
SECRETARY OF LABOR,

Complainant,

v.

GUNITE CORPORATION,

Respondent,

UAW LOCAL 718,

Authorized Employee
Representative

OSHRC DOCKET NOS. 98-1986
98-1987

DECISION

Before: RAILTON, Chairman; STEPHENS and ROGERS, Commissioners.

BY THE COMMISSION:

Gunite Corporation (“Gunite”) operates a foundry in Rockford, Illinois, where it manufactures brakes and wheels for heavy trucks. The Occupational Safety and Health Administration (“OSHA”) conducted a comprehensive safety and health inspection at Gunite’s facility from April 28 to October 27, 1998. As a result of the inspection, the Secretary issued three citations alleging numerous violations of OSHA’s standards concerning both safety and health. After Gunite contested the citations, the majority of items were settled. Following a hearing,

Administrative Law Judge Ann Z. Cook affirmed the remaining seven contested items and assessed penalties totaling \$102,000.

At issue on review before the Commission are six items alleging serious and willful violations of OSHA's air contaminant standard for overexposure of employees to crystalline quartz silica ("respirable silica"). Also on review are willful items alleging a violation of the respiratory protection standard for failure to inspect respirators to assure proper use and a violation of the occupational noise standard for failure to provide annual audiograms for employees exposed to excessive noise. For the reasons that follow, we affirm two items and vacate four items alleging violations of the airborne contaminant standard. We affirm the item alleging a violation of the respiratory protection standard and vacate the item alleging a violation of the occupational noise standard. We assess a combined penalty of \$95,000.

BACKGROUND

Gunite's facility is characterized as a "green sand mold foundry." The production process begins by forming sand molds from a mixture of sand, clay and water, and then filling the molds with melted scrap iron poured from a cupola. Once the iron solidifies, the resultant castings are shaken from the molds and transported along a series of vibrating conveyors to a cleaning and finishing area where they are prepared for shipping. As the castings are being shaken from the molds and transported along the interconnecting conveyors toward the finishing area, dust from sand containing particles of respirable silica becomes airborne. Typically, the process requires the use of 400 tons of sand per hour with approximately 100 pounds of sand per minute being added to replace sand removed by dust collectors.

At the time of the inspection, Gunite was utilizing make-up air units, ordinary fans, and six dust control systems to control airborne dust. Photographs taken by OSHA during the inspection showed a general buildup of sand on fans, floors, and other surfaces throughout the foundry. Airflow analysis conducted by

OSHA during the inspection showed that make-up air units were blowing settled dust off the floor and into the air. Fans blew contaminated dust into employee breathing zones. There were also holes in the ventilation ducts of the dust control systems and missing canopies over the interconnecting conveyors that transported the castings through the production process from the basement area to the finishing department. Plant manager Mark Vuletich testified that when the interconnecting conveyors were initially installed in 1989, they “turned into a disaster” by shaking unmanageable amounts of dust into the air. After several attempts to “keep the dust down” with water had failed, Gunite attempted to control the dust by installing covers over the conveyors in 1990. However, Vuletich admitted that the covers were ineffective in controlling airborne dust because of gaps between the conveyors and covers. When OSHA arrived to inspect the facility eight years later, the ineffective covers were still being used.

According to Gunite’s facilities engineer, Leroy Cator, Gunite initiated a long range plan in the early 1990s to “clean up the plant” by attacking known “environmental problems” in various areas of the foundry. The plan coincided with a 1990 report from one of Gunite’s insurers, Reliance Insurance Company, indicating that employee exposure to respirable silica exceeded the threshold limit value (TLV) set by the American Conference of Governmental Industrial Hygienists (ACGIH).¹ However, despite the subsequent installation of two

¹ACGIH defines its threshold limit value as “[a]n exposure limit . . . to which it is believed nearly all workers can be exposed day after day for a working lifetime without ill effect.” See <http://acgih.org/Resources/acronyms.htm>. In *Bunge Corp.*, 12 BNA OSHC 1785, 1986-87 CCH OSHD ¶ 27,565 (No. 77-1622, 1986) (consolidated), the Commission distinguished ACGIH’s TLV from OSHA’s PEL by stating that PEL is “a legal term referring to a limit that may not be exceeded or a limit that triggers certain legal obligations when it is exceeded” whereas the TLV “is an industrial hygienist’s term . . . intended for use in the field of industrial hygiene.” See also *Smith Steel Casting Co.*, 15 BNA OSHC 1001, 1007, 1991-93 CCH OSHD ¶ 29,314, p. 39,366 (No. 80-2069, 1991) (consolidated) (“the phrase ‘threshold limit value’ has no specific meaning in law but rather is an industrial

upgraded dust collection systems, sampling results by another insurer, Kemper-NATLSCO, in June 1996, April and August 1997, and March 1998, showed that employees working in the foundry were being exposed to levels of respirable silica in excess of OSHA's PEL. Kemper-NATLSCO recommended in June 1996 that Gunitite establish and follow a respiratory protection program until the company could implement feasible engineering and administrative controls to limit employee exposure to the PEL. Gunitite developed a written program, but in a follow-up report in April 1997, Kemper-NATLSCO indicated that "[m]anagement stated employees are required to wear respiratory protection in areas deemed necessary, however strict employee adherence to this policy is not enforced." In a subsequent report in August 1997, Kemper-NATLSCO again indicated that Gunitite's respiratory protection program required respirator use inside the foundry, but management acknowledged that "strict employee adherence to this policy [wa]s not enforced." Gunitite's implementation of its respiratory protection program did not improve even after it recorded three cases of silicosis, a condition that is caused by excessive exposure to respirable silica, in its 1996 and 1997 OSHA 200 logs.

During the OSHA inspection, Julia E. Evans, an OSHA compliance officer, and Jeff Milosch, an industrial hygienist for Kemper-NATLSCO, obtained side-by-side environmental sampling from thirteen employees in the foundry.² The sampling results showed that five of the thirteen employees were exposed to an 8-hour time weighted average of respirable silica in excess of OSHA's PEL. OSHA

hygienist's term referring to the concentration of an airborne contaminant to which an employee may be exposed without adverse effect").

²A fourteenth sampling was discarded because of damaged material. The record shows that successful sampling was obtained from the following thirteen employees: the sprue pull-off operator, BCP flip operator, mold line technician, metal pourer, corset-blowoff operator, inspector, fork lift utility driver, power sweeper, cupola operator, millwright, coremaker, and two laborers.

then assigned three members of its Health Response Team (“HRT”) to evaluate Gunite’s administrative and engineering controls.³ The HRT issued a report identifying five potential sources of respirable silica that appeared to be contributing to employee exposures: the sand plant, the vibrating conveyor system, conveyor belts carrying sand, vehicular traffic, and settled contaminant on all horizontal surfaces in the foundry. The report listed various recommendations for administrative and engineering controls to reduce levels of respirable silica in the foundry, specifically in targeted areas where sampling results showed that employees were exposed in excess of the PEL.

Based on the sampling results and the HRT’s report, the Secretary issued citations alleging that Gunite committed serious and willful violations of section 1910.1000(c) by exposing employees to respirable silica in excess of OSHA’s PEL and of section 1910.1000(e) by failing to determine and implement feasible controls. She also alleged that Gunite willfully violated section 1910.134(e)(4) by failing to inspect to insure proper respirator use. In addition, the Secretary alleged a willful violation of section 1910.95(g)(6) for failure to obtain annual audiograms.

We turn first to the six air contaminant items.

³The HRT is based in Salt Lake City and serves as a central technical resource for OSHA’s program activities.

AIR CONTAMINANT STANDARD: 29 C.F.R. § 1910.1000(c) and (e)⁴

Section 1910.1000(c) requires that employee exposure to respirable silica be limited to the amount set forth in Table Z-3 of the standard. Section 1910.1000(e) requires that compliance with the exposure limit in Table Z-3 be met by first determining and implementing feasible administrative or engineering controls, and when such controls are not feasible, by using protective equipment or other protective measures. The Secretary alleged serious and willful violations of both standards here. In items 8a and 8b of citation 1, she alleged serious violations of sections 1910.1000(c) and (e), respectively, for overexposing three employees - a metal pourer, coresot/blowoff operator, and mold line technician - to respirable silica and for failing to determine and implement feasible administrative or engineering controls to achieve compliance with the PEL. She alleged willful

⁴The standard provides in pertinent part:

§ 1910.1000 Air Contaminants.

An employee's exposure to any substance listed in Tables Z-1, Z-2, or Z-3 of this section shall be limited in accordance with the requirements of the following paragraphs of this section.

...

(c) *Table Z-3.* An employee's exposure to any substance listed in Table Z-3, in any 8-hour work shift of a 40-hour work week, shall not exceed the 8-hour time weighted average limit given for that substance in the table.

...

(e) To achieve compliance with paragraphs (a) through (d) of this section, administrative or engineering controls must first be determined and implemented whenever feasible. When such controls are not feasible to achieve full compliance, protective equipment or any 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/or technical measures used for this purpose must be approved for each particular use by a competent industrial hygienist or other technically qualified person. Whenever respirators are used, their use shall comply with 1910.134.

violations of the same standards in items 3a and 3b for overexposing a sprue pull-off operator and in items 4a and 4b for overexposing a BCP flip operator.

In affirming the serious and willful violations of section 1910.1000(c), the judge relied on the sampling results obtained during the inspection that showed employee exposure to an 8-hour time weighted average of respirable silica in excess of OSHA's PEL. She noted that in addition to the results obtained by OSHA, Gunite's insurer, Kemper-NATLSCO, also obtained sampling that confirmed exposure in excess of the PEL. The cited instances of overexposure are shown in the side-by-side sampling results represented in the chart below:

| CITATION ITEM | SAMPLING DATE | POSITION | OSHA | | KEMPER-NATLSCO | |
|--------------------------------|---------------|-----------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|
| | | | PEL Mg/m ³ | ACTUAL Mg/m ³ | PEL Mg/m ³ | ACTUAL Mg/m ³ |
| Serious Citation 1, Item 8a | June 18, 1998 | Mold Line Technician | 0.66 | 1.06 | 0.8 | 1.6 |
| | | Coreset- Blowoff | 0.94 | 1.30 | 0.8 | 1.4 |
| | | Metal Pourer | 1.22 | 2.03 | 1.5 | 3.5 |
| Willful Citation 2, Item 3a | June 9, 1998 | Sprue Pull- Off Operator | 0.70 | 1.16 | 0.76 | 4.7 |
| Willful Citation 2, Item 4a | June 9, 1998 | BCP Flip Operator | 0.27 | 4.5 | 0.15 | 3.5 |

Gunite argues that overexposure was not shown because air sampling was obtained outside the respirators that were worn by these five employees. However, we agree with the judge that the Secretary is not required to obtain air sampling inside the respirator in order to establish exposure to respirable silica in excess of the PEL. It is well-settled that unless actual ingestion or inhalation is a specific element of a standard, "the Secretary need only measure the level of contaminant in the employee's breathing zone, and such measurements may even be taken before the air is processed by the employee's respirator." *Bay State Refining Co.*, 15 BNA OSHC 1471, 1472 n. 1, 1991-93 CCH OSHD ¶ 29,579, p. 40,021 n. 1 (No. 88-1731, 1992) (citing *Titanium Metals Corp. of America*, 6 BNA OSHC 1760, 1763-64 & n. 11, 1978 CCH OSHD ¶ 22,836, p. 27,615 & n. 11 (No. 15411, 1978)). Because actual inhalation is not an element of section

1910.1000(c), the sampling obtained outside the respirators and within the breathing zone of the employees was sufficient to establish that the levels of respirable silica exceeded the PEL. The employer may rebut such a showing by establishing that the sampling results were not reliable. *Ebaa Iron, Inc.*, 17 BNA OSHC 1051, 1052, 1993-95 CCH OSHD ¶ 30,685, p. 42,585 (No. 92-3189, 1995). Here, Gunite did not challenge the procedures by which Evans obtained the samples, and it stipulated to the reliability of OSHA's laboratory analyses. Therefore, we find that the Secretary established that employee exposure to respirable silica exceeded the PEL.

Section 1910.1000(e) requires employers to determine and implement administrative or engineering controls whenever feasible, and to use protective equipment or any other protective measures when such controls are not feasible to achieve full compliance. The Secretary has the burden of establishing that controls are technologically and economically feasible. *GAF Corp.*, 9 BNA OSHC 1451, 1455, 1981 CCH OSHD ¶ 25,281, p. 31,244 (No. 77-1811, 1981). A control is technologically feasible if it can be adapted to the employer's operation and is capable of producing a significant reduction in employee exposure. *Id.* See also *G & C Foundry Co.*, 17 BNA OSHC 2137, 2138-40, 1995-97 CCH OSHD ¶ 31,388, pp. 44,340-42 (No. 95-0869, 1997).

The Secretary's case for establishing technological feasibility rests primarily on OSHA's HRT report and supporting testimony by compliance officer Evans and HRT members Lee Hathon and Keith Motley. Neither compliance officer Evans nor the HRT members were qualified as experts. The HRT report identified deficiencies in Gunite's controls and recommended additional controls, including general ventilation to reduce plantwide levels of air contaminant and specific controls to address areas where sampling results showed employee exposure in excess of the PEL. The general plantwide controls included recirculating plant air through bag houses, isolating silica generating operations with physical barriers, replacing open conveyor belts with sealed systems to

transport sand through the facility, and implementing Gunité's planned project to cover all conveyor belts. The specific controls included improving housekeeping; installing local exhaust ventilation systems, such as clean air islands and side draft hoods; isolating work areas with curtains or walls; providing evaporative mists for cooling air; constructing clean air rooms where employees could spend limited amounts of time breathing uncontaminated air; improving belt aprons and scrapers on the conveyor belts; and using an alternative material handling methods, such as pneumatic transport.

We conclude that the evidence of record as a whole is insufficient to prove that the controls suggested by the Secretary would produce a significant reduction in airborne respirable silica in the foundry.⁵ Because neither compliance officer Evans nor any of the HRT members were presented by the Secretary as expert witnesses, the record lacks sufficient evidence to establish that the proposed controls were technologically feasible.⁶ Moreover, the testimony failed to

⁵ Although, as the dissent notes, Gunité challenged only the feasibility of clean air islands, it remains "the Secretary's burden to establish that controls are technologically and economically feasible." *GAF Corp.*, 9 BNA OSHC at 1455, 1981 CCH OSHD at p. 31,244.

⁶ This is what distinguishes the instant case from *G & C Foundry, Co.*, 17 BNA OSHC 2137, 1995-97 CCH OSHD ¶ 31,388, p.44,342 (No. 95-0869, 1997), in which the Commission relied in part on the testimony of the Secretary's expert witness with respect to the feasibility of her proposed controls. Here, the Secretary offered no expert testimony in attempting to meet her burden of proof. The dissent's reliance upon *The Sherwin-Williams Co.*, 11 BNA OSHC 2105, 2110, 1984-85 CCH OSHD ¶ 26,986, p. 34,702 (No. 14131, 1984), is likewise unavailing. The issue of technological feasibility, and the Secretary's burden of proof with respect to that issue, was neither briefed to nor considered by the Commission. *Id.* at 2107, n.2. Instead, *Sherwin-Williams* addressed the issue of economic feasibility of engineering controls. Likewise, *Castle & Cooke Foods*, 692 F.2d 641, 650 (9th Cir. 1982), upon which *Sherwin-Williams* relies, focused primarily on economic feasibility. While the court did affirm the Commission's finding of technological feasibility against the employer, it specifically noted that the Commission had relied upon expert witness testimony introduced by the Secretary. Because the evidentiary standard, at least as to technological

quantify the expected or anticipated amount of silica dust reduction. At most, the HRT report provided a list of control technologies for Gunitite to experiment with in the hope that some of them or some combination of them would reduce employee exposure to some undefined levels.

Where administrative or engineering controls are not feasible, the standard requires that employers use “protective equipment or any other protective measures” to achieve compliance with the permissible exposure limit set forth in section 1910.1000(c). Here, Gunitite argues that it achieved compliance by relying on the use of respirators. The evidence supports this claim with respect to serious citation 1, items 8a and 8b, and willful citation 2, items 3a and 3b, but not with respect to willful citation 2, items 4a and 4b. OSHA’s sampling of the three employees identified in citation 1, items 8a and 8b, showed exposure to no more than 2.08 times the PEL while each employee wore a disposable respirator with a protection factor of up to 10 times the PEL. Compliance officer Evans testified that wearing the respirators “should protect employees, if they are [using them] properly and the seal is present, [up to] 10 times the permissible exposure level.” There is nothing in the record to show that the three employees identified in citation 1, items 8a and 8b, were using their respirators improperly on the date of the OSHA sampling. Similarly, sampling of the sprue pull-off operator identified in citation 2, items 3a and 3b, showed exposure to approximately 1.7 times the permissible limit while he wore both a half mask respirator and an air powered respirator with a total protection factor of 35 times the PEL. Because the evidence establishes that Gunitite achieved compliance with the PEL by using adequate respiratory protection, we vacate serious citation 1, items 8a and 8b, and willful citation 2, items 3a and 3b.

Regarding citation 2, items 4a and 4b, the OSHA sampling results showed that the BCP flip operator identified in the citation was exposed to 16 times the

feasibility, was clearly established at the time of the hearing, and the Secretary failed to sustain that burden, we see no basis for a remand or further briefing.

permissible limit. Thus, his use of a half mask respirator with a protection factor of up to 10 times the PEL could not have achieved full compliance with the PEL. We therefore affirm these items.

The judge affirmed the Secretary's willful characterization of citation 2, items 4a and 4b. The Commission has defined a willful violation as one committed with intentional, knowing, or voluntary disregard for the requirements of the Act, or with plain indifference to employee safety. *A.P. O'Horo Co.*, 14 BNA OSHC 2004, 2012, 1991-93 CCH OSHD ¶ 29,223, p. 39,133 (No. 85-0369, 1991). "The Secretary must show that the employer was actually aware, at the time of the violative act, that the act was unlawful, or that it possessed a state of mind such that if it were informed of the standard, it would not care." *Propellex Corp.*, 18 BNA OSHC 1677, 1684, 1999 CCH OSHD ¶ 31,792, p. 46,591 (No. 96-0265, 1999) (citations omitted). We agree with the judge that the violations were willful. The evidence shows that Gunitite acted with conscious disregard of the requirements of the standard. Despite recording three cases of silicosis in its OSHA-200 log in 1996 and 1997, and receiving repeated warnings from its insurers that employees were being exposed to high levels of respirable silica, Gunitite failed to comply with the standard. While "[t]he Commission has not always been willing to base a willful violation on an employer's failure to follow an outside consultant's advice," an employer's response to findings and recommendations made by its outside consultants can be used as a factor in determining willfulness, "particularly where the employer's response to safety recommendations may be fairly characterized as dilatory." *Pepperidge Farm, Inc.*, 17 BNA OSHC 1993, 2007-9, 1995-97 CCH OSHD ¶ 31,301, p. 44,019-20 (No. 89-0265, 1997); see also *J.A. Jones Constr. Co.*, 15 BNA OSHC, 2201, 2212, 1993 CCH OSHD ¶ 29,964, 41,031 (No. 87-2059, 1993).

The record contains seven reports of environmental studies conducted for Gunitite by its consultants over an eight-year period preceding the OSHA inspection. While two reports in 1990 and 1992 note exposures exceeding the

ACGIH TLV without indicating whether the exposures also exceeded OSHA's PEL, five subsequent Kemper-NATLSCO reports between 1996 and 1998 did report employee exposure to respirable silica exceeding the OSHA PEL and recommended that Gunitite require its employees to wear respiratory protection until engineering and/or administrative controls were implemented to reduce employee exposures. According to the Kemper-NATLSCO reports, despite the repeated warnings of employee overexposure and recommendations for respirator use, Gunitite management admitted it was not enforcing its policy requiring respiratory protection in areas where respirator use was deemed necessary. Gunitite's failure to take corrective steps in response to the findings and recommendations made by Kemper-NATLSCO in the years preceding the inspection, when considered in conjunction with other evidence showing three cases of silicosis recorded in Gunitite's OSHA 200 logs in 1996 and 1997, demonstrates that Gunitite ignored a known duty to protect the BCP flip operator from excessive levels of respirable silica in the foundry. Gunitite's argument that the three silicosis cases were not shown to have resulted from occupational exposure at its facility does not diminish the probative value of this evidence in determining willfulness.

The judge properly rejected Gunitite's argument that its efforts to improve its ventilation system, by installing two new ventilation systems in the mid-1990s and finalizing plans for a multimillion-dollar project at the time of the inspection, should be considered a good faith effort to comply with the standard. Under Commission precedent, "[i]f an employer has made a good faith effort to comply with the Act's requirements, a finding of willfulness is not justified, even though the employer's efforts are not entirely effective or complete." *Williams Enterp., Inc.*, 13 BNA OSHC 1249, 1256, 1986-87 CCH OSHD ¶ 27,893, p. 36,589 (No. 85-355, 1987). The test of good faith is whether the steps taken were objectively reasonable. *Pepperidge Farm Inc.*, 17 BNA OSHC at 2007-09, 1995-1997 CCH OSHD at pp. 44,019-20. "[T]he employer has the burden of proof on good faith."

Morrison-Knudsen Co./Yonkers Contr. Co., 16 BNA OSHC 1105, 1127, 1993-95 CCH OSHD ¶ 30,048, p. 41,285 (No. 88-572, 1993). Gunite acknowledged that its efforts to improve its ventilation system did not achieve full compliance, and its policy of relying on respirators to achieve compliance with the PEL was not consistently enforced. The BCP operator testified that he did not wear an air-supplied respirator whenever temperatures in the foundry were too hot or when the respirator was not functioning properly. The record shows that the BCP flip operator's work location was in the cleaning room of the foundry, an area that Gunite's manager of facilities engineering, Mark Morgan, characterized as having a "major" dust problem. The BCP flip operator worked in this location for two years without the benefit of administrative or engineering controls and without the consistent use of respiratory protection. We therefore conclude that Gunite's efforts to achieve compliance were not objectively reasonable under the circumstances. Accordingly, we affirm items 4a and 4b of citation 2 as willful.

The Secretary proposed a consolidated penalty of \$70,000 for citation 2, items 4a and 4b. The judge reduced the penalty to \$40,000. The Secretary argues that the judge's penalty assessment does not adequately reflect the gravity of the violations and the recalcitrance of the employer. Section 17(j) of the Act, 29 U.S.C. 666(i), provides that "[t]he Commission shall have authority to assess all civil penalties provided in this section, giving due consideration to the appropriateness of the penalty with respect to the size of the business of the employer being charged, the gravity of the violation, the good faith of the employer, and the history of previous violations." Here, no credit for size or history is warranted. Gunite is a moderate to large company with 300 employees and has a history of prior OSHA violations in 1991, 1993, 1994, and 1995.

With respect to the statutory good faith factor, the Commission will consider "the employer's safety and health program and its commitment to assuring safe and healthful working conditions." *Capform, Inc.*, 19 BNA OSHC 1374, 1378, 2001 CCH OSHD ¶ 32,320, p. 49,479 (No. 99-0322, 2001), *aff'd*

without published opinion, No. 01-60417 (6th Cir. 2002). Gunite installed two new dust collection systems in 1995 and 1997 and was finalizing plans for a multimillion-dollar project at the time of the inspection. However, these good intentions are counterbalanced by the fact that Gunite apparently did little in the way of controlling dust problems through the use of housekeeping measures. In addition, it failed to maintain ventilation ducts. We also note the glacial pace at which Gunite moved to solve the engineering problem. It was aware of the problems at least as early as 1989. Given these countervailing factors, we see no basis for crediting Gunite with a good faith effort to abate the hazard.

Gravity is generally the principal factor in assessing penalties. *Trinity Indus., Inc.*, 15 BNA OSHC 1481, 1483, 1991-93 CCH OSHD ¶ 29,582, p. 40,033 (No. 88-2691, 1992); *Nacirema Operating Co.*, 1 BNA OSHC 1001, 1971-73 CCH OSHD ¶ 15,032 (No. 4, 1972). In evaluating the gravity of the violation, the Commission considers the number of employees exposed, the duration of exposure, the precautions taken against injury, and the degree of probability that an injury would occur. *See J.A. Jones Constr. Co.*, 15 BNA OSHC 2201, 2214, 1991-93 CCH OSHD ¶ 29,964, p. 41,033 (No. 87-2059, 1993). Here, the evidence shows that the BCP flip operator identified in citation 1, items 4a and 4b, was exposed to more than 16 times the PEL while wearing a half mask respirator with an insufficient protection factor of only ten times the PEL. We agree with the judge that the gravity of the violation was high given the duration and level of exposure, the inconsistent use of the air supplied respirator, the conditional protection afforded by respirators, and the likelihood of developing silicosis from such high exposure, even though only one employee was exposed. Giving due consideration to the high gravity of the offense and Gunite's size, history of violations, and the lack of any significant evidence that Gunite made a good faith effort to assure safe and healthful working conditions, we affirm the \$40,000 penalty assessed by the judge.

RESPIRATORY PROTECTION STANDARD: 29 C.F.R. § 1910.134(e)(4)⁷

In citation 2, item 2, the Secretary alleged a willful violation of section 1910.134(e)(4) for 7 instances involving Gunite's failure to conduct frequent random inspections to assure that respirators were properly used. The judge affirmed the violation as willful based on compliance officer Evans' testimony that she observed numerous instances of improper respirator use during the inspection. The judge rejected Gunite's claim that the cited version of section 1910.134(e)(4) had been amended and did not apply, as well as its claim that Gunite's employees were not exposed to a hazard requiring the use of respirators. On review, Gunite does not dispute the factual allegations with respect to non-compliance with the terms of the standard or knowledge of the cited conditions, but it reiterates the arguments rejected by the judge. Gunite also challenges the willful characterization.

We agree with the judge's finding that the previous version of the respiratory protection standard was properly cited because the alleged instances of violation occurred before the amended standard took effect on October 5, 1998. The amended standard states that the effective date of promulgation was April 8, 1998, and the effective date for full compliance was October 5, 1998.⁸ Section

⁷The standard states in pertinent part:

§ 1910.134 Respiratory protection.

...

(e) *Use of respirators.* ... (4) 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.

⁸The standard states in pertinent part:

§ 1910.134 Respiratory protection.

...

(n) *Dates— (1) Effective date.* This section is effective April 8, 1998. The obligations imposed by this section commence on the effective

1910.134(n). It further states that the previous respiratory protection standard remained “in effect and enforceable” during the intervening period between the April 8 and October 5, 1998. The alleged instances of noncompliance occurred before October 5, 1998, and therefore, the Secretary properly cited the previous standard.⁹

With respect to Gunité’s argument that the Secretary failed to establish that the employees identified in the citation were exposed to a hazard requiring respiratory protection, we find that Gunité is correct with respect to the instance alleging that unidentified employees placed their respirators on top of their sand-covered hard hats when not in use. Compliance officer Evans testified that she observed this conduct when employees were leaving the foundry. The record contains no evidence to suggest that any of the employees reused the contaminated respirators upon reentering the foundry.

The other cited instances of violation involved respirator misuse by employees working inside the foundry where environmental sampling during the

date unless otherwise noted in this paragraph. Compliance with obligations that do not commence on the effective date shall occur no later than the applicable start-up date.

(2) *Compliance dates.* All obligations of this section commence on the effective date except as follows:

(i) The determination that respirator use is required (paragraph (a)) shall be completed no later than September 8, 1998.

(ii) Compliance with provisions of this section for all other provisions shall be completed no later than October 5, 1998.

(3) The provisions of 29 C.F.R. 1910.134 and 29 C.F.R. 1926.103, contained in the 29 C.F.R. parts 1900 to 1910.99 and the 29 C.F.R. part 1926 editions, revised as of July 1, 1997, are in effect and enforceable until October 5, 1998, or during any administrative or judicial stay of the provisions of this section.

⁹Gunité also argues that abatement is unnecessary because the cited provision of the old respiratory protection standard is not contained in the new standard. We do not decide the merits of this question because it is for the Secretary to determine whether or not it is appropriate to issue a citation under a reasonable interpretation of the new standard.

inspection exceeded the OSHA PEL for respirable silica. The evidence shows that for years preceding the OSHA inspection, environmental sampling inside the foundry had shown levels that consistently exceeded the OSHA PEL as indicated in reports by Kemper-NATLSCO. In response to these reports, Gunitite designated the entire foundry a mandatory respiratory protection area during production hours. This evidence and the documented cases of silicosis recorded in OSHA 200 logs in 1996 and 1997, establish that there was a significant risk of encountering hazardous levels of respirable silica inside the foundry, and that Gunitite had a duty to conduct frequent, random, inspections to insure proper respirator use. *See Weirton Steel Corp.*, 20 BNA OSHC 1255, 1259-61, 2003 CCH OSHD ¶ 32,672, pp. 51,449-51 (No. 98-0701, 2003). Accordingly, we find that the Secretary has proven a violation of section 1910.134(e)(4).

Characterization

We agree with the judge that Gunitite's lax enforcement of respirator use in the foundry constituted willfulness. The Kemper-NATLSCO reports establish that despite repeated warnings of excessive levels of respirable silica in the foundry, Gunitite management admitted that the use of respirators in areas deemed necessary was not strictly enforced. *See Caterpillar Inc. v. Secretary of Labor*, 154 F.3d 400, 402 (7th Cir. 1998), *aff'g*, 18 BNA OSHC 1005, 1995-97 CCH OSHD ¶ 31,386 (No. 93-3405, 1997) (violation willful where employer knew about hazardous condition and could have corrected the problem but failed to do so). This evidence, taken together with the three cases of silicosis recorded in Gunitite's OSHA-200 log in 1996 and 1997, shows that Gunitite ignored a known duty to comply with the respiratory protection standard. Under these circumstances, we find no basis for Gunitite's argument that it made good faith efforts to comply with the standard. Accordingly, we conclude that the violation was willful.

Penalty

The judge assessed a penalty of \$25,000 rather than the \$55,000 proposed by the Secretary. In reducing the penalty from \$55,000 to \$25,000, the judge

found the probability of harm to be lesser because the evidence did not show that the violative conduct led to damaged respirators or actual overexposure of employees. However, compliance officer Evans testified that a reduction for lesser probability had already been factored into the proposed amount of \$55,000. The Secretary argues that the judge's penalty assessment was not commensurate with the gravity of the violation and Gunitite's recalcitrance. We agree. Although Gunitite argues that it made several attempts to address safety and health in the foundry (including engaging outside consultants to monitor exposure levels, implementing a respiratory protection program, providing disposable respirators in unlimited numbers and training employees to use them, and posting notices warning of disciplinary action for failure to comply with the policy, credit for these efforts is diminished by evidence showing that Gunitite did not enforce the use of respirators inside the foundry where air sampling exceeded permissible exposure limits despite the repeated warnings and advice of its own consultants.

Accordingly, we find a penalty of \$55,000 to be appropriate.

AUDIOGRAM STANDARD: 29 C.F.R. § 1910.95(g)(6)¹⁰

The Secretary alleged in Citation 2, item 1, a willful violation of section 1910.95(g)(6) for Gunitite's failure to obtain annual audiograms for five employees exposed to noise at or above an 8-hour time weighted average of 85 decibels ("dBA"). The record shows that Gunitite did not obtain annual audiograms for one employee in 1996 and four employees in 1997 after initial baseline audiograms of those employees had shown exposure to noise levels exceeding an 8-hour time weighted average of 85 dBA. In all five instances, Gunitite obtained audiograms

¹⁰The standard states in pertinent part:

§ 1910.95 Occupational noise exposure.

...

(g) *Audiometric testing program.* ... (6) *Annual audiogram.* At least annually after obtaining the baseline audiogram, the employer shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted of 85 decibels.

the following year. The judge affirmed the citation, but reclassified it as serious based on the lack of evidence to show that Gunitite management knew of and disregarded internal memos regarding the missed audiograms by the company's health services department.

On review, Gunitite argues that the citation was time-barred under section 9(c) of the Act, which states that "[n]o citation may be issued under this section after the expiration of six months following the occurrence of any violation." We agree with Gunitite that none of the cited instances of noncompliance remained unabated when the inspection began on May 26, 1998, or within six months of the issuance of the citation on November 23, 1998. Accordingly, we vacate the item alleging violation of section 1910.95(g)(6).

ORDER

For the reasons stated, we order the following disposition:

Docket No. 98-1987

Items 8a and 8b of Citation 1 are vacated.

Item 1 of Citation 2 is vacated.

Item 2 of Citation 2 is affirmed as willful, and a penalty of \$55,000 is assessed.

Items 3a and 3b of Citation 2 are vacated.

Items 4a and 4b of Citation 2 are affirmed as willful, and a penalty of \$40,000 is assessed.

/s/

W. Scott Railton
Chairman

/s/

James M. Stephens
Commissioner

Dated: September 30, 2004

ROGERS, Commissioner, concurring in part and dissenting in part:

While I concur with the decision to affirm the willful violations of 29 C.F.R. §§ 1910.1000(c) and (e) with respect to citation 2, items 4a and 4b, my analysis of the case differs from that of my colleagues. I respectfully disagree with their conclusion that the record “is insufficient to prove that the controls suggested by the Secretary would produce a significant reduction in airborne respirable silica in the foundry.” In contrast, I would have found that the controls suggested by the Secretary were technologically feasible and thus affirmed citation 2, items 4a and b, on that basis, along with the other alleged violations of 29 C.F.R. §§ 1910.1000(c) and (e), with respect to citation 1, items 8a and 8b, and citation 2, items 3a and 3b.

The cited standard at 1910.1000(c) limits an employee’s exposure to respirable silica. The standard at 1910.1000(e) further provides that when administrative and engineering “controls are not feasible to achieve full compliance, protective equipment . . . shall be used to keep the exposure of employees to air contaminants within the limits” of subsection (c). *See Todd Shipyards Corp.*, 9 BNA OSHC 2031, 2034, 1981 CCH OSHD ¶ 25,516, p. 31,812 (No. 77-2545, 1981) (purpose of section is limitation of employee exposure to air contaminants). Under the standard, the preferred protection is through engineering or administrative controls, with personal protective equipment such as respirators as a backstop. *See id.* This is consistent with “an elementary principle of industrial engineering and hygiene, ‘the hierarchy of controls,’ . . . that hazards should be controlled at the source.” Rothstein, *Occupational Safety and Health Law* § 108 at 167 (4th ed. 1998).

OSHA’s Health Response Team (HRT) focussed its inspection on the workstations where sampling results showed employee exposure in excess of the Permissible Exposure Limit (PEL). As a result of the inspection, the HRT submitted a comprehensive report identifying housekeeping and ventilation problems at each of the cited areas and recommending a number of feasible

administrative and engineering controls to remedy the problems. It stated that “[p]rograms such as housekeeping and employee hygiene...will have a significant effect if used in conjunction with other administrative and engineering controls.” As the judge noted in her decision, “except for clean air islands, Gunitite [did] not challenge[] these recommendations.” In my view, the judge correctly found that the Secretary met her burden of showing that feasible administrative and engineering controls were available to provide a significant reduction in exposure at the five cited positions. *See G & C Foundry Co.*, 17 BNA OSHC 2137, 2140, 1995-97 CCH OSHD ¶ 31,388, p. 44,342 (No. 95-0869, 1997) (technological feasibility established where Secretary shows “that there are some controls available...that will have a significant effect on the amount of silica dust that reaches the employees’ breathing zones”). Moreover, the fact that the Secretary did not present the HRT members as experts does not diminish the probative value of their testimony. HRT member Lee Hathon, like the expert presented by the Secretary in *G&C Foundry, Co.*, 17 BNA OSHC at 2138, 1995-97 CCH OSHD at p. 44,340, was an OSHA mechanical engineer. He testified that he had worked with OSHA’s HRT for 10 years and that his credentials included Master of Science degrees in mechanical engineering and in public health. HRT member Keith Motley, an industrial hygienist with OSHA’s HRT for 12 years, stated that he had Bachelor of Science degrees in biology and chemistry and a Master of Science degree in public health. In my view, the credentials of these witnesses make their testimony sufficiently reliable. Gunitite did not challenge the expertise of the Secretary’s witnesses. To the extent that the majority would find dispositive the lack of “expert” testimony from the Secretary in order to meet her burden, and since this issue has not previously been briefed, I would remand this case to permit the parties to brief the issue or in the alternative request that they submit supplemental briefs to the Commission. *See The Sherwin-Williams Co.*, 11 BNA OSHC 2105, 2110, 1984-85 CCH OSHD ¶ 26,986, p. 34,702 (No. 14131, 1984) (“realism and common sense should dictate how the Secretary may meet his

burden of providing substantial evidence of feasibility” (citing *Castle & Cooke Foods*, 692 F.2d 641, 650 (9th Cir. 1982)).

On review, Gunite renews its argument against the feasibility of clean air islands, which the HRT report recommended as feasible at the workstations of the BCP flip operator, sprue pull-off operator, and coresot/blowoff operator. The report stated that a clean air island at each of these workstations would supply clean, tempered air at approximately 100 to 200 feet per minute to the breathing zone of the employee. HRT member Motley described the clean air island as an air diffuser that “would blow down over the employee’s head and breathing zone and enclose them in a cone of clean air.” Gunite argues that Motley had observed the use of clean air islands only in battery manufacturing facilities to protect against lead and cadmium exposure, but had never observed them used in foundries. Gunite’s argument is undermined by the testimony of its own witness, facilities engineer Cator, who stated that “[c]lean air islands are probably effective and I don’t question that.” Cator initially testified that Gunite had rejected clean air islands targeting individual workstations in favor of a “dust collector large enough to handle the problem without adding another piece of equipment, which becomes another piece of equipment to maintain.” However, as the judge noted, the record contains no evidence that Gunite’s dust collection systems were effective in achieving compliance at the cited areas. While Cator stated that Gunite had rejected clean air islands because they brought outdoor air into individual work areas to create uncomfortably hot conditions in summer and cold conditions in winter, he later admitted that such outdoor air could be tempered to an acceptable degree and that Gunite actually operated a clean air ventilation system along the pouring line area of its foundry where the air was conditioned in summer and heated in the winter.

Gunite also raises a broad challenge to the technological feasibility of any kind of local exhaust ventilation (LEV) system by claiming that “no type of local exhaust ventilation possibly would be capable of removing” the 400 tons of silica

sand that its foundry processed each hour. This argument misreads the recommendations in the HRT report, which did not recommend LEV to remove all 400 tons of sand from the plant but rather to aim LEV at the cited workstations. Gunité's other argument is that the Secretary's failure to identify specific abatement methods in the citation indicates that she "had no idea what controls would work under the circumstances." Mandating the implementation of specific administrative and engineering controls in the abatement order was not required here, however, because an employer "is not precluded from using other means of engineering or administrative controls if it so chooses, so long as those means reduce the level of silica dust at least to the same extent" as the Secretary's proposals. *Smith Steel Casting Co.*, 15 BNA OSHC 1001, 1012 n. 16, 1991-93 CCH OSHD ¶ 29,314, pp. 29,371-72 n. 16 (No. 80-2069, 1991) (consolidated).

Having found that the Secretary met her burden of showing the existence of feasible engineering and administrative controls, I would have accordingly also affirmed the other alleged violations of 29 C.F.R. §§ 1910.1000(c) and (e) based on Gunité's failure to implement those controls.

/s/

Thomasina V. Rogers
Commissioner

Dated: September 30, 2004

SECRETARY OF LABOR,
Complainant,
v.

OSHRC DOCKET NOS. 98-1986 and
98-1987

GUNITE CORPORATION,
Respondent.

UAW LOCAL 718,
Authorized Employee
Representative.

APPEARANCES:

For the Complainant:

Susan Witz, Esquire, and Ruben Chapa, Esquire, U.S. Department of Labor, Office of the Solicitor, 230 South Dearborn, Room 844, Chicago, Illinois 60604

For the Respondent:

Robert E. Mann, Esquire, Franczek Sullivan, P.C., 300 South Wacker Drive, Suite 3400, Chicago, Illinois 60606

For the Authorized Employee Representative:

Benny Crawford, President, UAW, Local 718, Gunite Corporation, 302 Peoples Avenue, Rockford, Illinois 61104-7092

Before: Administrative Law Judge Ann Z. Cook

DECISION AND ORDER

This proceeding is before the Occupational Safety and Health Review Commission (“the Commission”) pursuant to section 10(c) of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 651 *et seq.* (“the Act”). Respondent, Gunite Corporation (“Gunite”), operates a foundry that

produces various parts for heavy trucks. (Tr. 469). Gunite acknowledges that it is an employer engaged in a business affecting interstate commerce and that it is subject to the requirements of the Act, and I so find. (Answer ¶ 1). The Occupational Safety and Health Administration (“OSHA”) conducted an inspection of Gunite’s foundry from April 28, 1998 through October 27, 1998, resulting in the issuance of serious, willful and “other” citations. Gunite timely contested the citations, and this matter was set for hearing. The parties achieved a partial settlement prior to the hearing, leaving for resolution two serious items, five willful items, and proposed penalties of \$319,000. The hearing was held in Rockford, Illinois, on June 5, 6 and 7, 2000. The Secretary and Gunite filed post-hearing briefs on September 6, 2000.¹

Background

Gunite’s foundry produces parts for heavy trucks by pouring molten iron into sand molds and then removing the parts from the molds and cleaning and preparing them for shipping. The process begins with melting scrap metal in the cupola and pouring it into molds on the pouring line. The molds move along conveyor belts to the Mold Unit, where the molds are knocked off, while the parts continue on to the cleaning room via a vibrating conveyor line called the “shakeout line” or the “GK Line.” The parts are then conveyed through blasting machines, after which they are painted and put on pallets for shipment. The parts weigh up to 150 pounds and are extremely hot as they move along the conveyor lines, and the manufacturing process releases large amounts of sand that become airborne dust and then accumulate on surfaces. The sand contains silica, which is a toxic material, and overexposure to silica can lead to silicosis, a progressive and potentially life-threatening lung disease. To reduce the amount of sand in the air, and therefore the amount of respirable silica, Gunite had six dust control systems at the time of the inspection, as well as exhaust fans and air makeup units. Nevertheless, the large amount of sand used (an average of 400 tons an hour, most of which was cleaned and recycled) resulted in accumulations of dust and sand throughout the foundry, and Gunite’s OSHA 200 logs for 1996 and 1997 recorded three cases of silicosis. (Tr. 35, 58-59, 249-50, 349-50, 431-43, 469-73, 478-83, 486; CX-5, pp. 10, 15, 21; CX-85).

¹Although the authorized employee representative attended the hearing, it did not participate in the hearing or submit a post-hearing brief.

OSHA's inspection of Gunitite's foundry was a comprehensive safety and health inspection, conducted by Julie Evans, an OSHA Industrial Hygienist ("IH"), Vilma Cantu, an OSHA Compliance Officer, ("CO"), and John Newquist, an OSHA Safety and Health Specialist ("SHS").² Of the seven contested items resulting from the inspection, six involve sand and respirable silica. In connection with the latter, the Secretary alleges one serious and two willful violations relating to employee exposure to respirable silica above the permissible exposure limit ("PEL") and failure to implement feasible controls. The Secretary also alleges one serious and one willful violation pertaining to accumulations of sand in working areas, one willful violation involving the use of respirators, and one willful violation involving audiograms.

The Secretary's Burden of Proof

To establish a violation of a standard, the Secretary has the burden of proving, by a preponderance of the evidence:

(a) the applicability of the cited standard, (b) the employer's noncompliance with the standard's terms, (c) employee access to the violative conditions, and (d) the employer's actual or constructive knowledge of the violation (*i.e.*, the employer either knew, or with the exercise of reasonable diligence could have known, of the violative conditions).

Atlantic Battery Co., 16 BNA OSHC 2131, 2138 (No. 90-1747, 1994).

Exposure to Respirable Silica - 29 C.F.R. §§ 1910.1000(c) and (e)

The Secretary alleges that Gunitite was in serious violation of 29 C.F.R. §§ 1910.1000(c) and (e) by exposing three employees to respirable silica in excess of the PEL and failing to determine and implement controls to achieve compliance. (Docket No. 98-1987, Citation 1, Items 8a and b). The Secretary alleges willful violations of the same standards for exposing two further employees to respirable silica in excess of the PEL. (Docket No. 98-1987, Citation 2, Items 3a and b and 4a and b, respectively). The cited standards provide, in pertinent part, as follows:

(c) An employee's exposure to any substance listed in Table Z-3, in any 8-hour work shift of a 40-hour work shift, shall not exceed the 8-hour time weighted average limit given for that substance in the table.

²OSHA's Health Response Team ("HRT"), which is a group of IH's who serve as a technical resource within OSHA, also assisted in the inspection. (Tr. 4-10).

(e) To achieve compliance with paragraphs (a) through (d) of this section, administrative or engineering controls must first be determined and implemented whenever feasible. When such controls are not feasible to achieve full compliance, protective equipment or any other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed by this section.

Employee Exposure

On June 9, 1998, IH Evans monitored two employees for exposure to respirable silica, a substance listed in Table Z-3. Jeffrey Milosch of Kemper/NatlSCO ("Kemper"), Gunitite's insurance company, performed simultaneous monitoring of the same employees. The monitoring results Evans and Milosch obtained were, respectively: Sprue Pull-Off Operator, 1.7 and 6.0 times the PEL, and BCP Flip Operator, 16.6 and 25.0 times the PEL.³ On June 18, 1998, Evans and Milosch monitored three other employees and obtained the following results, respectively: Metal Pourer, 2.03 milligrams per cubic meter ("mg/m³") with a PEL of 1.22, and 3.5 mg/m³ with a 1.5 PEL; Coreset/Blowoff Operator, 1.30 mg/m³ with a PEL of 0.91, and 1.4 mg/m³ with a 0.8 PEL; and Mold Line Technician, 1.06 mg/m³ with a 0.66 PEL, and 1.6 mg/m³ with a 0.8 PEL. (Tr. 42-43, 50, 97, 105, 124-25; CX-12). The evidence thus establishes overexposure of the five employees.

On six occasions during 1996, 1997 and 1998, Kemper had monitored employees and found overexposure to respirable silica. During two 1996 visits, Kemper found five employees to be overexposed, including the Sprue Pull-Off Operator Evans monitored. (Tr. 52-53; 304-05; CX-7-8, CX-11). In June of 1997, monitoring revealed employees working in Metal Pourer, Coreset/Blowoff Operator and Mold Line Technician positions were overexposed, and in August of 1997, monitoring showed the Sprue Pull-Off Operator position as overexposed at three times the PEL. (Tr. 54, 307-11; CX-9-10). In March of 1998, monitoring showed a BCP Flip Operator, a Coreset/Blowoff Operator and others to have been overexposed. (Tr. 313-14; CX-12). Beginning in April of 1997, Kemper's reports to Gunitite's management recommended that engineering and/or administrative controls be adopted to reduce exposure and that respirators be used until controls brought exposure below the PEL. (Tr. 48, 53-57, 306-15). Gunitite therefore knew that employees were being overexposed.

³The accuracy of the differing monitoring results is not in dispute. IH Evans testified that the differences could be due to different silica contents in the samples or to placement of monitoring equipment. (Tr. 105-06).

Gunite asserts that the five employees were not overexposed because they wore or had available respiratory gear that lowered actual personal exposure below the PEL. It notes that the Metal Pourer, Coreset/Blowoff Operator, Mold Line Technician, and Sprue Pull-Off Operator were wearing respirators with a protection factor of ten and were thus protected well beyond the PEL exposure measured. (Tr. 213-14). Gunite also notes that the Sprue Pull-Off Operator wore an air hood with a protection factor of 25, increasing his protection to 250 times PEL. (Tr. 203, 214). Finally, Gunite notes that the BCP Flip Operator, whose exposure was 16.6 to 25 times the PEL, also had an air hood at his position but wore only a respirator providing protection ten times the PEL. (Tr. 205-07, 222-23). Gunite maintains that the silica inhalation of four employees was below the PEL and that that of the fifth would have been below the PEL had he used the protective gear provided.

It is apparent from the above that Gunite interprets “an employee’s exposure” in subsection (a) of the standard to mean an employee’s actual inhalation. However, this interpretation creates a conflict with subsection (e). The clear dictate of subsection (e) is to rely on personal protective equipment to keep employee exposure below the PEL only if administrative or engineering controls are not feasible. The Eleventh Circuit noted the reasonableness of this approach in *American Iron and Steel Inst.*, 182 F.3d 1261, 1267-69 (11th Cir. 1999), because controls eliminate or arrest a hazard at its source, making respiratory protection automatic, while respirators depend on constant attention and absence of human error to be effective. Gunite’s assertion is therefore rejected, and I find that the five employees monitored by IH Evans and by Milosch were exposed to respirable silica in excess of the PEL in violation of 29 C.F.R. 1910.1000(c).

Engineering/Administrative Controls

The Secretary alleges that Gunite failed to determine and implement feasible administrative or engineering controls to achieve compliance with the PEL for the five overexposed employees as 29 C.F.R. 1910.1000(e) required. OSHA’s HRT studied ventilation at the foundry and suggested controls it represents were feasible and would bring each position within the PEL. Gunite contends that it had adopted a program that abated the overexposures by the end of the abatement period.

The record shows that the foundry building was built between 1919 and 1930. (Tr. 480). At the time of the inspection, the actual foundry area was served by six dust control systems, four air makeup units, and wall exhaust fans, which together replaced the in-plant air once every six to seven

minutes. (Tr. 431-32, 449-50). With the exception of two systems installed in 1995 and 1997, the dust control systems had been in place for several years. (Tr. 431-41, 450, 509-13; RX-1). The testimony of IH Evans and the photographic evidence establish that the systems were in disrepair, that maintenance had not been done, that ventilation pipes had holes or were no longer aligned, and that fan blades had holes and/or accumulations of dust. Fans used for cooling blew dust around, sometimes into employees' work spaces, and on one occasion the dust was dense enough to obstruct vision. (Tr. 34, 68-84, 557-58; CX-55-57, CX-60-61).

During its inspection, OSHA monitored 13 foundry employees and found five overexposed to silica. All five worked in the vicinity of the "shakeout line," commonly called the "GK Line." The GK Line runs approximately 700 feet from where the parts are removed from the molds, past the Sprue Pull-Off Operator, who separates any excess metal from the parts, to the BCP Flip Operator, who aligns the castings on the conveyor belt before they enter the Cleaning Unit. (Tr. 40, 97, 473-76; CX-85). The GK Line vibrates vigorously at a high frequency and throws off large amounts of sand and dust. OSHA's monitoring showed the greatest overexposure at the end of the GK Line, where the BCP Flip Operator worked (16.6 times the PEL), with much less overexposure at the beginning of the line, where the Sprue Pull-Off Operator worked (1.7 times the PEL), and on the pouring line, where the three other overexposed employees worked. Sand and dust from the GK Line was poorly contained. There were holes in the canopy and ducts over the line, ventilation pipes were no longer aligned, and sand escaped from the gaps between the line and the canopy. Fans used for cooling blew sand and dust into work spaces, and the system was ineffective in removing the sand and dust the line generated. (Tr. 68-83; CX-55-57, CX-60). There were no local ventilation systems at the overexposed positions, leaving respiratory protection to the general ventilation systems, the air-supplied hoods at the BCP Flip and Sprue Pull-Off positions, and the individual respirators.

Gunite argues that it had a program to reduce exposure through engineering controls applied area-by-area in a deliberate, orderly manner. The plan first addressed the more populated plant areas, evaluated the effect of controls installed there, and then proceeded to the next area. Under the program, new ventilation systems had been installed in 1995 (for the cupola, the pouring line, and the area where parts are separated from their molds) and in 1997 (for the sand cooler). (Tr. 461-66, 509-517). In 1998, work began on a system to address the sand and dust generated by the GK Line,

which Gunite had been unsuccessful in containing since the line was installed in 1989. (Tr. 497-500, 509-12; CX-7-12). In August of 1997, Gunite began plans for a new cleaning room and a new dust control system for the GK Line, including the BCP Flip Operator position. Contracts for the project were let in March of 1998, work went on during the summer, and the system was installed over the Christmas shutdown in December of 1998. (Tr. 461-66, 512-17; RX-21-22, RX-24). The project included nearly full enclosure of the conveyor and also included a new cleaning room and a bag house. When it was completed in March of 1999, the cost was \$2.8 million. (Tr. 465, 514-16).

OSHA's HRT visited the foundry in October of 1998, before the project was completed, and made specific recommendations for bringing each of the overexposed positions below the PEL, and, except for clean air islands, Gunite has not challenged these recommendations. (Tr. 528; CX-13). While Gunite assumes its new system achieves compliance with the PEL at the five overexposed positions, it offered no recent monitoring results in support of its belief. Further, IH Evans testified that the improvements would not achieve compliance at the Sprue Pull-Off and BCP Flip positions. (Tr. 231-32). The evidence of record shows that Gunite knew shortly after the GK Line was installed in 1989 that it created a serious dust problem. Despite this knowledge, Gunite continued to use what it knew to be an inadequate dust control system over the line until the new system was installed in December of 1998. (Tr. 484-86). In the nine-year interim, Gunite relied on respirators, air-supplied hoods and an inadequate, ill-maintained ventilation system to protect the five positions. I find that Gunite did not determine and implement administrative or engineering controls to achieve compliance with the PEL for the five employees and thereby violated 29 C.F.R. 1910.1000(e).

Classification and Penalty

The citation item involving the Metal Pourer, Coreset/Blowoff Operator and Mold Line Technician (Docket No. 98-1987, Citation 1, Item 8) has been classified as a serious violation. A violation is serious when it is substantially probable that a resulting injury would have been serious in nature. *Hamilton Fixture*, 16 BNA OSHC 1073, 1085 (No. 88-1720, 1993). The overexposure at the three positions was less than twice the PEL, but it was documented in three successive Kemper reports between April 1997 and March 1998. Because overexposure to silica can cause silicosis, a disabling, life-threatening disease, and because respirators cannot be relied upon for long-term, effective protection, I find that the violation is properly characterized as serious.

The citation items involving the Sprue Pull-Off Operator and the BCP Flip Operator (Docket No. 98-1987, Citation 2, Items 3 and 4, respectively) have been classified as willful violations. In regard to this classification, the Commission has stated that:

A violation is willful if committed with intentional, knowing or voluntary disregard for the requirements of the Act or with plain indifference to employee safety....[It] is differentiated from a nonwillful violation by a heightened awareness, a conscious disregard or plain indifference to employee safety....A willful charge is not justified if an employer has made a good faith effort to comply with a standard or to eliminate a hazard, even though the employer's efforts are not entirely effective or complete. *George Campbell Painting Corp.*, 18 BNA OSHC 1929, 1934 (No. 94-3121, 1999) (citation omitted), *aff'd* 73 F.3d 1466 (8th Cir. 1996).

The evidence establishes that Gunitite knew that the Sprue Pull-Off Operator and the BCP Flip Operator were being overexposed to silica. The dust in the air and sand accumulations were easily observable, and Gunitite's management was aware shortly after the GK Line was installed in 1998 that excessive dust and sand were being expelled and that there was no "easy fix" to the problem. (Tr. 484-86, 497-500). In 1991, air sampling was done that showed silica levels to be high. (Tr. 498-99; CX-6). Management reviewed the Kemper reports, which showed overexposure in the Sprue Pull-Off position in 1996, 1997 and 1998 and in the BCP Flip position in 1997 and 1998. (Tr. 48, 53-57, 307-15). Management also knew employees had been diagnosed with silicosis in 1996 and 1997 because this information was recorded in its OSHA 200 logs. (Tr. 58-59; CX-5). Gunitite nonetheless failed to deal with this issue until mid-1997, relying instead on respiratory gear employees could choose not to wear and a ventilation system it did not adequately maintain or repair.

Based on the foregoing, I disagree with Gunitite's contention that it was making a sincere effort to comply with the standard. The dust problem in the foundry was longstanding, as was the neglect of the ventilation system, and despite the new system now in place, there is no evidence that the two cited positions are in compliance with the standards. I conclude that Gunitite has exhibited conscious disregard of the standards and/or plain indifference to employee safety. The Secretary has accordingly met her burden of demonstrating that the violations were willful.

The Secretary has proposed a penalty of \$7,000 for Item 8 of Serious Citation 1 and a penalty of \$70,000 each for Items 3 and 4 of Willful Citation 2. Section 17(j) of the Act requires the Commission to give due consideration to the gravity of the violation and the employer's size, history

and good faith when assessing penalties. The gravity of the violation, generally the most significant factor, depends upon such matters as the number of employees exposed, the duration of the exposure, the precautions taken against injury, and the likelihood that an injury would result. *J.A. Jones Constr. Co.*, 15 BNA OSHC 2201, 2214 (No. 87-2059, 1993). In regard to size, history and good faith, Gunitite is a large employer, having about 300 employees at its facility, and the company has a history of previous violations. As to good faith, the record shows that Gunitite cooperated with OSHA during the lengthy and comprehensive inspection. However, Gunitite's record of past violations, and the finding of willful violations, precludes giving the company credit for good faith. (Tr. 144; CX-1).

With respect to gravity, turning first to Item 4 of Citation 2 (the BCP Flip Operator violation), OSHA's proposed penalty of \$70,000 was based on an assessment of high severity and greater probability. (Tr. 129). The exposure to silica was measured at 16.6 times the PEL by OSHA and 25 times the PEL by Milosch. IH Keith Motley of the HRT testified that overexposure at ten times the PEL is considered chronic even with respirators because they are much less reliable than engineering controls. He further testified that while air hoods offer more protection, their protective value can be compromised. (Tr. 350-53). When monitored the BCP Flip Operator was wearing a respirator, which, if fitted properly, would provide protection at ten times the PEL. An air-supplied hood was available but he was not using it, and he indicated he did not wear it when it was too hot or when it broke down. (Tr. 114-16, 381-82). The Kemper reports establish overexposure at that position in August 1997 and March 1998, although at much lower concentrations than that measured by OSHA. I conclude that the gravity of the violation was high given the duration and level of exposure, the inconsistent use of the air hood, the conditional protection afforded by respirators, and the likelihood of developing silicosis from such high exposure, even though only one employee was exposed. Considering all the relevant information, I find a penalty of \$40,000 for this item to be appropriate.

OSHA also determined the gravity of Item 3 of Citation 2 (the Sprue Pull-Off violation) to be of higher severity and greater probability, and again proposed a penalty of \$70,000. Monitoring for this position showed much lower exposure, 1.7 and 6.0 times the PEL, and, since the employee used both an air hood and a respirator, actual inhalation was likely within the PEL. The duration of the overexposure, however, may have been longer, since it was noted in June 1996, August 1997,

and March 1998 (overexposure was not found in September 1996 and April 1997). In these circumstances, I find the gravity to be less high for Item 3 and a penalty of \$20,000 to be appropriate.

As noted above, the proposed penalty for the serious violation concerning the Metal Pourer, Mold Technician and Coreset/Blowoff Operator, is \$7,000. The three positions were exposed at less than two times the PEL. Kemper found overexposure of similar magnitude for all three positions in April and August 1997 and in March 1998. The Secretary classified this violation as serious rather than willful primarily because she believed the new ventilation system would bring the three positions into compliance. In view of the number of employees overexposed and the duration of the documented overexposure, I find the gravity to be high and the \$7,000 penalty proposed appropriate.

Respirator Use - 29 C.F.R. 1910.134(e)(4)

In Docket No. 98-1987, Citation 2, Item 2, the Secretary alleges seven instances of failure to conduct frequent random inspections to assure respirators were properly selected, used, cleaned and maintained, in willful violation of 29 C.F.R. 1910.134(e)(4).⁴ That section provides as follows:

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.

To prove the alleged violation, the Secretary offered the testimony of IH Evans as to what she observed during the 15 days she visited the foundry, as well as her conversations with management. Evans testified that Gunitite had a respirator program that required employees to wear respirators in the foundry area. (Tr. 141, 147-156). In regard to the specific instances alleged, that is, (b) through (h), Evans observed the following:⁵

(b) On July 29, 1998, the Coremaker was working in an area designated by Gunitite's respiratory program as a mandatory respirator area ("mandatory area") while wearing a two-strap respirator with only one strap. After discussing this with Ruth Nicol, Gunitite's Technician for Safety and Training, who was with her, Evans again observed the Coremaker on August 5, 1998 in the same

⁴The cited standard was amended and was to become effective on April 8, 1998. However, this date was extended to October 5, 1998. *See* 63 Fed. Reg. 20,098-99 (1998). Because the majority of the inspection occurred before October 5, 1998, the pre-amended standard was cited appropriately.

⁵The Secretary withdrew instance (a).

area wearing a respirator with only one strap. Although both Nichol and Mark Morgan, Gunite's Manager of Facilities Engineering, accompanied her, she saw no corrective action taken. Evans testified that to fit tightly and create a seal, both straps must be worn. (Tr. 144-48; CX-19).

(c) When performing air monitoring in the basement, Evans found employees working there wearing half-mask respirators instead of the powered air-purifying respirators Gunite required. Evans mentioned her observation to Nicol, who had accompanied her. (Tr. 148-49).

(d) At another time Evans observed employees, who were leaving the foundry area, roll the tops and bottoms of their respirators together and place them on top of their hard hats. Evans testified that rolling the respirators in this manner could deform them and compromise their seals. Since the hard hats were covered with dust, placing the respirators on them could also allow sand to get inside the respirators. Evans discussed her observation and concern with Nicol and/or Morgan, but she observed the practice to continue unchanged over roughly five months. (Tr. 149-51).

(e) By the GK Line, Evans observed an employee engaged in sand removal take off his respirator, take a drink from a can of soda pop, and replace his respirator. Evans testified that each time he did so, the employee risked not getting a proper seal and exposure to silica. There were supervisors in and out of the area, which was designated a mandatory area. Evans discussed her observation with Nicol and noticed no change. (Tr. 151-52).

(f) While accompanying an employee into a mandatory area, Evans watched him put on his half-mask respirator with both straps around his neck rather than placing one strap around his head. Evans testified this compromised the respirator-to-face seal, and while she discussed the matter with Nicol, who was present, she noticed this behavior repeated throughout the inspection. (Tr. 152-54).

(g) On June 9, 1998, Evans saw the Cupola Operator, in a mandatory area where supervisors were present, also wearing his respirator with both straps around his neck. Evans discussed her observation with Nicol, who was with her, but noticed no corrective action. (Tr. 154-55).

(h) Evans saw a millwright working in a mandatory area with his respirator straps up over his hard hat. Evans testified that the union safety representative told her that when respirators were fit-tested, employees did not wear hard hats. Evans also testified that to achieve an adequate seal, respirators must be worn the same way they were when fit-tested. Supervisors, including Nicol, were in the area when Evans saw the employee, and Evans discussed the matter with Nicol. (Tr. 154-56).

Gunite presented no evidence that employees were ever disciplined for misuse of respirators, and the Secretary notes that the two Kemper reports in 1997 pointed out to management that its respirator policy was not being strictly enforced. (CX-9-10). However, Gunite contends the standard is not applicable because none of the employees Evans observed were shown to have been exposed to any toxic substance to a degree that would have required use of respiratory gear under any OSHA standard. It cites to *Gulf Oil Corp.*, 11 BNA OSHC 1476, 1480 (No. 76-5014, 1983), in which the Commission held that a hazard requiring the use of respirators must be shown before an employer is required to comply with the standard's training requirement. In reaching its decision, the Commission noted that there was no showing that exposure to dust at the monitored levels was hazardous to employees or that employees had become ill as a result of exposure. In this case, the record shows that employees in various parts of the foundry were exposed to impermissibly high levels of respirable silica and that employees had contracted silicosis. The record also shows Gunite knew of the silica hazard and chose to address it with respirators rather than engineering controls. That the Secretary has not established that each cited incident subjected employees to overexposure is not determinative. The standard's objective is to protect employees from occupational diseases caused by breathing harmful dusts, and this objective is largely unachievable if the standard applies only to employees demonstrated to have been overexposed. I find the standard to be applicable.

In regard to instance (e), Gunite notes that the employees who placed their respirators on their hard hats after leaving the foundry may not have reentered wearing the same respirators since they were disposable and provided free of charge by Gunite. While this could be true in some instances, the testimony of Evans shows that the practice continued over the approximately five months that she conducted her inspection and after she had reported it to management. In any case, the citation alleges the failure to inspect and enforce proper respirator use, not the failure to use them properly. I find that Gunite failed to conduct frequent random inspections to assure that respirators were used properly, that management was aware of this fact, and that employee misuse of respirators created a hazard of exposure to silica at unhealthy levels. This item is accordingly affirmed.

Classification and Penalty

The Secretary urges the violation was willful for the following reasons: (1) Evans observed no change in respirator misuse, even though she discussed the instances with management; (2) the

misuse was in plain view in areas where supervisors were present; and (3) management ignored the statements in the 1997 Kemper reports that respirator requirements were not being enforced. In support of her position, the Secretary cites to *Calang Corp.*, 14 BNA OSHC 1789 (No. 85-319, 1990), in which the Commission held that an employer's persistence in a course of action after an OSHA CO specifically warned it that it was violating the OSHA standards constituted willfulness. The Secretary determined the probability in regard to this item as lesser and the severity as high because silicosis could have resulted. The penalty proposed for this item is \$55,000.

Having considered the classification and the penalty factors set out *supra*, I conclude that Gunite's continued failure to take steps to assure respirators were being used properly after instances of misuse were brought to its attention renders the violation willful. Because excessive silica exposure can lead to silicosis, and in light of Gunite's lengthy reliance on respirators to protect foundry employees, I find the severity to be high. However, because there is no evidence that failure to enforce proper respiratory use led to damaged respirators or overexposure of employees, I find the probability to be lesser, even though the number of employees affected was large. Under these circumstances, I conclude that a \$25,000 penalty is appropriate.

Sand Accumulation in the Basement - 29 C.F.R. 1910.22(a)(1)

In Docket No. 98-1986, Citation 2, Item 1, alleges that sand buildup in the basement along the 31 belt conveyor obstructed egress in the aisle by the conveyor, in willful violation of 29 C.F.R. 1910.22(a)(1). The cited standard provides as follows:

(a) *Housekeeping*. (1) All places of employment, passageways, storerooms, and service rooms shall be kept clean and orderly and in a sanitary condition.

The cited belt runs 200 feet horizontally between the sand cooler and the sand plant through the basement, an open area below the level of the main floor. Sand is collected in the basement for recycling. The only machinery in the basement is the conveyor belt and its drive mechanism, and the only employees who work in the basement are those cleaning up the sand and technicians performing occasional maintenance work. The basement is reached by a series of steps and landings in a passageway about 5 feet wide that parallels the conveyor. (Tr. 387, 391-93, 402, 424-28; RX- 40).

On June 3, 1998, SHS Newquist inspected the basement area and found sand accumulations as high as 3 to 5 feet. He testified that drifts and accumulations made it difficult to walk down the

length of the conveyor without tripping and that someone tripping could fall, hit the conveyor and be seriously cut or knocked unconscious. (Tr. 386-88, 393, 409). Based upon his conversations with two foremen, as well as an employee complaint or suggestion he became aware of, he concluded that the condition had persisted since November of 1997. He also concluded that the four employees currently assigned to sand removal in the basement were “just keeping up” with the incoming sand. (Tr. 389-95, 410-11). Newquist had found the basement clear of sand on a visit in 1986 and believed the accumulations, which management acknowledged to him to be at their highest ever, were due to failure to assign adequate personnel to clean up. He also testified that Nicol and Mark Vuletich, Gunite’s plant manager, had declined to accompany him to the basement because they considered it unsafe; however, Nicol and Gary Ingram, the union representative who had also been present, denied that this was the case. (Tr. 390, 395-97, 418, 721).

Gunite asserts the large accumulation of sand in the basement was abnormal and due to three unusual events. The first was the failure of both a conveyor belt and the backup system, which buried the basement in sand. The next was around January 1998, when part of the foundry roof collapsed during a heavy rain. This caused the basement to flood and the sand to turn into mud, rendering the sand-sucker vacuums useless and requiring sand to be removed manually. Third, sand removal ceased during a three to four week strike in April, although production and accumulation continued. (Tr. 87, 486-88, 501-05). Newquist was aware of these events but apparently gave them scant consideration, since he knew little about the belt breakdown or the foundry’s rate of sand usage, and he was silent about the difficulty of removing wet sand. (Tr. 394, 398-99, 406-07, 413). He also testified that no additional employees had been assigned to clean up since January, contrary to Vuletich’s testimony regarding higher current staffing levels and substantial manpower commitments following the roof collapse. (Tr. 404, 488, 502). I find dubious the opinion of Newquist that sand accumulations posed a hazard as far back as November 1997, when an unspecified employee complaint or suggestion led him to believe there were accumulations of 8 to 12 inches. (Tr. 392). Similarly, I find unreliable his assessment that sand removal was “just keeping even,” as it was based solely on his brief (20 to 25 minute) visit without any additional information. (Tr. 412).

Newquist’s uncontradicted testimony regarding the depth of accumulations on June 3, 1998, the video he took, and management’s comments conceding accumulations were unacceptably high

establish that the basement passageway was not kept clean and orderly as required. The technicians who went to the basement to inspect equipment, as well as the employees using the sand suckers, were exposed to a tripping hazard. (Tr. 392). Management was obviously aware of the problem and endeavoring to rectify it. While I find it was not shown that Gunitite was doing nothing more than keeping pace with incoming sand, there is no evidence the sand would have been brought to a safe level in the foreseeable future. (Tr. 502-03). The Secretary has established the alleged violation.

Classification and Penalty

The Secretary maintains the violation was willful because the duration of the hazard and Gunitite's failure to assign sufficient employees to clean it up exhibit plain indifference. (Tr. 404-05). Two supervisors told Newquist that past accumulations had been cleaned up by assigning eight to ten workers on the weekend and three to four a shift. (Tr. 394-95, 404-07). However, neither of the supervisors testified, and Newquist's summarization of their comments left unresolved when he understood the policy to have changed. In addition, Vuletich testified that after the roof collapse, employees had worked extra shifts, including weekends, to remove sand. (Tr. 488). Finally, while the Secretary points out that Gunitite was cited for violating the same standard in 1993, I note that that citation was not for sand accumulations but for storing boxes on a stairway. (Tr. 393, CX-43). I find that the Secretary has not demonstrated that the violation was willful.

The parties have stipulated that, absent a finding of willfulness, the violation was serious. (JX-1). Newquist testified that the severity of the violation was medium, in that an employee could have fallen against the conveyor and been cut or knocked unconscious, and that the probability was greater, due to noise, unguarded machinery, poor lighting and blowing sand. (Tr. 393, 402, 412). I find the likelihood of anyone falling against the conveyor and sustaining a serious injury to be small. Taking this factor and the other penalty factors into consideration, and in view of the few employees exposed, the short duration of exposure and the impossibility of removing the sand without at least some exposure to the hazard, I conclude that a penalty of \$4,000 is appropriate for this item.

Sand on Platforms, Stairs and Rafters - 29 C.F.R. 1910.141(a)(3)(i)

In Docket No. 98-1987, Citation 1, Item 6, alleges that throughout the foundry and cleaning room, silica sand had settled on platforms, stairs and rafters, in serious violation of 29 C.F.R. 141(a)(3)(i), which requires all places of employment to be kept clean to the extent the work allows.

IH Evans described the accumulations of sand and dust on floors, platforms, stairs, railings, fans and computer workbenches that she observed and photographed. (Tr. 28-34; CX-48, CX-52, CX-81-84). Evans testified that sand and dust on such surfaces, particularly rafters, become airborne when disturbed. She noted that this had actually occurred on June 18, 1998, when wind coming in from outside had caused the sand and dust on the rafters to become airborne, reducing visibility to roughly a foot and forcing her to stand still. (Tr. 34). Evans also testified that Vuletich told her that employees had been hired to do housekeeping work in the past but that those positions had been left vacant. (Tr. 36). IH Evans considered the sand accumulations hazardous because the sand contained silica, a toxic material that can cause silicosis. (Tr. 37-38, 237-40).

Gunite contends that the cited standard is inapplicable because it does not purport to regulate toxic materials such as silica, but, rather, hazards created by unsanitary conditions. Section 141, entitled "Sanitation," defines "toxic material" as a material in concentration or amount that exceeds the applicable limit established by a standard, such as sections 1910.1000 and 1910.1001. The term is used twice more in the standard, once in (e), which relates to changing rooms, and once in (g)(2), which relates to eating and drinking areas. The parties have cited no legal authority for their positions and I have found no reported cases in which the standard has been applied to hazards similar to the one in this case; instead, the cases addressing the standard have to do with issues such as lack of potable water or inadequate lavatory facilities. In addition, I note that the regulations enacted for asbestos and lead included specific housekeeping provisions rather than leaving this matter to a general regulation such as the one cited here. I conclude that section 141(a)(i) protects against the hazards of excessive accumulations of dust and sand, but not against those which are hazardous only because they contain silica. The Secretary has shown that sand and dust accumulations on rafters and other surfaces can be hazardous when they become airborne and impair vision and movement.

Gunite also contends the standard of cleanliness, *i.e.*, the level of acceptable accumulations, was too subjective to inform it of what was required for compliance. IH Evans testified that in a foundry, she expects rafters not to contain settled-out dust, platforms to be sufficiently clear so that sand or dust does not "rain down" on lower levels, and working surfaces to be cleaned on a regular basis. (Tr. 37, 234-35). No evidence was presented to show these expectations were unreasonable, and I found Evans to be experienced, well-informed and credible. I also found her testimony about

what occurred on June 18, 1998, to be particularly telling as to the amount of sand and dust accumulations in the foundry. I conclude that Gunitite was in violation of the cited standard, and that, in light of the obvious nature of the condition and the fact that Gunitite had employed workers to do housekeeping in the past, employer knowledge is established. This citation item is affirmed.

Classification and Penalty

There is no evidence that death or serious physical harm was a substantially probable result of the violation, and I find that it was not serious. However, because there is a direct and immediate relationship between the cited condition and occupational safety and health, the violation is properly classified as non-serious. Although many foundry workers were exposed to the hazard, there is no evidence that any resulting injuries would be more than minor. I find the gravity of the violation to be low and conclude that a penalty of \$1,000 is appropriate.

Audiograms - 29 C.F.R. 1910.95(g)(6)

In Docket No. 98-1987, Citation 2, Item 1, alleges that Gunitite did not obtain new audiograms annually for five employees who were exposed to noise at or above an 8-hour time-weighted average of 85 decibels (“dBA”), in willful violation of 29 C.F.R. 1910.95(g)(6), which provides as follows:

Annual audiogram. At least annually after obtaining the baseline audiogram, the employer shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels.

CO Cantu testified that on June 3 and June 9, 1998, she monitored Gunitite foundry employees for exposure to noise and found the following five employees’ exposures to exceed the 85-dBA threshold and the 90-dBA PEL: Ralph Alvoid, Quality Control Inspector, 92.2 dBA; Eric Robertson, Metal Pourer, 91.2 dBA; David Upton, Metal Pourer, 90.1 dBA; Jerol Shanklin, BCP Flip Operator, 98.7 dBA; and Robert Marks, Paint Line Operator, 94.9 dBA. (Tr. 269-70; CX-20). Testing Milosch did of Alvoid, Shanklin and Marks around the same time showed nearly identical results. (CX-12). Based on her review of Gunitite’s records, Cantu testified that audiograms for the five employees were administered on the following dates: Alvoid, July 30, 1992; Robertson, August 21, 1990; Upton, December 1975; Shanklin, June 12, 1992; and Marks, August 1, 1975. Cantu further testified that Gunitite records showed that the five employees had not been tested as required in the following years: Alvoid, 1997; Robertson, 1997; Upton, 1974-84, 1988, 1990, 1997; Shanklin, 1997; and Marks, 1976-84, 1987-88, 1990, 1997. (Tr. 276-77; RX-28-30, RX-32-34).

Numerous internal memos and notes in 1996, 1997 and 1998 show that Gunitite knew that supervisors were not assuring that employees were scheduled for audiograms and that some employees failed to receive them. (Tr. 280; CX-28, CX-30, CX-33-41). For example, 1996 memos sent to management reported that maintenance employees were not being tested. (CX-28, CX-30). Kemper reports in 1996, 1997 and 1998 noted that employees were being exposed to noise in excess of the PEL. (CX-7-11). CO Cantu testified that when annual audiograms are not administered, hearing loss can go undetected and unaddressed, which can lead to possible permanent hearing loss. (Tr. 279-83). Gunitite had a hearing conservation program for the foundry and acknowledges that it had known of the standard for several years. (Tr. 272-74, 279).

Gunitite maintains the citation should be vacated because it was issued for violations that had been corrected before or during the OSHA inspection. It reasons that since the five employees received audiograms between January and July 1998, the failure to administer annual audiograms in earlier years had been corrected. (Tr. 287-92; RX-28-30, RX-32-34). However, the Commission precedent Gunitite cites supports a different conclusion. In *Kaspar Wire Works, Inc.*, 13 BNA OSHC 1261, 1262 (No. 85-1060, 1987), the Commission held that OSHA may cite a violation occurring more than six months earlier (the limitation period imposed by section 9(c) of the Act) unless it reasonably should have discovered the violation earlier. *See also, General Dynamics Corp., Electric Boat Div.*, 15 BNA OSHC 2122, 2128-29 (No. 87-1195, 1993). Gunitite advances no reason why OSHA should have discovered the violation any earlier. Gunitite's argument is rejected, and I find that the Secretary has demonstrated a violation of the cited standard.

Classification and Penalty

The Secretary alleges the violation was willful and proposes a penalty of \$55,000. She urges that internal memos and the Kemper reports demonstrate either a general indifference to the hazard or a choice not to remedy it. She also points to the numerous years that Upton and Marks had not received audiograms. Gunitite, on the other hand, notes the five employees all received audiograms in 1998 and 1999. (Tr. 287-93). It also points out that four of the five employees wore ear protection and were not actually exposed to the levels measured. (Tr. 297-98). Finally, Gunitite notes that OSHA's comprehensive investigation led to no other hearing-related citations. (Tr. 299-300).

When management knew of a violation and could have corrected it, but did not, the violation is willful. *Caterpillar, Inc. v. Herman*, 154 F.3d 400, 402 (7th Cir. 1998); *Great Lakes Packaging Corp.*, 18 BNA OSHC 2138, 2142, 2145 (No. 97-2030, 2000). There is no convincing evidence here that in 1997 management actually knew of and disregarded evidence that employees were not receiving annual audiograms. Only two of the internal memos were prepared in 1997, both appear to be internal records of Gunitite's Health Services, and neither shows copies went to management. (CX-31-32). Those prepared in prior years do not mention Upton or Marks, the two employees who missed testing in more than one year, and memos sent to management in 1998 arguably demonstrate that full compliance was achieved that year. The two 1997 Kemper reports show that employees other than those described in the citation were overexposed to noise, and they gave no indication that employees were not receiving audiograms. Those same reports also state that employees were then required to wear hearing protection. (CX-9-10). The evidence in this case does not establish that Gunitite's management acted with intentional disregard of the standard or with plain indifference to employee safety. The Secretary has therefore not shown the violation was willful, and, in accordance with the parties' stipulation, the violation was serious. (JX-1).

The Secretary's proposed penalty is based on an assessment of the severity as medium and the probability as greater because of the number of employees not receiving annual audiograms. However, the Secretary did not consider the ear protection worn by four of the five employees, which I find lessens the probability and the severity of any injury. I also find it relevant that of all the foundry employees, only five were not tested annually and three of them went untested for only one year. Further, there was no evidence presented of any other deficiencies in Gunitite's hearing protection program that would increase the importance of annual testing. Considering this information and the other factors relevant to penalty determination, I conclude that the gravity of the violation is medium to low and that a \$5,000 penalty is appropriate.

FINDINGS OF FACT

The foregoing constitutes my findings of fact in accordance with Federal Rule of Civil Procedure 52(a). Any proposed findings of fact inconsistent with this decision are hereby denied.

CONCLUSIONS OF LAW

1. The Commission has jurisdiction of this matter pursuant to section 10(c) of the Act.

2. Gunitite was in willful violation of 29 C.F.R. §§ 1910.1000(c) and (e), and penalties of \$20,000 and \$40,000 are appropriate.

3. Gunitite was in serious violation of 29 C.F.R. §§ 1910.1000(c) and (e), and a penalty of \$7,000 is appropriate.

4. Gunitite was in willful violation of 29 C.F.R. § 1910.134(e)(4), and a penalty of \$25,000 is appropriate.

5. Gunitite was in serious violation of 29 C.F.R. §§ 1910.22(a)(1) and 1910.95(g)(6), and penalties of \$4,000 and \$5,000, respectively, are appropriate.

6. Gunitite was non-serious violation of 29 C.F.R. § 1910.141(a)(3)(i), and a penalty of \$1,000 is appropriate.

ORDER

On the basis of the foregoing Findings of Fact and Conclusions of Law, it is ordered that:

1. In Docket No. 98-1986, Item 1 of Citation 2 is affirmed as a serious violation, and a penalty of \$4,000 is assessed.

2. In Docket No. 98-1987, Item 6 of Citation 1 is affirmed as a non-serious violation, and a penalty of \$1,000 is assessed.

3. In Docket No. 98-1987, Item 8 of Citation 1 is affirmed as serious violation, and a penalty of \$7,000 is assessed.

4. In Docket No. 98-1987, Item 1 of Citation 2 is affirmed as a serious violation, and a penalty of \$5,000 is assessed.

5. In Docket No. 98-1987, Items 2, 3 and 4 of Citation 2 are affirmed as willful violations, and penalties of \$25,000, \$20,000 and \$40,000, respectively, are assessed.

/s/

Ann Z. Cook
Judge, OSHRC

Dated: November 13, 2000
Washington, D.C.