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Secretary of Labor,  
Complainant,

v.

Cumbie Concrete Company, Inc.,  
Respondent.

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OSHRC Docket No. **96-1627**

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**APPEARANCES:**

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Office of the Solicitor  
U. S. Department of Labor  
Atlanta, Georgia  
For Complainant

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Tallahassee, Florida  
For Respondent

Before: Administrative Law Judge Ken S. Welsch

**DECISION AND ORDER**

Cumbie Concrete Co., Inc., (Cumbie) is engaged in concrete work in Tallahassee, Florida. After employees cut holes in a concrete floor with a propane powered saw on May 31, 1996, at the Florida State University library, the hospital's blood tests found that three of Cumbie's employees were exposed to carbon monoxide. An inspection was conducted by the Occupational Safety and Health Administration (OSHA), which resulted in Cumbie receiving three citations. Cumbie timely contested the citations.

Serious citation no. 1 alleges that Cumbie failed to have available material safety data sheets (MSDS), in violation of § 1926.59(g)(8) (item 1a); failed to provide training on chemicals used in the work area, in violation of § 1926.59(h) (item 1b); failed to inform employees on hazards associated with their job, in violation of § 1926.21(b)(2) (item 1c); failed to have a written respirator program, in violation of § 1926.103(e)(1) (item 2a); failed to provide the correct respirator for the job, in violation of § 1926.103(g)(2) (item 2b); failed to ensure proper selection of a respirator, in violation of § 1926.103(g)(4) (item 2c); and failed to train employees

on the selection of a respirator in violation of § 1926.103(g)(5) (item 2d). The serious citation proposed penalties totaling \$5,000.

Willful citation no. 2 alleges that Cumbie failed to implement feasible administrative or engineering controls, in violation of § 1926.55(b), to reduce employees' exposure to carbon monoxide, which was generated by operating a propane powered saw. The willful citation proposed a penalty of \$35,000.

The "other" than serious citation no. 3 alleges that Cumbie failed to provide employees with face and eye protection adequate for the hazards of cutting concrete.

The hearing was held on May 20, 1997, in Tallahassee, Florida. Jurisdiction and coverage was admitted (Tr. 6). Both parties submitted briefs supporting their positions. Cumbie's argument that it was unaware of the carbon monoxide exposure is rejected. The violations, except for § 1926.21(b)(2) which is considered duplicative, are affirmed as non-willful.

#### *The Accident*

Cumbie's principal place of business is in Tallahassee, Florida. Cumbie performs concrete work, including concrete demolition work. Cumbie employs approximately 40 employees.

In May 1996 Anaco Electric contracted Cumbie to cut openings for electrical boxes in the concrete floor in the computer room of the Galvin Strozier Library at Florida State University (Tr. 14-15). Anaco Electric was the electrical subcontractor for the general contractor Biltmore Construction Company. Biltmore was hired to renovate the library.

The library's computer room, located in the annex on the first floor, is 39 feet by 24 feet with an 11-foot ceiling (Tr. 118). There are two doorways to the library along one wall, one doorway on another wall and no windows in the room (Tr. 118). When Cumbie began its work, newly installed carpeting was in the rooms outside the computer room (Tr. 16, 118). Beneath the computer room, there was a room with shelves of old books (Tr. 16).

Because of a concern for dust escaping from the computer room where Cumbie was working, the doorways were encased in visqueen, a plastic sheeting material. The visqueen was secured to the door openings with duct tape to confine the dust to the room (Tr. 16-17, 26, 35-37). Also, because there were old books in the room below the computer room, it was decided that water, except in small spray mist bottles, could not be used to control the dust levels (Tr. 16,

31). A negative air machine, provided by Biltmore, was used to draw the dust out of the room (Tr. 16, 18).

Unlike other rooms in the library, the thickness of the concrete floor in the computer room was in excess of 5 inches. It was decided that a pneumatic saw could not be used (Tr. 194, 202). Instead, Cumbie used a propane powered concrete saw on wheels with a specially ordered 15-inch diamond-impregnated blade (Tr. 257). Cumbie considered that unlike a gasoline saw, propane was cleaner burning and more suitable for indoor work (Tr. 213).

On Wednesday night, May 29, 1996,<sup>1</sup> Cumbie employees Travis Asbell, saw operator, Willie Atkinson, laborer, and Kingsley Montequé, laborer, performed the concrete cutting in the computer room. The work started at approximately 10:00 p.m. with setting up the visqueen over the doorways (Tr. 43, 73, 198). Cumbie could not work during the day because the library was open to students until midnight. The employees were provided dust masks, safety glasses and gloves. After showing them the job and watching them get started, Ralph Gemmill, superintendent, went home to sleep.

During the night, Asbell testified that while operating the saw, he felt dizzy, light-headed and he had a real bad headache. It was dusty and he could smell “the heat and exhaust coming from the saw” (Tr. 40-41). Asbell described working in the computer room as working in a “flour bag” (Tr. 40). After cutting for an hour, Asbell testified that the saw started acting like it was running out of gas; revving up and then back down. Also, the blade got hot and bent in the concrete (Tr. 44-45). Gemmill was called at home and he returned to the library at approximately 2:00 a.m. Gemmill operated the saw for a while and found no problem. He instructed the employees to continue cutting. Gemmill testified that the employees did not tell him that they were feeling sick nor did he smell any fumes or exhaust (Tr. 200). IH Joseph Roesler testified that Atkinson stated that he told Gemmill the employees were not feeling well (Tr. 162). Regardless, Gemmill returned home without making any changes (Tr. 46-47). The employees worked until approximately 5:00 a.m., cleaned up and left the site.

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<sup>1</sup>The citation incorrectly considered Wednesday as May 30, 1996. A review of a 1996 calendar shows that Wednesday was May 29, Thursday was May 30 and Friday was May 31, 1996.

On Thursday evening, Gemmill, Asbell, Atkinson and J.D. Carper<sup>2</sup> returned to the computer room at approximately 11:00 a.m. replaced the visqueen and started cutting with the propane saw (Tr. 50). Gemmill remained in the computer room for a while to get things started. He then checked the other rooms to see if any dust had escaped and went outside to check the tube from the negative air machine to see if it was functioning. Afterwards, Gemmill went to his truck to sleep (Tr. 266). Asbell began feeling sick. The employees took a break. Asbell laid down outside and blacked out. Atkinson found Gemmill and told him that Asbell and Carper were ill (Tr. 55-56). Gemmill saw the employees outside and returned to the computer room with Carper and Atkinson. He started operating the saw and within 15 minutes, he stopped and shut down the job. Gemmill testified that he became light-headed and related the feeling to a previous experience when he thought he had been exposed to carbon monoxide (Tr. 59, 245, 256). At the time Gemmill shut the job down, Atkinson had a bad headache, Asbell was sick and Carper was laying down (Tr. 244). It was approximately 5:00 a.m. The employees returned to their homes.

Asbell was still feeling ill Friday morning and was taken by his wife to the hospital (Tr. 61). He was given oxygen and his blood was tested for carbon monoxide (Tr. 63). His carboxyhemoglobin level was 20.2 percent (Exh. C-2). The hospital telephoned Cumbie. Carper and Atkinson were taken to the hospital for treatment. Their carboxyhemoglobin levels were 12.5 percent for Atkinson and either 13.2 or 10.2 percent<sup>3</sup> for Carper (Exh. C-2). According to Dr. Steven A. Dawkins, doctor of occupational medicine and the Secretary's expert witness, a carboxyhemoglobin level of 5 percent or higher indicates an exposure to carbon monoxide above the threshold limit value of 50 parts per million (Tr. 95). Cumbie stipulates to Dr. Dawkins' expertise (Tr. 85).

On June 5, 1996, Cumbie rented a pneumatic saw and used a hammer to finish cutting out the remaining holes in the computer room (Tr. 253, 260). On June 5, 1996, compliance/industrial hygienist (IH) Joseph Roesler of OSHA initiated a complaint inspection of the accident (Tr. 112). He reviewed Cumbie's hazardous communication program, interviewed the employees and the

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<sup>2</sup>Carper (also referred to as J.D. Harper, and J.D. Carter in the transcript) replaced Montequ (Tr. 50, 236).

<sup>3</sup>The percent number is not clear in the medical report.

general contractor, Biltmore Construction, and viewed the computer room. Cumbie was no longer working in the computer room during OSHA's inspection.

At the hearing, the parties stipulated the following facts (Tr. 6-9):

1. At all material times, Travis Asbell, Willie Atkinson, and J.D. Carper were employed by Cumbie.
2. The carboxyhemoglobin levels contained in the medical records from Tallahassee Community Hospital are accurate reflections of the results of the tests performed.
3. Cumbie did not possess and maintain an MSDS for propane on June 5, 1996.
4. Cumbie's employees at the library work site were not trained in the hazards associated with silica dust or the hazards associated with exhaust fumes generated by a propane powered saw.
5. Cumbie did not have a written respirator program, had not performed random inspections of its respirators by a qualified person within the six months preceding May 30, 1996, and had not provided its employees who were cutting concrete with training by a competent person in respirator selection, use and maintenance. Cumbie stipulates that it did not comply with the § 1926.103 written respirator program. Cumbie, however, does not agree that a written respirator program was required.

#### Discussion

To establish a violation of a safety standard, the Secretary must show by a preponderance of the evidence that: (1) the cited standard applies to the alleged condition; (2) the terms of the standard were not complied with; (3) employees were exposed to or had access to the violative condition; and (4) the employer knew or could have known of the violative condition with the exercise of reasonable diligence. *Seibel Modern Manufacturing & Welding, Corp.*, 15 BNA OSHC 1218, 1221-1222 (No. 88-821, 1991).

There is no argument that Cumbie's work in the computer room constitutes construction activities within the meaning of Part 1926. Cumbie, also, does not dispute that the environmental control of fumes standard and the hazard communication standard at §§ 1926.55 and 1926.59 applied to its work in the computer room. Further, Cumbie does not dispute that employees were exposed to carbon monoxide and dust.

Cumbie disputes whether the standards cited were violated and whether Cumbie knew or should have known of the exposure to carbon monoxide. Also, Cumbie argues that respiratory protection standards were not required at the computer room.

#### SERIOUS CITATION NO. 1

##### Item 1a - Violation of § 1926.59(g)(8)

The citation alleges that “on or about 6/5/96, the employer had not ensured that all of the material safety data sheets (MSDS) were made available at the worksite for such hazardous materials as, but not limited to propane.” Section 1926.59(g)(8) provides that:

The employer shall maintain in the workplace copies of the required material safety data sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s).

There is no dispute that Cumbie did not maintain an MSDS for propane at the library project during May 30-31, 1996. Ralph Gemmill, Cumbie’s former overall job superintendent, acknowledged that no MSDS for propane was at the library (Tr. 246). Propane was used to power the saw to cut the concrete floor. Also, no MSDS for propane was maintained at Cumbie’s office on June 5, 1996 (Cumbie Stipulation).

An MSDS for propane is required. The standard requires an employer to have an MSDS for each “hazardous chemical” which it uses. A hazardous chemical is defined at § 1926.59(c) as “any chemical which is a physical hazard or a health hazard.” The MSDS for propane identifies it as a health hazard that may be harmful to the central nervous system and the affects include headache, dizziness, convulsion, loss of consciousness, coma, respiratory arrest and death (Exh. C-3). Propane is a hazardous chemical.

Cumbie argues that on June 5, 1996, the work at the library had been completed and the propane powered saw was not used after May 31, 1996. Also, on June 5, 1996, Cumbie argues that the propane was impounded at its office by OSHA (Cumbie Brief, p. 13).

IH Joseph Roesler testified that on June 5, 1996, propane for the saw was stored at Cumbie’s office in Tallahassee, Florida. Employees working at the office had access to the stored

propane (Tr. 124). Cumbie's argument that the propane was impounded misconstrues the testimony of Roesler. IH Roesler stated that the saw was impounded; not the propane (Tr. 181).

The standard requires the MSDS to be maintained in the "workplace." A "workplace" is "an establishment, job site, or project, at one geographical location containing one or more work areas." See § 1926.59(c) definitions. Cumbie stored and made accessible to employees the propane at its office on June 5, 1996. The office was a workplace. Therefore, an MSDS was required on June 5, 1996.

Further, the citation is amended *sua sponte* to reflect more clearly the use of propane on May 30 to June 1. Cumbie used the propane to power its slab saw at the library. See *A. L. Baumgartner Construction, Inc.*, 16 BNA OSHC 1995, 1997 (92-1022, 1994). Cumbie is not prejudiced by the amendment. The citation refers to "on or about" June 5, 1996. Also, the hearing related to conditions on May 30-31 and the affects of the propane powered saw in the computer room. Cumbie failed to maintain an MSDS for propane in violation of § 1926.59(g)(8).

#### Item 1b - Violation of § 1926.59(h)

The citation alleges that "[o]n or about 5/30/96, and 5/31/96, the employees engaged in, but not limited to cutting concrete using a propane powered saw, were not provided training for chemicals such as concrete dust containing silica and exhaust gases generated by a propane powered saw." Section 1926.59(h) provides that:

Employers shall provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new physical or health hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (*e.g.*, flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and material safety data sheets.

The standard requires an employer to train employees in the hazard associated with the use of hazardous chemicals in their work place. As stated, propane is a hazardous chemical. The record is uncontradicted that employees working at the library were not trained as to the hazard associated with the use of propane to power the slab saw (Tr. 66, 133, 246). Superintendent

Gemmill told IH Roesler that he had some training because he had gone to some toolbox meetings of the general contractor. However, the employees did not attend the meetings and Gemmill did not give the information to employees (Tr. 134). Gemmill testified that there was no training for employees on propane (Tr. 246). Gemmill explained that the employees were experienced, and he assumed they did not need training (Tr. 220). An employer cannot rely entirely on the prior training or experience of its employees in lieu of providing specific instruction tailored to the job at hand. *A. P. O'Horo Co.*, 14 BNA OSHC 2004, 2010 (No. 85-369, 1991). According to Travis Asbell, saw operator, no one at Cumbie asked about his prior training (Tr. 78). Cumbie stipulates that it did not train its employees at the library project in the hazards associated with exhaust fumes generated by a propane powered saw and with silica dust (Tr. 7).

In addition to propane, OSHA alleges that Cumbie failed to train employees on the hazards associated with silica dust. However, the record fails to establish the presence of silica dust in the computer room. IH Roesler testified that no air samples were obtained at the library (Tr. 179). Therefore, the Secretary failed to show the need for training on the hazards associated with silica dust.

The violation is affirmed with regard to the failure to train employees on the hazards associated with using propane.

#### Item 1c - Violation of § 1926.21(b)(2)

The citation alleges that “[o]n or about 6/5/96, the employer had not informed their employees on the hazards associated with the tasks that they were to perform, such as concrete demolition including cutting and core drilling, where significant dust exposure was created and the hazards of exposure to the exhaust emissions from the propane powered saw were present.”

Under an employer’s responsibility, Section 1926.21(b)(2) requires that:

The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.

There is no dispute that Cumbie did not maintain an MSDS for propane and failed to train its employees in the hazards associated with propane. Other than the conditions already



addressed by the previous standards cited, the Secretary failed to identify other unsafe conditions in which Cumbie failed to train its employees. The record failed to show that Cumbie did not train its employees on the hazards associated with cutting and core drilling concrete. IH Roesler testified that Cumbie had an adequate written safety program (Tr. 139, 186). Without identifying other unsafe hazards not covered by §§ 1926.59(g)(8) and 1926.59(h), a violation of § 1926.21(b)(2) is vacated.

Item 2a - Violation of § 1926.103(e)(1)

The citation alleges that “[o]n or about 5/30/96 and 5/31/96, the employer had not established a written respirator program to aid employees in the use, care and selection of the respirators for but not limited to carbon monoxide and silica. The written respirator program shall include elements from 29 C.F.R. §§ 1926.103(e)(2) through (e)(11).” Section 1926.103(e)(1) requires as minimum requirements for an acceptable program that:

Written standard operating procedures governing the selection and use of respirators shall be established.

Cumbie stipulates that it did not have a written respirator program and had not performed random inspections of its respirators by a qualified individual to ensure proper selection. Employees were not provided with training by a competent person on respirator selection, use and maintenance (Tr. 7-8). Ralph Gemmill, Cumbie’s former overall demolition superintendent, testified that he had not seen a written respirator program at Cumbie (Tr. 248).

Cumbie argues, however, that it was not required to comply with the respirator requirements. It did not and could not, with the exercise of reasonable diligence, know of the presence of carbon monoxide in the computer room (Cumbie Brief, p. 15).

It is undisputed that employees working in the computer room wore Muldex 21C NIOSH (National Institute for Occupational Safety and Health) approved respirators for dust, fumes, and mist (Tr. 187-188). The Muldex respirator is described as a paper face mask, like a doctor uses. It is cup shaped, fitting over the nose and mouth and held by two straps around the head (Tr. 41, 187).

IH Roesler testified that a written respirator program was required because the exposure to carbon monoxide exceeded the permissible exposure level (PEL) of 50 parts per million (Tr. 142, *see* Subpart Z, § 1910.1000, Table Z-1). He stated that a written respiratory program is required when an employer elects to use respiratory protection at its work site or when employees are exposed to concentrations of carbon monoxide in excess of the permissible exposure levels.

Section 1926.103(a) requires a respiratory program “in emergencies, or when controls (engineering) . . . either fail or are inadequate to prevent harmful exposure to employees, (then) appropriate respiratory protective devices shall be provided by the employer and shall be used.” Therefore, in this case the standard requires a showing that employees were exposed to harmful levels of carbon monoxide.

Cumbie does not dispute that employees were exposed to carbon monoxide or the carboxyhemoglobin levels found by the hospital during the blood tests. Also, Cumbie does not dispute the correlation described by Dr. Steven Dawkins between the carboxyhemoglobin levels found by the hospital to the PEL for carbon monoxide adopted by OSHA (Tr. 95). Using this correlation, the exposure to carbon monoxide by the three employees working in the computer room exceeded 100 parts per million (Tr. 95). The PEL established by OSHA is 50 part per million. *See* § 1910.1000, Table Z-1. Therefore, the record establishes that the employees were exposed to harmful levels of carbon monoxide.

In addition to showing harmful levels of carbon monoxide, the Secretary must also show that Cumbie should have known with the exercise of reasonable diligence of the employees’ exposure to carbon monoxide. An employer’s failure to perceive the violative conditions as hazardous is not a defense to the citation. An employer has a duty to inspect its work area for hazards. It must make reasonable efforts to anticipate the particular hazards to which its employees may be exposed in the course of their scheduled work. *Automatic Sprinkler Corp. of America*, 8 BNA OSHC 1384, 1387 (No. 76-5089, 1980); *Pace Constr. Corp.*, 14 BNA OSHC 2216, 2221 (No. 86-758, 1991). Further, constructive knowledge may be predicated on an employer’s failure to establish an adequate program to promote compliance with a safety standard. *Pride Oil Well Service*, 15 BNA OSHC 1809, 1814 (No. 87-692, 1992).

Cumbie did not have a written respirator program despite having employees exposed to “extremely dusty” conditions (Tr. 263). Also, Cumbie failed to show that it maintained an

appropriate monitoring or inspection program of its worksite. *See Milliken & Co.*, 14 BNA OSHC 2079, 2083 (No 84-767, 1991), *aff'd* 947 F.2d 1483 (11th Cir. 1991). There is no evidence that Cumbie performed any atmospheric monitoring to know whether the levels of carbon monoxide were harmful. Ralph Gemmill, former superintendent, testified that he did not know that incomplete combustion can cause carbon monoxide. He “never knew that propane put off carbon monoxide, thought it was not a by-product” (Tr. 240, 243).

Also, the work was performed in a visqueen, sealed room while employees operated a large propane powered concrete saw. Three employees worked in the sealed room from 11:00 p.m. to 6:00 a.m. on a project Cumbie anticipated would take two days (Tr. 213). The room had no forced ventilation. There were areas where the visqueen was not taped, which permitted the flow of air.

However, there was no method utilized which assured the flow of fresh air into the room.

Although it may not have known that employees’ exposure would exceed the PEL for carbon monoxide, Cumbie should have known of the potential exposure to carbon monoxide from operating the saw in an enclosed room. The MSDS for propane, which Cumbie did not maintain, plainly states that carbon monoxide may be generated when propane is burned in an oxygen deficient atmosphere (Exh. C-3). Cumbie relied on a negative air machine without doing any atmospheric testing or monitoring in the room to determine oxygen levels and exposure to carbon monoxide. Also, Gemmill was aware of complaints on Wednesday and Thursday nights about the operation of the saw, its blade and its tendency to increase and decrease its speed of revolution (Tr. 198). Gemmill knew that the saw had an internal combustion engine and knew it emitted an exhaust (Tr. 213).

Cumbie’s argument that it was unaware of the potential for carbon monoxide is rejected. The violation is affirmed.

#### Item 2b - Violation of § 1926.103(g)(2)

The citation alleges that “the employer had not specified the correct respirator for each job. Employees were exposed to such hazards as carbon monoxide and silica at the worksite.” Section 1926.103(g)(2) requires that:

The respirator type is usually specified in the work procedures by a qualified individual supervising the respiratory protective program. The individual issuing them shall be adequately instructed to insure that the correct respirator is issued.

The exposure to carbon monoxide in excess of the PEL was documented by the hospital records and the testimony of Dr. Steven Dawkins, occupational medicine physician. According to Dr. Dawkins, a 5 percent carboxyhemoglobin level correlates to the PEL of 50 parts per million for carbon monoxide (Tr. 95). The carboxyhemoglobin level for the three employees working in the computer room on the night of May 31, 1996, exceeded 10 percent with the highest of 20.2 percent (Exh. C-2).

Under Table E-4 of § 1926.103, the selection of an appropriate respirator for oxygen deficiency requires a “self-contained breathing apparatus. Hose mask with blower. Combination air-line respirator with auxiliary self-contained air supply or an air-storage receiver with alarm.” The Muldex 21C type respirator is not self-contained air line respirator (Tr. 187). However, the record does not show Gemmill’s training, or the basis for his selection (Tr. 149). The Muldex is the wrong respirator for the potential conditions in the computer room.

The violation is affirmed.

Item 2c - Violation of § 1926.103(g)(4)

The citation alleges that “the employer did not have a qualified individual inspection to ensure proper selection, use, cleanliness and maintenance of the respirators.” Section 1926.103(g)(4) provides that:

Respiratory protection is no better than the respirator in use, even though it is worn conscientiously. Frequent random inspections shall be conducted by a qualified individual to assure that respirators are properly selected, used, cleaned, and maintained.

Cumbie stipulates that it did not have a respiratory protection program (Tr. 7-8). Other than providing the Muldex 21C respirator to employees, there is no showing that Ralph Gemmill, former superintendent, was conducted or was qualified to conduct random inspections to assure the Muldex was the proper respirator for the conditions in the computer room. Gemmill was in charge of selecting the respirator. Gemmill told IH Roesler that he had selected only a dust mask

(Tr. 149). Gemmill, however, was not familiar with the properties of propane or hazards associated with using it to power a concrete saw in an enclosed, sealed room (Tr. 240, 243). Although Gemmill was in the computer room at the beginning of each shift and at least once during the shift, there is no evidence that he inspected the atmospheric conditions in the room or the Muldex dust mask used by the employees. The violation is affirmed.

Item 2d - Violation of § 1926.103(g)(5)

The citation alleges that “the employer had not ensured that the employees and the supervisors were trained by a competent person on the selection, use, and maintenance of the respirators provided.” Section 1926.103(g)(5) provides that:

For safe use of any respirator, it is essential that the user be properly instructed in its selection, use, and maintenance. Both supervisors and workers shall be so instructed by competent persons. Training shall provide the men an opportunity to handle the respirator, have it fitted properly, test normal air for a long familiarity period, and, finally, to wear it in a test atmosphere.

Gemmill testified that he held classes for employees on why to wear a dust mask and how to put it on (Tr. 247). Such limited training is inadequate and does not comply with the standard. There was no information given to employees as to the selection of the respirator or its use and maintenance. None of the employees told IH Roesler that they were trained on how to use, clean, and maintain the respirator (Tr. 152). The saw operator, Travis Asbell, testified that he received no training on respirators (Tr. 66). The use of a respirator was optional for employees. The violation is affirmed.

Serious Classification for Citation No. 1

In determining whether the violations identified in citation no. 1 are serious within § 17(k) of the Occupational Safety and Health Act (Act), the Secretary must show that Cumbie knew or should have known, with the exercise of reasonable diligence, of the presence of the violative conditions and that there was a substantial probability that death or serious physical harm could result from the conditions.

As discussed, the record establishes that Cumbie should have known, with the exercise of reasonable diligence, of the lack of an MSDS for propane, the failure to train employees on propane and failure to have a written respiratory program for the selection of respirators. Because of Cumbie's failure to know the hazards associated with working with propane and selecting the respirator, the issue is whether the resulting injury would likely be death or serious harm if an accident should occur. *Whiting-Turner Contracting Co.*, 13 BNA OSHC 2155, 2157, 1989 CCH OSHD ¶ 30,148, p. 41,478, n. 5 (No. 91-862, 1993).

As described by Travis Asbell and Ralph Gemmill, the resulting injuries to employees were serious. Employees blacked out and suffered light-headedness, dizziness, headaches, and nausea while working with the concrete saw (Tr. 40, 49, 55, 203, 244, 256). Dr. Dawkins testified that at 20 percent level carboxyhemoglobin, an individual would experience nausea and vomiting (Tr. 105). Asbell's carboxyhemoglobin level was still 20.2 percent several hours after the job was shut down.<sup>4</sup> Therefore, the violations of §§ 1926.59(g)(8), 1926.59(h), 1926.103(e)(1), 1926.103(g)(2), 1926.103(g)(4) and 1926.103(g)(5) are serious.

#### Penalty Considerations for Citation No. 1

The Commission is the final arbiter of penalties in all contested cases. In determining an appropriate penalty, the Commission considers the size of the employer's business, history of previous violations, the employer's good faith, and the gravity of the violation. Gravity is the principal factor to be considered.

Cumbie employs 35 - 40 employees. There were 3 - 4 employees working in the computer room at the library (Tr. 185). OSHA gave Cumbie 40 percent credit for size (Tr. 131). Cumbie is also entitled to credit for history and good faith. There is no record that Cumbie has received a citation in the past (Tr. 131, 181). Also, there is no evidence that Cumbie was uncooperative during the inspection. Cumbie's written hazardous communication program was not considered deficient by OSHA (Tr. 186).

For violations of §§ 1926.59(g)(8), and 1926.59(h) (items 1a, 1b), a grouped penalty of \$1,500 is reasonable. There is no dispute that Cumbie failed to maintain an MSDS for propane

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<sup>4</sup>Hospital records indicate that Asbell was at the hospital at 8:42 a.m. (Exh C-2).

and train employees associated with working in an enclosed space while burning propane. Three employees worked two shifts of six to eight hours each. The employees suffered dizziness, nausea, and black outs. The employees went to the hospital and received oxygen. Asbell spent time in a hyperbaric chamber (Tr. 64).

For violations of §§ 1926.103(e)(1), 1926.103(g)(2), 1926.103(g)(4) and 1926.103(g)(5) (items 2a, 2b, 2c, 2d), a grouped penalty of \$2,300 is reasonable. Cumbie used an inappropriate respirator for the conditions. It was ineffective for the hazards associated with burning propane in an enclosed room. Three employees were exposed and suffered serious health conditions.

## WILLFUL CITATION NO. 2

### Item 1a - Violation of § 1926.55(b)

The citation alleges that “employees working in the Strozier Library on Florida State University campus were overexposed to carbon monoxide which was generated by a faulty operating, propane gas powered saw.” Also, it alleges that “The employer failed to assure that engineering controls in place were adequately operated and maintained to assure a safe working environment.” Section 1926.55(b) provides that:

To achieve compliance with paragraph (a) of this section, administrative or engineering controls must first be implemented whenever feasible. When such controls are not feasible to achieve full compliance, protective equipment or other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed in this section. Any equipment and technical measures used for this purpose must first be approved for each particular use by competent industrial hygienist or other technically qualified person. Whenever respirators are used, the use shall comply with 1926.103.

There is no dispute that Cumbie used a negative air machine and employees wore dust masks in the enclosed computer room while cutting holes in the concrete floor with a propane powered saw. The purpose of the negative air machine was to draw the dust from the room to the outdoors. The negative air machine was provided by the general contractor and was the type used in asbestos abatement (Tr. 17-18, 158, 195). The filters to the negative air machine were checked and replaced repeatedly during the two nights (Tr. 21, 23, 196). However, the computer

room was sealed with visqueen. In certain small places where the visqueen was not taped, small amounts of air could pass into the room. The room was not completely air tight (Tr. 196-197). However, the room needed to be sealed sufficiently to prevent the escape of dust to other rooms in the library. If there was no air in the room, the tubing for the negative air machine to the outside would have collapsed. According to Gemmill, he repeatedly checked the tubing and there was no collapsing (Tr. 196). However, there was no fresh air forced into the room. Also, there was no evidence that Cumbie performed air flow monitoring to show the amount of ventilation, nor was any other ventilation provided to the room.

Although a negative air machine may be used for asbestos abatement, employees working in an asbestos-regulated area should wear air purifying or supplied air respirators, not dust masks as used by Cumbie (*See* § 1926.1101(h)(2) construction asbestos standard for respirators). Also, the ventilation in the asbestos-regulated area must be able to move air contaminants away from employees (*See* § 1926.1101(g)(1)(iii)).

It is undisputed that three Cumbie employees working in the computer room were exposed to an excessive amount of carbon monoxide from the operation of a propane powered concrete saw. IH Roesler testified that the employees should have been protected with appropriate respiratory protection. He also opined that a pneumatic saw instead of propane powered saw could have been utilized (Tr. 189). Ralph Gemmill, former superintendent, acknowledged that a pneumatic saw was used to complete the job (Tr. 253-254).

The record establishes, therefore, that engineering controls and alternative protective equipment could have been utilized if Cumbie knew or should have known, with the exercise of diligence, of the potential for carbon monoxide exposure. Although propane may be a clean burning fuel and suitable for some indoor uses, Cumbie used it to power a combustible engine in an enclosed/sealed room. According to the MSDS, propane should be used in a opened, well ventilated room (Exh. C-3). The MSDS which Cumbie did not maintain plainly advises against burning propane in an oxygen deficient environment. Gemmill agreed that the computer room was not a well ventilated room (Tr. 244). Gemmill described the work in the computer room as an “extremely dusty job, I’ll not deny it” (Tr. 263).

There is no evidence that the concrete saw was faulty (Tr. 179). Also, Gemmill denied that until he shut the job down, he was unaware that employees were feeling ill from fumes from



the saw. He testified that the employees did not tell him of being sick (Tr. 200-201, 222). However, Travis Asbell, saw operator, testified that he told Gemmill of the problems with the fumes during a telephone call on Thursday afternoon and during a break on Thursday evening (Tr. 49, 54). However, in his statement to IH Roesler, taken on June 6, 1996, Asbell stated that he never told Gemmill of his health problems (Tr. 68-69). Since his statement to OSHA was taken immediately after the accident and Asbell is currently involved in legal action against Cumbie, Asbell's testimony on this point is not credible. Gemmill's testimony, on the other hand, appears more credible and devoid of any reason to fabricate. Gemmill was fired by Cumbie several months after the accident "because we have different ideas" (Tr. 210).

IH Roesler testified that Willie Atkinson stated that he told Gemmill of problems with the fumes on Wednesday night (Tr. 162, 164). However, Atkinson did not testify, and no signed statement was made a part of the record. Although an admission under § 801(d)(2), Federal Rules of Evidence, the statement is given little weight. Gemmill's testimony at hearing and in his statement to IH Roesler contradicts Atkinson's statement to Roesler (Exh. C-4; Tr. 200-201). Also, Atkinson, like Asbell, is currently involved in legal action against Cumbie (Tr. 176).

Larry Davis, foreman for Biltmore Construction, general contractor, was aware that the employees were not feeling well during their first evening of work in the computer room. However, he only told Gemmill that "all looked normal that night" (Tr. 23, 30).

The record, therefore, does not support Cumbie's actual knowledge of conditions in the computer room. However, Cumbie had constructive knowledge of the conditions. Cumbie was operating a combustion engine in an enclosed room without knowing whether there was adequate ventilation or proper respiratory protection. If Cumbie had maintained the MSDS for propane, it would have known of the health hazards of burning propane in an oxygen-deficient atmosphere. The MSDS warns that "when burned in a deficiency of oxygen, CO can be formed" and "at high concentrations and when mixed with air, the gas may become an anesthetic and subsequently an asphyxiant by diluting or decreasing the available oxygen in potential breathing zones" (Exh. C-3). Gemmill knew the room was not well ventilated (Tr. 244). He did not know that propane "put off carbon monoxide" (Tr. 243). Gemmill was using a product without knowing its properties and potential health hazards. There is no showing that Gemmill exercised reasonable diligence in designing proper ventilation for an enclosed/sealed room; monitoring the conditions in the

computer room; and understanding the potential health affects of propane. The constructive knowledge of a supervisory employee is imputed to Cumbie. *See Tampa Shipyards, Inc.*, 15 BNA OSHC 1533 (Nos. 86-360, 86-469, 1992).

#### Willful Classification for Citation No. 2

The violation of § 1926.55(b) is classified as “willful.” A willful violation is “one committed with intentional knowing or voluntary disregard for the requirements of the Act, or with plain indifference to employee safety.” *Conie Construction, Inc.*, 16 BNA OSHC 1870, 1872 (No. 92-264, 1994). A willful violation is differentiated from other classifications of violations by a heightened awareness of the illegality of the conduct or conditions and by a state of mind showing conscious disregard or plain indifference.

A violation, however, is not willful if the employer has a good faith belief that it was not in violation. The test of good faith for these purposes is objective--whether the employer’s belief concerning a factual matter, or the interpretation of a rule was reasonable under the circumstances. *General Motors Corp., Electro-Motive Div.*, 14 BNA OSHC 2064 (No. 82-630, 1991).

The record does not support a willful violation of § 1926.55(b). There is no history that Cumbie was previously cited by OSHA for unsafe conditions (Tr. 181). Also, the work in the computer room changed from what Cumbie had anticipated and planned. There was new carpeting in other rooms and the thickness of the concrete floor exceeded 5 inches (Tr. 194). These unexpected conditions changed Cumbie’s method of work. It required sealing the computer room from other areas in the library. Also, to use a blade large enough to cut through the concrete floor, a propane powered saw was needed (Tr. 201-202). Cumbie knew that a gasoline powered saw was not acceptable. Cumbie in good faith believed that propane was an appropriate fuel for indoor use. Also, the use of a negative air machine was believed adequate to remove excessive levels of dust from the room. To protect workers, Cumbie used NIOSH-approved dust masks suitable for dust, fumes, and mists (Tr. 187).

Ralph Gemmill, former superintendent, in his repeated visits inside the computer room denied smelling any fumes or exhaust (Tr. 200, 240, 252). When he did smell the exhaust and started feeling dizzy, he immediately shut down the job and sent the workers home after asking

the employees if they needed a doctor (Tr. 203-204). Gemmill testified that “if felt conditions were unsafe, he would not have done the job regardless of Biltmore (general contractor) instruction” (Tr. 212).

The Secretary failed to show intentional disregard or plain indifference. Cumbie maintained an adequate written hazardous communication program (Tr. 185-186). The violation of § 1926.55(b) is serious in that Cumbie should have known of the potential hazard of burning propane in an enclosed space and employees were exposed to serious injury. Three employees showed exposure levels to carbon monoxide in excess of the PEL.

#### Penalty Consideration for Citation No. 2

A penalty of \$4,000 for violation of § 1926.55(b) is reasonable. For the reasons previously discussed, Cumbie is entitled to credit for size, history and good faith. The gravity is high. Three employees were injured from their exposure to excessive levels of carbon monoxide. Asbell was blacking out and vomiting. He was taken to the hospital and treated with oxygen and placed in a hyperbaric chamber. Even after several hours, Asbell’s carbon monoxide exposure level exceeded four times the PEL adopted by OSHA.

#### OTHER THAN SERIOUS CITATION NO. 3

##### Item 1 - Violation of § 1926.102(a)(5)

The citation alleges that “the employer had not provided the employees with face and eye protection that was adequate for the hazards of cutting concrete. Face shields and goggles were the eye and face protection needed for cutting concrete.” Section 1926.102(a)(5) provides that:

Table E-1 shall be used as a guide in the selection of face and eye protection for the hazards and operations noted.

The standard requires an employer to use Table E-1 when selecting eye protection for its employees. There is no dispute that employees were cutting concrete with a propane powered saw and the job was “extremely dusty” (Tr. 263). IH Roesler testified, based on discussions with employees, that safety glasses were provided for the concrete cutting in the computer room.

According to Roesler, Table E-1 requires goggles to protect employees' eyes from the dust and particulates arising from the concrete cutting operation (Tr. 154-155).

Gemmill testified that there were "safety goggles" but he could not remember whether they were being worn by employees. He did not describe the "goggles," and there is no indication that Table E-1 was taken into consideration in making the selection (Tr. 217). Travis Asbell, saw operator, testified that he did not wear any eye protection. Thus, Asbell's testimony is unrefuted and appropriate eye protection was not worn by employees.

Cumbie argues that on June 5, 1996, as alleged in the citation, the project was complete and there was no showing of a violation on that date. The citation alleges the violation to have occurred "on or about 6/5/96." The failure to use proper eye protection occurred May 30 to June 1, 1996, at the library project. The citation reasonably notifies Cumbie of the nature of the violation and the date of occurrence. If not, the citation is amended *sua sponte* to reflect the violation to have occurred on May 30- June 1, 1996. It is clear from the record that the failure to properly select eye protection occurred at the library project. It was the subject of the hearing. Cumbie did not object to the testimony of IH Roesler and is not prejudiced by the amendment (Tr. 154-155).

An "other" than serious violation of § 1926.55(b) is affirmed.

**FINDINGS OF FACT AND**  
**CONCLUSIONS OF LAW**

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Rule 52(a) of the Federal Rules of Civil Procedure.

**ORDER**

Based upon the foregoing decision, it is ORDERED that:  
CITATION NO. 1

1. Item 1a, violation of § 1926.59(g)(8) and Item 1b, violation of § 1926.59(h), are affirmed and a grouped penalty of \$1,500 is assessed.

2. Item 1c, violation of § 1926.21(b)(2), is vacated.

3. Item 2a, violation of § 1926.103(e)(1); Item 2b, violation of § 1926.103(g)(2); Item 2c, violation of § 1926.103(g)(4); and Item 2d, violation of § 1926.103(g)(5), are affirmed and a grouped penalty of \$2,300 is assessed.

CITATION NO. 2

1. Item 1a, violation of § 1926.55(b), is affirmed as serious and a penalty of \$4,000 is assessed.

CITATION NO. 3

1. Item 1, violation of § 1926.102(a)(5), is affirmed and no penalty is assessed.

/s/ Ken S. Welsch

KEN S. WELSCH  
Judge

Date: July 2, 1998