may appear to be loose to an inexperienced eye is actually quite secure. Indeed, Mr. Weber testified that one of the rocks that concerned the inspector, shown on left side of the photograph, remained in place after the area was blasted. (Tr. 710-13). The cracks that the inspector observed in that area were not unusual at the quarry. In addition, the loader had not operated directly below the area that Inspector Julien thought was frozen and no loading was to occur until the area was blasted again. If any hazard existed, no miners were exposed to it.

I credit the testimony of Spencer's witnesses concerning the nature of quartzite highwalls at the quarry. I also credit their testimony with respect to the lack of history of rock falling from the highwall and striking equipment in the pit. No miners are present under the highwall when an area is drilled and blasted. If there appears to be unstable rock at the top of the highwall, the evidence establishes that it is removed before loading the rock that was shot. If a loader operator observes any rock that he considers to be unstable, he does not scoop up rock under that area until after the highwall is blasted again. I also credit the testimony of Spencer's witnesses that MSHA's suggestion that the highwalls be scaled may not be prudent. MSHA's witnesses suggested that the loader operator drive his vehicle up onto the shot rock and use the scoop to remove loose rock up on the highwall. From the photos that were introduced at the hearing, it

would appear to me that such a procedure would be rather reckless and foolhardy. In addition, Spencer's witnesses creditably testified that the tires on the loader would be cut up by the sharp, hard, quartzite rock. I do not know whether other means of scaling the highwalls would be feasible. Spencer believes that scaling would loosen rock on the highwall and increase the risk that such rock would subsequently fall.

Inspector Julien testified that he reviewed Mr. Gottheld's report before he went out on his inspection. (Tr. 431-33, 435-36). Although I credit his testimony that he did not feel compelled to issue a citation for the highwalls, I believe that he was influenced by the report. Gottheld's testimony on this citation was not very convincing because it was based solely on his review of photographs that are not very clear. He also acknowledges that he did not have any experience with or expertise in highwalls at quartzite mines. In addition, he testified that *if* the area were unstable, there was a large mass of rock that could fall. He could not affirmatively state that the area was unstable because he was only looking at photographs. As to the supposedly frozen area in the center of the photos, I credited Spencer's evidence that the rock under this area was not going to be loaded until the area was blasted again. This blast would have eliminated the area of concern.

To summarize, I find that Spencer's witnesses were "experienced observers" of the highwalls at the quarry and that, because of this experience, they had greater knowledge of the hazards presented by the highwalls than the inspector. Their testimony, summarized above, was both relevant and credible. Lynn Putzier, the loader operator, has worked at the pit for 15 years and, based on his experience, he did not believe that the cited area presented a hazard. The testimony of the quarry superintendent, assistant superintendent, the production foreman, and the general manager are consistent with Mr. Putzier's testimony on this issue. A reasonably prudent person would not have recognized that the conditions on the highwall cited by Inspector Julien created a fall-of-material hazard. In reaching this conclusion, I am relying on all of the evidence presented, not just the fact that, as of the date of the hearing, no miners have been injured and no equipment has been damaged by rock falling from the cited highwall. For the reasons discussed above, this citation is vacated.

b. Citation No. 7938296

Inspector Julien also issued Citation No. 7938296 under section 104(a) of the Mine Act alleging a violation of section 56.3131 as follows:

Hazardous ground conditions, at the highwall next to the Deister screen, were not corrected. A 1-2 foot vertical crack, as well as several large pieces of unconsolidated material, were observed hanging over the area. A front end loader operates in the area several times per shift, piling rip-rap and moving waste material from the edge of the highwall. If the wall were to suddenly slough off and fall, a fatal crushing injury could occur to the loader operator.

Inspector Julien determined that an injury was reasonably likely and that any injury could reasonably be expected to be fatal. He determined that the violation was S&S and that Spencer's negligence was moderate. The Secretary proposes a penalty of \$154.00 for this citation.

The citation was issued for an area near the primary crusher that was not an active highwall. (Tr. 318). There is a pile of waste rock next to the highwall that is deposited from the crusher. This material is loaded into trucks on a periodic basis. Large rocks are also stored next to another area of the highwall that is sold as rip-rap. The highwall is about 40 feet high. (Tr. 321). The Secretary introduced photographs taken by the inspector to illustrate the alleged violation. (Ex. G-23). Inspector Julien pointed out large cracks and fissures in the photos. (Tr. 323). The cracks are larger at the top than at the bottom. The inspector testified that these cracks demonstrate that the rock is moving because it has "leaned itself out from the top." *Id.* He also testified that there was loose rock along the top of the highwall that could fall and injure the loader operator.

Inspector Julien determined that the violation was S&S based on the size of the fissures and the amount of time that a loader operator is in the area each day. (Tr. 327). He determined that, with the loader digging in the waste pile on a regular basis, it was reasonably likely that rocks would fall and hit the loader operator. Spencer abated the violation by installing a berm along the side of the highwall to prevent anyone from getting too close. (Tr. 329).

Inspector Julien does not know how long the large crack that he testified about has existed in the cited area. (Tr. 408). At first, Inspector Julien testified that the large rocks on the floor of the pit in the first photo of Exhibit G-23 fell from the highwall. (Tr. 420-22). He later admitted that the rock was more likely some of the rip-rap shown in the second photo of the exhibit. (Tr. 426). He admitted that he reached his conclusions that the highwall was unstable based on his visual observations on this single visit to the mine. (Tr. 441).

Mr. Waldera testified that in late 1997 and early 1998, Spencer built a new conveyor and the cited bench was used to anchor one of the supports for the conveyor. (Tr. 647; Ex. G-23; Ex. R-101(a)). Waldera also testified that the cited highwall has not changed since the bench was built in 1997 and the conveyor was installed in 1998. (Tr. 650, 653, 694; Ex. R-101). The crack that Inspector Julien was concerned about was present when the conveyor was installed. Indeed, the footing for the support of the conveyor was intentionally placed six feet away from the crack so that when the concrete for the footing was poured, the crack would not become filled with concrete. (Tr. 651, 692-93). Spencer would not have placed a support for the conveyor on the cited bench if the immediately adjacent highwall was not stable. (Tr. 655).

Mr. Weber testified that the cracks and fissures shown on the first page of Exhibit G-23 have been present for at least 10 years. (Tr. 717, 728). These cracks are not unusual in quartzite highwalls and they have not changed in any significant way over that period of time. (Tr. 717-20). He has not measured the cracks to see if they have gotten larger over time.

Mr. Putzier loaded the shot rock when the cited highwall was created in 1997. (Tr. 748). The cracks that were of concern to the MSHA inspector, as shown in Exhibit 23, existed at the time he loaded the shot rock and they have not changed since that time. *Id.* No blasting has occurred in the area since 1997. (Tr. 751).

Mr. Tuttle accompanied Inspector Julien during his inspection of the highwalls. When the inspector pointed out a crack in the highwall near the large conveyor support, Tuttle advised him that the crack had been present for a long time. (Tr. 766-67; Ex. R-105). Spencer would not have used the bench to support the leg for the conveyor if the company thought that the highwall was not stable. (Tr. 768; Ex. G-23). The crack has not changed since the conveyor was constructed.

The cited highwall is really a small finger that protrudes into the pit along the east highwall. (Ex. R-101a). The cited highwall is on both sides of this finger. No extraction occurs at or near this finger. The primary crusher is located close to the highwall. A large conveyor travels over the top of this finger to a finishing crusher that is located at the top of the quarry near the office. One of the supports for this conveyor is on the finger near the crack that was of concern to Inspector Julien.

For many of the same reasons set forth with respect to the previous citation, I find that the Secretary did not establish a violation. Spencer's witnesses consistently testified that the large crack observed by Inspector Julien was present when the conveyor system was built in 1997. These witnesses testified that, while nobody has measured the crack, it appears to be in the same condition as it was in 1997. Apparently, the engineer who designed the conveyor system was going to have one of the supports directly over the crack. Spencer management had the support moved so that concrete would not pour into the crack when the footing was laid. This conveyor system cost at least a hundred thousand dollars when it was installed. It is highly unlikely that Spencer would risk its investment by placing a major support for the conveyor on a highwall that was unstable. There is no question that the point of the finger looks like it is leaning outward. Mr. Waldera testified that the "natural formation of my quarry has a leaning effect, but it does not change from day to day." (Tr. 636).

I credit the testimony of these "experienced observers" that the structure of the highwall has not moved since the finger was created and that the crack observed by the inspector has remained stable. In addition, the large rocks at the corner shown on the first page of Exhibit G-23 is rip-rap, not rock that had fallen off the face. (Tr. 648, 716, 750, 758). The Secretary did not establish that the rocks that Inspector Julien considered to be loose near the top of the highwall created a safety hazard. When Mr. Gottheld visited the quarry a year earlier, he did not closely examine this area of the quarry. He did not take any photos in this area to illustrate the structural problems that he was concerned about and he did not testify about this highwall at the hearing. For the reasons discussed above, this citation is vacated.

C. Silica Dust Citations.

Inspector Julien testified that he has been thoroughly trained to sample for silica dust and that he has sampled air and noise over a hundred times. (Tr. 334). Julien indicated that inspectors in the metal/non-metal division look to a mine's history of citations alleging overexposure to airborne contaminants, as well as the nature of the mine's products to determine which mines to sample during a particular inspection cycle. (Tr. 332, 336). After scheduling a time to perform the sample with the mine operator, the inspector sets up and calibrates the equipment, attaches it to appropriate miners, allows the equipment to run for the entire working shift, and then mails the sample from the test to a lab for analysis. (Tr. 336-38).

The sampling equipment itself is not complex. Pumps are attached to a miner which draw air and any contaminants into a plastic cyclone which collects and spins the dust, allowing anything 10 microns or less to be caught by the sampling cassette. These sampling cassettes are pre-weighed and numbered. The samples are taken in the air closest to the miner's breathing zone. When the sampling is complete, the cassette is sent to MSHA's laboratory for analysis. (Tr. 338-42).

On March 18, 2005, Inspector Julien sampled for silica dust at Spencer Quarries. (Tr. 331). As stated above, the target of his sample was silica dust ten microns and less. (Tr. 336). On the night before he performed the sampling, Julien calibrated the pumps to a level within the allowed 5 percent variation using the 1.70 liters per minute standard. (Tr. 352-53). The purpose of this calibration was twofold: to ensure the pump was operational and to align the pump's intake to that required by the cassette. (Tr. 347). Julien noted that the elevation where he calibrated the pump and the elevation where he performed the test were within allowable requirements. (Tr. 353). He also noted that the environmental conditions were normal. (Tr. 367).

With the pump fully charged and calibrated, Julien hooked the sampling equipment up to two crusher operators at the beginning of their shifts. Jeremy Zens operated the primary crusher and Dave Duba operated the finish crusher. Julien chose these operators because they worked in areas suspected of high respirable dust exposure. (Tr. 355-56). Once Julien hooked the equipment to the miners, he explained how it functioned and told the miners that they should not allow the pump to tip over, as doing so might void the sample. (Tr. 357-58). Sampling was conducted on the miners from 7:00 a.m. until 4:30 p.m. During the sampling period, Julien checked the equipment on each miner about every two hours to make sure everything was functioning properly. (Tr. 360). Julien testified that nothing unusual occurred during the sampling period. (Tr. 361).

At the conclusion of the shift, Julien removed the sampling equipment from each miner and sealed the cassettes to be mailed to the lab for analysis. Along with the sample cassettes, Julien also shipped an empty cassette, which is the "control blank," to the lab, so that the weight of the empty cassette can be compared to the weight of the sampled cassettes. He chose an empty cassette from the same lot as the sample cassettes. (Tr. 362-64). Julien prepared the

required paperwork and mailed the sealed cassettes to MSHA's laboratory at the Pittsburgh Tech Center. (Tr. 365-66).

When the lab sent the silica analytical report back to Julien, he determined that the two miners had been overexposed to silica dust and that citations should be issued. He based his conclusion on the laboratory report. (Ex. G-27). Julien double checked for any possible errors, but found none. (Tr. 367-69). Julien compared the shift-weighted average value for each sample, which had been prepared by the lab, to the threshold limit value (TLV) for each sample, and adjusted upward by a 20% error factor to ensure the samples were at least 95% accurate. (Tr. 374-76).

James Polizzano, a physical scientist technician with MSHA's Pittsburgh laboratory, testified in detail as to the procedures used by MSHA to test for silica dust. (Tr. 493-534). Polizzano specializes in X-ray powder diffraction. Because he was also the technician who tested the dust samples submitted by Inspector Julien in this instance, he testified as to the steps he took in performing his analysis. *Id*.

1. Citation No. 7938298

Inspector Julien inspected the quarry on March 18, 2005, and issued Citation No. 7938298 under section 104(a) of the Mine Act alleging a violation of section 56.5001(a)/5005 as follows, in part:

The primary crusher operator was exposed to a shift weighted average of .423 mg/m³ of silica bearing dust on 3/18/2005. This exceeded the threshold limit value (TLV) of .14 mg/m³, times the error factor (1.20 for respirable free silica dust sampling and analysis). A respiratory protection program, meeting all the requirements of ANSI Z88.2-1969 was in place, but the crusher operator was not wearing a respirator while in the control booth.

Inspector Julien determined that an illness was reasonably likely and that any illness could reasonably be expected to be permanently disabling. He determined that the violation was S&S and that Spencer's negligence was moderate. The safety standard provides, in part, that "exposure to airborne contaminates shall not exceed, on the basis of a time weighted average, the threshold limit values adopted by the American Conference of Governmental Industrial Hygienists. . . ." Section 56.5005 provides, in part, that when "engineering control measures have not been developed or when necessary by the nature of the work involved . . . , employees may work for reasonable periods of time in concentrations of airborne contaminates exceeding permissible levels if they are protected by appropriate respiratory protective equipment." The Secretary proposes a penalty of \$124.00 for this citation.

Julien determined that the primary crusher operator was overexposed. By multiplying the TLV for the sample (.14 mg/m³) by the error factor for respirable free silica dust sampling and

analysis (1.20), the maximum amount the primary crusher operator would have been permitted to be exposed to during his shift was .168 mg/m³. The shift weighted average of exposure of the primary crusher operator was calculated by the lab to be .423 mg/m³, two and a half times the permissible TLV multiplied by the error factor. (Tr. 374-78; Ex. G-27).

Julien testified that mine operators are expected to know to comply with the TLVs set forth in the 1973 publication of the American Conference of Governmental Industrial Hygienists as adopted by the Secretary in section 56.5001(a). (Tr. 378). At the time of his inspection, Julien noted that several engineering controls were in place, including a respirator program, water sprays, enclosed operator booths, an ion filter, and self-contained air conditioning and heating units. (Tr. 379-84). Following this inspection, Spencer Quarries added double doors to the operator's booth for the primary crusher operator, and the water sprays were put back into operation. (Tr. 383-85).

Inspector Julien determined that the violation was S&S because the crusher operator was only wearing his respirator when working outside of the control booth and the measured overexposure to the silica could lead to permanently disabling illnesses, such as silicosis. (Tr. 396-97).

After issuing the citation, Julien contacted Richard Waldera and discussed ways to eliminate the problem, including changing the insulation in the operator's booth. In July of 2005, Julien took another sample at Spencer Quarries, following the same procedures he followed during his March 2005 sample. This time, the water sprays were in operation. In this sample, the primary crusher operator was again found to be overexposed. (Tr. 399-404). A month later, in August of 2005, Julien performed another sample on the primary crusher operator, following the same procedures as he had before. This time, the primary crusher was within the TLV limits. (Tr. 406-09).

Mr. Waldera testified that from 1997 until March of 2005, Spencer Quarries did not receive any respirable silica dust citations. Waldera testified that he did not test for silica dust in this time period. He also testified that upon receiving the dust citations from MSHA, he conducted his own silica dust tests. (Tr. 656, 697-98). Waldera obtained testing equipment from Energy Laboratories, followed the instructions and sent results back to their laboratory. (Tr. 657-58). Waldera testified that some samples failed, indicating an overexposure, while at least one sample passed. (Tr. 695). He also testified that he has since placed additional engineering controls in effect, such as the installation of new insulation in the control booth, a new self-contained air conditioning unit and a new air purifier. (Tr. 661). New double doors were also installed to keep dust out.

I find that the Secretary established a violation. I credit the testimony of Inspector Julien as to the procedures he used to sample for silica dust. I also credit the testimony of James Polizzano on the analytical methods he used at the MSHA laboratory. Based on this testimony and the exhibits presented, I find that the results of the sampling performed on March 18, 2005, accurately represent the amount of respirable silica dust that was present in the breathing zone of

the primary crusher operator that day. Spencer Quarries did not seriously dispute these results at the hearing. The primary crusher operator was overexposed to silica dust and he was not wearing a respirator.

I find that it was appropriate for MSHA to issue this citation based on a single-shift silica dust survey. I reach this conclusion based on the Commission's decision in *Asarco, Inc.*, 17 FMSHRC 1 (1995), and former Commission Administrative Law Judge Maurer's subsequent analysis in *Asarco, Inc.*, 19 FMSHRC 1097, 1130-1136 (1997). Based on the evidence presented, Judge Maurer concluded that "MSHA's use of single-shift sampling is a reasonable means of ascertaining, to the requisite degree of accuracy, whether the enforcement concentration level standard in section 57.5001(a) has been exceeded." *Id.* at 1136. *See Excel Mining, LLC.*, 22 FMSHRC 318, 319-20 (Mar. 2000) ("We have held that the legal basis for rejecting the use of single-shift sampling in coal mines does not apply to metal/non-metal mines."). *See also Sec'y of Labor v. Excel Mining, LLC*, 334 F.3d 1 (DC Cir. 2003).

I also find that the violation was S&S. The Commission has held that there is a presumption that the violation of the respirable coal dust standard is S&S. *Consolidation Coal Co.*, 8 FMSHRC 890 (June 1986), *aff'd sub nom. Consolidation Coal Co. v. FMSHRC*, 824 F.2d 1071 (D.C. Cir. 1987); *U.S. Steel Mining Co., Inc.*, 8 FMSHRC 1274 (September 1986); *Twentymile Coal Co.*, 15 FMSHRC 941 (June 1993). In those cases, the mine operator violated 30 C.F.R. § 70.100 or §70.101, which apply only to coal mines. The Commission reached this conclusion because an analysis of the four elements of the S&S test would be essentially the same in each instance in which the Secretary proves a violation of the health standard. This presumption was based, in large part, on the legislative history of the Mine Act. The Commission noted that "prevention of pneumoconiosis and other occupational illnesses is a fundamental purpose underlying the Mine Act." 8 FMSHRC at 895. The Commission has not directly applied this presumption to silica dust violations. Consequently, I have not relied on the presumption in reaching my S&S findings.

I find that a violation occurred that contributed to a discrete health hazard. I also find that the evidence establishes that there was a reasonable likelihood that the hazard contributed to by the violation would result in an illness of a reasonably serious nature. As stated above, the primary crusher operator was exposed to more than two times the level of silica dust permitted under the TLV. The water sprays were not operating on the crusher and the crusher operator was not wearing a respirator while he was in the control booth. Spencer did not have in place a program for monitoring the crusher operator's exposure to silica dust so it had no way of knowing whether the crusher operator was being over exposed. Taking into consideration continuing mining operations, I find that the violation was S&S and very serious.

Spencer Quarries argues that it upgraded the control booth in 1997 to keep dust out. As a consequence, no citations were issued for respirable dust after these renovations were made until the present inspection. It believes that these steps should be "considered as a mitigating factor." (Tr. 552). Spencer believes that its negligence should be low and that the penalty should be reduced to reflect the efforts it has made to protect the health of the primary crusher operator. I

disagree with Spencer's position and find that its negligence was moderate to high based on the evidence summarized above. A penalty of \$300.00 is appropriate.

2. Citation No. 7938299

Inspector Julien also issued Citation No. 7938299 under section 104(a) of the Mine Act which also alleged a violation of section 56.5001(a)/5005 as follows, in part:

The finish crusher operator was exposed to a shift weighted average of .398 mg/m³ of silica bearing dust on 3/18/2005. This exceeded the threshold limit value (TLV) of .13 mg/m³, times the error factor (1.20 for respirable free silica dust sampling and analysis). A respiratory protection program, meeting all the requirements of ANSI Z88.2-1969 was in place, but the crusher operator was not wearing a respirator while in the control booth.

Inspector Julien determined that an illness was reasonably likely and that any illness could reasonably be expected to be permanently disabling. He determined that the violation was S&S and that Spencer's negligence was moderate. The Secretary proposes a penalty of \$124.00 for this citation.

Inspector Julien and Mr. Polizzano followed the same procedures and performed similar calculations as discussed with respect to the previous citation. The results obtained by the MSHA laboratory showed that the crusher operator was exposed to .398 mg/m³, which was about two and a half times higher than the TLV. (Ex. G-27). I find that the sampling performed on March 18, 2005, accurately represents the amount of respirable silica dust that was present in the breathing zone of the finish crusher operator that day.

The evidence and arguments with respect to this citation were the same as with the previous citation. Spencer was able to terminate this citation after he sampled for dust again in July 2005. As with the previous citation, Spencer instituted additional engineering controls to bring the finish crusher into compliance.

I find that the Secretary established a violation for the reasons stated above. I make the same findings with respect to gravity and negligence. The violation was S&S. A penalty of \$300.00 is appropriate.

II. APPROPRIATE CIVIL PENALTIES

Section 110(i) of the Mine Act sets out six criteria to be considered in determining appropriate civil penalties. The quarry has a history of three paid violations in the two years prior to May 12, 2004, and a history of one paid violation in the two years prior to March 1, 2005, excluding the citations at issue in these cases. (Ex. G-1). Spencer is a rather small operator; it had 19 employees in 2004 and 2005 and worked about 38,000 hours each year. All

of the violations were abated in good faith. The penalties assessed in this decision will not have an adverse effect on Spencer's ability to continue in business. My gravity and negligence findings are set forth above. Based on the penalty criteria, I find that the penalties set forth below are appropriate.

III. ORDER

Based on the criteria in section 110(i) of the Mine Act, 30 U.S.C. § 820(i), I assess the following civil penalties:

Citation No.	30 C.F.R. §	Penalty
CENT 2004-227-M		
7915361	56.15005	\$200.00
7915362	56.1101	150.00
7915363	56.12004	50.00
7915364	56.14100(b)	Vacated
7915366	47.41(a)	50.00
7915368	47.41(a)	Vacated
CENT 2004-245-M		
7915369	56.14100(b)	\$60.00
CENT 2005-182-M		
7938296	56.3131	Vacated
CENT 2005-215-M		
7938295	56.3131	Vacated
CENT 2005-256-M		
7938299	56.5001(a)/.5005	300.00
CENT 2006-056-M		
7938298	56.5001(a)/.5005	300.00
	TOTAL PENALTY	\$1,110.00

28 FMSHRC 1033

Accordingly, the citations contested in these cases are AFFIRMED , MODIFIED , or VACATED as set forth above and Spencer Quarries, Inc., is ORDERED TO PAY the Secretary of Labor the sum of \$1,110.00 within 30 days of the date of this decision. Upon payment of the penalty, these proceedings are DISMISSED .		
Richard W. Manning Administrative Law Judge		
Administrative Law Judge		
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