United States of America
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
1120 20th Street, N.W., Ninth Floor
Washington, DC 20036-3457

SECRETARY OF LABOR, Complainant, v. E. SMALIS PAINTING CO., INC., Respondent.	OSHRC Docket No. 94-1979

APPEARANCES:

Jordana W. Wilson, Attorney; Nicholas J. Levintow and Kenneth A. Hellman, Senior Trial Attorneys; Joseph M. Woodward, Associate Solicitor; J. Davitt McAteer, Acting Solicitor, U.S. Department of Labor, Washington, DC
For the Complainant

Joseph W. Rufolo, JW Rufolo and Associates, Inc., Edison, NJ
For the Respondent

DECISION

Before: ROGERS, Acting Chair; and THOMPSON, Commissioner.

BY THE COMMISSION:

In July 1992, E. Smalis Painting Co. ("Smalis") entered into a contract with the Pennsylvania Department of Transportation ("PennDOT") to repaint the Tarentum Bridge, which spans the Allegheny River in Pennsylvania and is located in both Allegheny County and Westmoreland County. The project required Smalis to perform abrasive blasting to remove lead-based paint from the bridge, followed by repainting.

The Occupational Safety and Health Administration ("OSHA") first inspected the bridge worksite in September 1992, shortly after Smalis had begun blasting and repainting on the Allegheny County side. Based on that inspection, OSHA issued Smalis citations alleging various violations of the Occupational Safety and Health Act of 1970 ("Act" or "OSH Act"), 29 U.S.C. §§ 651-678, relating primarily to Smalis's failure to adequately protect its employees

from airborne lead exposure. In the settlement agreement resolving those citations, which became a final order of the Commission in October 1993, Smalis admitted to all of the alleged violations and agreed to pay a total penalty of $50,000.

OSHA conducted a second inspection of this worksite in December 1993, after blasting and painting operations had reached the Westmoreland County side of the bridge and the project was near completion. This inspection led to the two citations at issue here. In these citations, the Secretary alleged four serious and 202 willful violations of the Act, primarily under the newly promulgated Lead in Construction Standard ("LICS"), 29 C.F.R. § 1926.62, and the recordkeeping regulation, 29 C.F.R. § 1904.2(a), and proposed a total penalty of $5,008,500.[1] The late Administrative Law Judge Michael H. Schoenfeld affirmed approximately half of these violations and assessed a total penalty of $2,293,834.

On review are numerous challenges from both parties, including those related to the reliability of OSHA's air monitoring results and the probative value of expert testimony concerning lead exposure levels, the applicability of various provisions in the LICS, and the Secretary's per-employee citation authority under the training and medical surveillance provisions of the standard. As discussed below, we find OSHA's sampling results and expert testimony sufficiently reliable to establish the levels of lead exposure that existed under the monitored conditions. We resolve specific items based on our overexposure findings for each cited condition, as well as other evidentiary and legal bases. We also conclude the Secretary permissibly cited the medical surveillance and training provisions of the standard on a per-employee basis and, in so doing, overrule the contrary portion of the Commission majority's decision in *Eric K. Ho*, 20 BNA OSHC 1361, 2002-04 CCH OSHD ¶ 32,692 (No. 98-1645, 2003) (consolidated), *aff'd sub nom. Chao v. OSHRC*, 401 F.3d 355 (5th Cir. 2005). For the violations that we affirm, we assess a total penalty of $1,092,750.

---

[1] On May 4, 1993, seven months before the inspection at issue here, OSHA promulgated the LICS, denoted an "Interim Final Standard," with an effective date of June 3, 1993. 29 C.F.R. § 1926.62(p). By its terms, the standard applies "to all construction work where an employee may be occupationally exposed to lead." 29 C.F.R. § 1926.62(a). Although the standard permitted employers to delay compliance with its requirements until either 60 or 120 days after the effective date, depending on the specific provision at issue, by the time of the December 1993 inspection, employers were required to comply with all aspects of the standard. 29 C.F.R. § 1926.62(r).

BACKGROUND

In August 1992, Smalis began the process of removing lead-based paint from the Tarentum Bridge, followed by repainting. During the removal process, Smalis used a suspended scaffold covered by tarps to encapsulate each section of the bridge. Attached to the encapsulated area—known as the containment—were dust collectors that comprised an exhaust ventilation system. Within the containment, a group of Smalis employees, classified as abrasive blasters, sprayed steel grit at high velocity from blasting hoses to remove paint from bridge surfaces and prepare them for repainting. Another group of Smalis employees, classified as sand suckers, worked alongside the blasters to vacuum up the steel grit for reuse as the blasting work progressed. Each employee who worked inside the containment during blasting was provided a Bullard Model 88 blasting hood ("Bullard hood") with an integrated respirator.

On December 9, 1993, two OSHA compliance officers ("CO"), John Morris and Maria Javorsky, conducted an inspection of Smalis's worksite, which included monitoring six Smalis employees for lead exposure. This inspection, which CO Morris characterized as a follow-up to the OSHA inspection conducted in September 1992, concluded that same day. Nearly six months later, on June 3, 1994, OSHA issued one serious and one willful citation to Smalis. The citations include allegations of lead overexposure, as well as failures to have a lead compliance program, maintain employee injury and illness records, provide OSHA with access to employee medical records, implement proper engineering and work practice controls, and monitor for overexposure. In addition, OSHA cited Smalis for failing to provide its employees with training, adequate respiratory protection, hygiene facilities/practices, medical surveillance, medical removal protection and benefits, and notification of blood lead levels ("BLLs") and removal benefits.

DISCUSSION

I. Threshold Issues

A. OSHA's air monitoring

On December 9, 1993, during the day shift, COs Morris and Javorsky conducted personal air monitoring of five employees who worked inside the bridge containment, and one employee who worked immediately outside of it ("topside"). The results of the sampling showed that those working inside the containment were exposed to an eight-hour time weighted average ("TWA") of lead between 12,604 $\mu g/m^3$ and 33,458 $\mu g/m^3$—between 252 to 669 times the 50 $\mu g/m^3$

permissible exposure limit ("PEL")—and the employee working topside was exposed to an eight-hour TWA of 908 μg/m^3—more than eighteen times the PEL.

Like the judge, we reject Smalis's contention that deficiencies in the COs' sampling methods invalidated OSHA's results. Evidence in the record does show the COs did not fully comply with several guidelines in the OSHA Technical Manual, and "we do not condone [the COs'] departure from best-practice sampling methods." *Manganas Painting Co.*, 21 BNA OSHC 1964, 1972, 2007 CCH OSHD ¶ 32,908, p. 53,390 (No. 94-0588, 2007).[2] Nonetheless, the degree of overexposure measured during OSHA's inspection of the Smalis worksite is simply unprecedented. Moreover, the sampling results themselves consistently show overexposure, and the departures from the Technical Manual's requirements do not undermine the reliability of these results. In such circumstances, we find the COs' methodology and results sufficiently reliable to determine whether employees were overexposed to lead. *Id.*, 2007 CCH OSHD at p. 53,390 (finding monitoring results reliable despite failure to fully comply with compliance manual, where overexposure was admitted for previous similar work performed under similar conditions, and degree of overexposure was "exceedingly high").

Background

In preparation for the December 9, 1993 sampling, CO Javorsky separately pre-calibrated six sampling pumps and, in accordance with Technical Manual procedures, used a cellulose estic filter and properly set the flow rate. CO Morris then duct-taped the pump tubing to the pump inlets and the cassettes in order to keep them secure while employees worked inside the containment. Once at the worksite, the COs either clipped the sampling pump to a particular employee's clothing or placed it inside his pocket, and then attached a sampling cassette facing downward within the employee's breathing zone. The COs explained to the employees how the sampling equipment functioned, assured them that they would not be financially liable for any equipment damage, and instructed them to tell either a CO or supervisor about any problems they might have with the sampling equipment. Also, the COs told each employee that, upon entering the containment and affixing the Bullard hood, he should reattach the cassette to the top of his

---

[2] The Technical Manual, OSHA Instruction CPL 2-2.20B ch. 1 (Nov. 13, 1990), "does not contain requirements to which the Secretary must adhere, but notes that any departure from its procedures is relevant to the reliability of the sampling results." *Manganas Painting Co.*, 21 BNA OSHC at 1972 n.6, 2007 CCH OSHD at p. 53,390 n.6.

shoulder, or wherever the employee could best attach it, point the cassette in "a slightly down position" if possible, and keep the cassette within his breathing zone. Nonetheless, despite receiving these instructions, one employee admitted that he reattached his cassette in an upward position.

Once the pumps were activated, the sand suckers and abrasive blasters entered the containment. The COs, however, refrained from entering the containment in order to avoid potential overexposure. Accordingly, the COs were unable to follow Technical Manual guidelines recommending that pumps be checked "every two hours," and that employees be monitored "throughout the work day to insure that sample integrity is maintained and activities and work practices are identified." The COs left the worksite but returned to the bridge deck later that morning. As the employees exited the containment for lunch, the COs removed the sampling equipment, turned off the pumps, recorded the deactivation time, and visually examined the equipment. During this examination, the COs noted that the duct tape was still in place, none of the shrink bands around the cassettes appeared disturbed, and the pumps, tubing, and cassettes were no dirtier than expected, though CO Morris did see loose material in some of the cassettes.

Before the cassettes were reattached following lunch, Mr. Smalis informed the COs that the employee working topside may have bumped his cassette on a piece of equipment, causing some material to inadvertently fall into the cassette. Exercising caution, the COs changed the employee's cassette during the lunch break even though the used cassette was no dirtier than normal and its shrink band was intact. Once all of the pumps and cassettes were reattached for the afternoon session, the COs left the site for a few hours. At the end of the shift, as employees exited the containment, the COs detached the sampling equipment, recorded the deactivation times, and inserted plugs into the filters; examined the shrink bands, cassettes, and duct tape, finding everything intact; and secured the equipment in a bag before leaving the site. Although none of the five monitored employees who worked inside the containment reported problems to the COs at that time, four of them testified that their sampling pumps and/or cassettes had fallen off during the sampling period. The fifth employee testified, however, that he had no problems with the sampling equipment. The following morning, CO Morris post-calibrated the pumps at

the OSHA office, and found that any differences from the pre-calibration flow rates were within an acceptable range.[3]

Analysis

Smalis principally argues the monitoring results for employees working inside the containment should be invalidated because (1) some employees reattached the sampling cassettes in an upward position, (2) the COs did not observe the employees during the sampling period, and (3) certain employees dropped the sampling equipment onto surfaces inside the containment. Despite the judge's contrary finding, we note the evidence indicates that a sampling cassette's upward orientation can affect its measured intake. CO Javorsky explained that it is OSHA policy to place cassettes facing downwards in order to avoid contamination, and expert industrial hygienist Robert Leighton testified that if positioned upwards, lead dust could fall into the cassettes, making it impossible to quantify the precise concentration of airborne lead. Nonetheless, contrary to Smalis's assertion, only one of the monitored employees testified that he reattached his cassette in an upward position, and his measured exposure was consistent with the other monitoring results.

Additionally, Smalis has not shown that the COs' failure to observe the employees while they were inside the containment during the sampling period, or to check the sampling equipment more frequently, undermined the reliability of the monitoring results. *Manganas Painting Co.*, 21 BNA OSHC at 1973, 2007 CCH OSHD at p. 53,391 (noting CO's location outside containment was consistent with expert's recommended "alternative procedures" for avoiding hazardous conditions). The COs observed no problems during the lunchtime and end-of-shift equipment checks,[4] and found no significant discrepancies in pump flow rates following post-calibration. Finally, even though the sampling equipment attached to several employees may have fallen onto containment surfaces during the sampling period, their measured exposures

---

[3] CO Morris testified that a change of more than 5% or 10% in flow rate from pre-calibration would raise a "red flag." Only one of the tested pumps approached this percent of deviation, at approximately 5.5%.

[4] While CO Morris admitted that he saw loose material in some of the cassettes, CO Javorsky explained that a filter with a heavy accumulation of material would have diminished air flow, thereby reducing, not increasing, the measured exposure.

were consistent with the exposure level associated with an employee whose equipment remained attached.

We also reject Smalis's contention that air monitoring results for the topside employee, whose cassette may have been bumped and was changed between shifts, should be invalidated because the COs combined the sampling results from both cassettes. There is no evidence the cassette used during the morning session was actually contaminated. Indeed, CO Morris's visual inspection of the cassette revealed no abnormalities. Moreover, the calculated sampling result for the combined shifts—eighteen times the PEL—appears reasonable, especially considering the employee's location immediately outside the containment where interior airborne lead levels were at least 250 times the PEL and reached 669 times the PEL.

Finally, we reject Smalis's additional contention that the COs should have positioned the sampling equipment inside, rather than outside, the employees' blasting hoods. The standard plainly contemplates that the operative exposure assessment is calculated "without regard to the use of respirators." *See, e.g.,* 29 C.F.R. § 1926.62(b) (defining "action level" as "employee exposure, without regard to the use of respirators, to an airborne concentration of lead of" 30 $\mu g/m^3$ calculated as an 8-hour TWA); 29 C.F.R. § 1926.62(d)(1)(ii) (noting that, under paragraph (d), "employee exposure is that exposure which would occur if the employee were not using a respirator"); 29 C.F.R. § 1926.62(g) (applying PPE requirements "[w]here an employee is exposed to lead above the PEL without regard to the use of respirators"); 29 C.F.R. § 1926.62(i) (applying hygiene requirements "where employees are exposed to lead above the PEL without regard to the use of respirators").[5] In these circumstances, we conclude the evidence supports the judge's finding that "the reported results of exposures to airborne lead as an eight hour time weighted average . . . are reliable and appropriate measures upon which a determination of the violations . . . may rest." *See Manganas Painting Co.*, 21 BNA OSHC at 1973, 2007 CCH

[5] Similarly, we find the COs correctly calculated exposure without regard to the respiratory protection factor provided by the Bullard hoods. The LICS provides that when respirators are used to limit employee overexposure and "all the requirements of paragraphs (e)(1) and (f) of this section have been met, employee exposure may be considered to be at the level provided by the protection factor of the respirator for those periods the respirator is worn." 29 C.F.R. § 1926.62(c)(3). As discussed below, the record shows Smalis did not fully comply with paragraphs (e)(1) and (f). Accordingly, Smalis was not entitled to rely on any respirator protection factor for the purpose of assessing employee exposure.

OSHD at p. 53,391 (finding air sampling "reasonably reliable" where measured overexposure was extremely high and results were consistent overall).

B. Computer simulation

The Secretary's lead abatement expert, John Cignatta, developed a model to simulate the containment conditions that existed at Smalis's worksite on December 9, 1993.[6] Cignatta based his simulation on information collected from a visit to the Tarentum Bridge, analysis of the COs' photos, interviews of PennDOT engineers and a review of their worksite measurements, and OSHA interviews of Smalis employees. Based on this evidence, Cignatta made a number of conservative assumptions in analyzing the working conditions inside the containment. He assumed that the containment dust collectors were operating at maximum capacity and there were only nine blasters working inside the containment at one time, rather than the twelve he knew the three abrasive recycling machines could support. Additionally, because he did not know the actual length of the containment, Cignatta ran the simulation with several different estimated lengths. Based on his simulation, Cignatta calculated that airborne lead concentrations within the containment during blasting on December 9, 1993 ranged from 20,000 $\mu g/m^3$ to 30,000 $\mu g/m^3$, except for areas near gaps in the tarps—where the record shows employees were unlikely to be working—that could have been below 5,000 $\mu g/m^3$. These concentrations are similar to those OSHA obtained from its December 9, 1993 employee monitoring, which revealed lead exposure levels inside the containment between 12,604 $\mu g/m^3$ and 33,458 $\mu g/m^3$.

Smalis argues that Cignatta's assumptions were erroneous and the simulation, therefore, "did not reflect the actual work situation or engineering controls that existed at the time of the inspection."[7] Smalis does not dispute, however, that its dust collectors had the maximum capacity that Cignatta identified. Moreover, we note Cignatta's assumption that the dust collectors operated at maximum efficiency works in Smalis's favor, as less efficient operation would lead to an increased concentration of lead-containing dust and greater exposure levels. With respect to the containment's length, although Cignatta incorrectly assumed a single large

---

[6] Smalis did not object to Cignatta's qualifications as an expert on this subject matter.

[7] Smalis also contends that the computer simulation has no probative value because Cignatta designed it "to justify high results rather than objectively determine the engineering controls that existed." We reject this contention in the absence of any supporting evidence.

interior space, the size of the containment sub-compartment in which employees worked on December 9, 1993 was within, or near, the range of lengths Cignatta used in his analysis. Additionally, Cignatta found that the varying lengths he entered into the simulation did not significantly affect the predicted concentration of airborne lead inside the containment. Finally, with respect to Cignatta's assumption that nine blasters worked inside the containment, the record shows this was most likely the *minimum* number of blasters who worked there on December 9. Accordingly, we find Cignatta's assumptions in formulating his simulation were either on target or gave Smalis the benefit of any doubt, and therefore conclude that the simulation provides a probative model of conditions inside the containment during blasting activities on December 9, 1993.

C. Employee exposure levels

A number of the citation items at issue on review are predicated on employee exposure to lead above the 50 $\mu g/m^3$ PEL or 30 $\mu g/m^3$ action level. The judge determined the Secretary established the required level of lead overexposure only for the six day-shift employees OSHA monitored on December 9, 1993, and any unmonitored employee classified as a sand sucker or blaster who also worked the day shift on that date. He excluded all unmonitored employees whose alleged overexposure occurred during the night shift on December 9, 1993, or during any shift on any other day. For the reasons that follow, we find the judge's overexposure analysis excluded some employees for whom there is sufficient overexposure evidence, and included others for whom the overexposure evidence is insufficient. We also agree with Smalis's argument that even if OSHA's monitoring is reliable, it would not be representative of lead exposure for unmonitored employees absent consideration of job assignment and employee location. Accordingly, although we adopt the judge's findings for the six monitored employees whose results showed exposures substantially above the PEL, we do not adopt his overexposure analysis for unmonitored employees.

Unmonitored employees - December 9, 1993 day shift

In addition to the six employees monitored on December 9, 1993, the Secretary alleged that fourteen other employees who worked at the bridge that day were also overexposed to lead. We agree with the judge's finding that Cignatta's expert testimony based on his simulation is reliable evidence of lead overexposure for similarly situated employees who worked inside the containment during blasting operations on that day. Unlike the judge, however, we also find

OSHA's sampling results, showing lead exposure inside the containment at exceedingly high and relatively uniform levels, are reliable evidence of overexposure for similarly situated unsampled employees. *See A.G. Mazzocchi, Inc.*, 22 BNA OSHC 1377, 1380 (No. 98-1696, 2008) (finding lead overexposure in conditions similar to those where representative air monitoring showed overexposure and high-risk presumption applied).

In order to establish overexposure for any particular unsampled employee, we find the evidence must also show the individual worked inside the containment during blasting. The judge relied primarily on job classification to infer that any employee classified as either a blaster or sand sucker must have worked inside the containment. However, the record shows that Smalis employees spent as little as twenty percent of their time at the worksite engaged in abrasive blasting. Employees spent the remainder of their time—notwithstanding their job classification—performing other activities, such as rigging, painting, cleaning, controlling traffic or operating rescue boats. In these circumstances, we reject the judge's principal reliance on job classification to establish overexposure for the unsampled employees working the day shift on December 9, 1993, and find overexposure only where direct evidence shows an unsampled employee worked inside the containment during blasting operations.

Unmonitored employees - day shifts other than December 9, 1993

The Secretary also cited Smalis for alleged lead-related violations pertaining to employees who worked the day shift on days other than December 9, 1993. The judge rejected the Secretary's overexposure claim for these citation items, finding no direct evidence to establish employee overexposure for the relevant time periods. Moreover, he noted that Cignatta's computer model had not been "claimed nor shown to be applicable to any other day or set of circumstances" beyond December 9, 1993, and emphasized that the variability in containment configuration, weather, and bridge size precluded extrapolating the "quantification of exposure to airborne lead" beyond the monitored conditions on that day. We disagree.

As noted above, the Commission recently found that, in appropriate circumstances, the Secretary's representative monitoring under the LICS may establish exposure levels on other days or at other areas of the worksite under similar conditions. *Id.* at 1381. Here, the evidence shows that, beyond December 9, abrasive blasting occurred at the bridge on December 10, 11,

and 13 to 17, 1993.[8] In addition, the number of employees performing abrasive blasting inside the containment on these days remained constant, as did the nature of the work, the size and location of the containment, and the bridge surface material. The record also shows that the engineering controls in use on December 9, 1993, did not change over this period. Moreover, given the nature of the tarp enclosure located around and below the entire steel framework, we find any changes in weather would not have affected the levels of employee exposure inside the containment. In these circumstances, we find that any unsampled employee shown by direct evidence to be present inside the containment during blasting operations on any one day during the period December 9 to 11, and 13 to 17, 1993, was overexposed to lead. *Id*.

Unmonitored employees - night shift

Finally, the Secretary issued a number of citation items alleging violations pertaining to employees who worked at the bridge during the night shift. The judge vacated such items stating there "is no evidentiary basis upon which it can be inferred that these men were exposed to any particular level of airborne lead . . . ." We agree. It is undisputed that no blasting ever occurred during the night shift. Nor is there any evidence of ambient lead level measurements at any work area on the jobsite in the absence of ongoing abrasive blasting. Thus, with respect to employees who worked during non-blasting times, there is no lead exposure data for locations either inside or outside the containment to assess employee exposure levels. Accordingly, we find the Secretary failed to establish that employees who worked the night shift were overexposed to lead.[9]

---

[8] Employee #53, who worked at the Tarentum Bridge during November and December 1993, testified that he only performed blasting work, and payroll records place him onsite after the inspection on December 10, 11, and 13 to 17, 1993. We find this evidence sufficient to establish that, for the period following the inspection, abrasive blasting occurred on those days.

[9] We note the overexposure presumption under 29 C.F.R. § 1926.62(d)(2)(iii)(B) for "cleanup activities where dry expendable abrasives are used" is not applicable here, as Smalis used recyclable steel grit rather than dry expendable abrasive.

II. Willful Citation 2

A. Merits

1. Items 1(a) to 20(a): 29 C.F.R. § 1926.62(c)(1) (lead overexposure)

Items 1(b) to 20(b): 29 C.F.R. § 1926.62(e)(1) (engineering, work practice, and administrative controls)

For each of Items 1 to 20, the Secretary issued two grouped sub-items, (a) and (b), and proposed a single grouped penalty. Under each sub-item (a), she alleged that the named employee was overexposed to lead,[10] and under each sub-item (b), she alleged that Smalis failed to implement adequate engineering, work practice, and administrative controls.[11] The judge affirmed grouped Items 1 to 6, pertaining to the six sampled employees, based on his findings that OSHA's sampling results established exposure above the PEL and Smalis failed to implement sufficient engineering controls. He also affirmed grouped Items 8 to 12, and 14 to 19, pertaining to unsampled day shift employees, based on his findings that Cignatta's testimony and other record evidence established the requisite overexposure and insufficiency of engineering controls. For the following reasons, we vacate Items 1(a) to 20(a), 7(b) to 9(b), 11(b) to 16(b),

---

[10] The cited section provides:

> (c) *Permissible exposure limit.* (1) The employer shall assure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air (50 μg/m^3) averaged over an 8-hour period.

29 C.F.R. § 1926.62(c)(1).

[11] The cited section provides:

> (e) *Methods of compliance*. (1) *Engineering and work practice controls*. The employer shall implement engineering and work practice controls, including administrative controls, to reduce and maintain employee exposure to lead to or below the permissible exposure limit to the extent that such controls are feasible. Wherever all feasible engineering and work practices controls that can be instituted are not sufficient to reduce employee exposure to or below the permissible exposure limit prescribed in paragraph (c) of this section, the employer shall nonetheless use them to reduce employee exposure to the lowest feasible level and shall supplement them by the use of respiratory protection that complies with the requirements of paragraph (f) of this section.

29 C.F.R. § 1926.62(e)(1).

and 18(b) to 20(b), and find Smalis violated 29 C.F.R. § 1926.62(e)(1) with respect to Items 1(b) to 6(b), 10(b), and 17(b).[12]

As a threshold matter, we find the (a) overexposure sub-items are duplicative of other citation items. Under Commission precedent, citation items involving the same abatement are duplicative. *See Capform, Inc.*, 13 BNA OSHC 2219, 2224, 1987-90 CCH OSHD ¶ 28,503, p. 37,778 (No. 84-0556, 1989). The Secretary did not specify any particular means of abatement for the (a) sub-items here, but she grouped them with the (b) sub-items, for which she sought only one of the two forms of abatement specified under the cited provision—the implementation of engineering, work practice and administrative controls. With respect to the use of appropriate respiratory protection, the second form of abatement specified in the cited provision, the Secretary separately issued a number of citations under the discrete provision of the LICS that pertains exclusively to respiratory protection, 29 C.F.R. § 1926.62(f). In these circumstances, the abatement sought for the (a) sub-items is engineering, work practice, and administrative controls, which is the same as that sought for the (b) sub-items. Accordingly, we vacate Items 1(a) to 20(a) as duplicative. *Manganas Painting Co.*, 21 BNA OSHC at 1975, 2007 CCH OSHD at p. 53,392 (vacating citation item alleging overexposure violation as duplicative of item alleging failure to use respirator).

Turning to Items 1(b) to 20(b), we find the Secretary established that Smalis failed to provide sufficient controls to reduce overexposure with respect to eight of the named employees, in violation of § 1926.62(e)(1). OSHA's sampling results show that the six sampled employees referenced in Items 1(b) to 6(b) were exposed well above the PEL. As to all but one of the remaining fourteen employees, Smalis's payroll records indicate that, following December 9, 1993, they worked the day shift on at least some days when blasting occurred.[13] Direct evidence, however, places only the employees referenced in Items 10(b) and 17(b) inside the

---

[12] On review, Smalis does not renew its argument, rejected by the judge, that the overexposure items were barred because the abatement period for similar items in the 1992 citations had not yet expired. Accordingly, we deem the argument abandoned. *Ragnar Benson, Inc.*, 18 BNA OSHC 1937, 1938, 1999 CCH OSHD ¶ 31,932, p. 47,371 (No. 97-1676, 1999) ("The Commission need not review an issue abandoned by a party.").

[13] The payroll records indicate that on these days, the employee referenced in Item 7(b) only worked the night shift and, therefore, was not shown to be overexposed.

containment on any of those days. Based on this evidence, we find the requisite overexposure is established for the six sampled employees referenced in Items 1(b) to 6(b) and the two unsampled employees referenced in Items 10(b) and 17(b).

In terms of noncompliance, the record shows that following the 1992 inspection, Smalis increased the number of dust collectors from two to three, and subdivided the containment into smaller sections, but did not reduce the number of blasters who worked in each compartment. In fact, despite Smalis's knowledge—based upon its prior experience in Allegheny County[14]—that the number of blasters working inside the containment was directly correlated to airborne lead concentration, it *increased* the number of blasters once work progressed to the Westmoreland County side of the bridge. We agree with the judge that Smalis's meager compliance efforts were plainly inadequate. Indeed, unrebutted expert testimony establishes that Smalis failed to institute a number of additional engineering and work practice controls that were feasible and could have substantially reduced the measured exposure levels, such as: (1) replacing the existing "pure dilution" ventilation system with a "forced ventilation" system; (2) altering the size and configuration of the containment into smaller, sub-divided areas with only two or three employees working in each area; (3) reducing the number of blasters working at one time; (4) using localized exhaust vacuum shrouded power tools; and (5) using dust collectors with a greater capacity to draw air out of the containment.

Moreover, Mr. Smalis admitted he "knew that inside the containment, that the [lead] concentration was high," and knew from the prior OSHA inspection that the engineering controls and work practices were inadequate to reduce it sufficiently. *See Conie Constr. Inc.*, 16 BNA OSHC 1870, 1872, 1993-95 CCH OSHD ¶ 30,474, p. 42,090 (No. 92-0264, 1994) (imputing owner's knowledge to the corporation), *aff'd*, 73 F.3d 382 (D.C. Cir. 1995). Nonetheless, Smalis failed to take reasonable and necessary steps to address the known hazard. In these circumstances, we find Smalis had actual knowledge of the violative condition. Accordingly,

---

[14] Pursuant to its contract with PennDOT, Smalis was required to comply with certain Allegheny County Health Department Air Pollution Control rules and regulations governing ambient lead levels in the vicinity of the project. When elevated levels of ambient lead were detected by the county at a nearby playground, Smalis implemented additional work control measures—such as reducing the number of blasters working inside the containment at one time from at least six to two—to meet the county's requirements. Thus, we find Smalis knew that implementing this type of control would reduce the amount of lead generated both inside and outside the containment.

with regard to Items 1(b) to 6(b), 10(b) and 17(b), we find Smalis failed to provide adequate engineering, work practice, and administrative controls, in violation of 29 C.F.R. § 1926.62(e)(1), and we vacate Items 7(b) to 9(b), 11(b) to 16(b), and 18(b) to 20(b) for lack of proof.

2. Item 22: 29 C.F.R. § 1926.62(e)(2)(i) (written compliance program)

Under this item, the Secretary alleged that "[w]here employees were over-exposed to lead, a written compliance program had not been established." The cited provision states that "[p]rior to commencement of the job each employer shall establish and implement a written compliance program to achieve compliance with paragraph (c) of this section." 29 C.F.R. § 1926.62(e)(2)(i). The judge vacated this item. Noting that the LICS became effective after the commencement of the job, and the cited provision "requires that certain actions be taken 'before the onset of work,'" he found the provision could "not possibly apply to the work Respondent was performing." We also vacate this item, but on different grounds.

The LICS became effective on June 3, 1993, and compliance with the cited provision was required "no later than 60 days from the effective date." 29 C.F.R. § 1926.62(p), (r). Smalis, however, began blasting and painting the Tarentum Bridge in August 1992, well before either the effective date of the provision at issue, or the date upon which compliance was required. We recently addressed the identical issue in *Manganas Painting Co.*, where, as here, the employer had commenced its paint removal operations at the cited worksite prior to the effective date of the LICS, and was cited for a violation of this particular provision. In that case, we found that although the "plain meaning" of § 1926.62(e)(2)(i) indicates the provision would not apply to work that commenced prior to the effective date of the standard, such a result would be "absurd." *Manganas Painting Co.*, 21 BNA OSHC at 1976-77, 2007 CCH OSHD at p. 53,394. We explained that adherence to a plain meaning approach would render another provision of the LICS—requiring revisions and updates to an employer's compliance program—"inapplicable regardless of how long the work continued after the standard's effective date, as it would be anomalous to require updating a program that had never been required in the first place." *Id.*, 2007 CCH OSHD at p. 53,394. Nonetheless, we vacated the citation in *Manganas* because the employer there "lacked fair notice that the written program requirement applied" in light of "the complexity of the issue and exception to the usual 'plain meaning' interpretation." *Id.*, 2007 CCH OSHD at p. 53,394.

In these circumstances, we find that although the written compliance program provision was applicable to Smalis during the time covered by the citation, Smalis lacked fair notice that the requirement applied. Accordingly, we vacate Item 22.

3. Item 23(a): 29 C.F.R. § 1926.62(f)(2)(i) (respirator selection)

Item 23(b): 29 C.F.R. § 1926.62(f)(3)(ii) (respirator fit testing)

Under these grouped items, the Secretary cited Smalis for two conditions under separate paragraphs of the standard. Under Item 23(a), the Secretary alleged that the referenced employee, whose lead exposure measured 908 $\mu g/m^3$, or over eighteen times the PEL, "was wearing a half mask air purifying respirator approved for exposure levels not in excess of 10 times the PEL." The judge affirmed this item based on (1) OSHA's sampling result for the employee at issue, (2) testimony identifying the type of respirator this employee used, and (3) the respirator criteria set out in Table 1 of the standard. For the following reasons, we affirm the judge.

The cited provision states that "[w]here respirators are used under this section the employer shall select the appropriate respirator or combination of respirators from Table I below." 29 C.F.R. § 1926.62(f)(2)(i) (1993). The CO testified that he observed the employee tending equipment topside wearing a half-mask style cartridge respirator that fit over the lower portion of the face and nose, and had screw-cartridges. The employee similarly testified that he wore a half-mask respirator pieced together from parts he found in the foreman's truck. Table I of the LICS limits use of this type of respirator to environments where the airborne lead level does not exceed 500 $\mu g/m^3$. Because this employee was exposed to lead at a level of 908 $\mu g/m^3$, which exceeds the allowable level for that respirator, we find Smalis failed to select an appropriate respirator.

With respect to knowledge, the record lacks evidence that Smalis knew this employee was exposed to airborne lead in excess of ten times the PEL and, therefore, that his respirator was inadequate. We find, however, that the company could have known of this violative condition with the exercise of reasonable diligence. *See Pride Oil Well Serv.*, 15 BNA OSHC 1809, 1814, 1991-93 CCH OSHD ¶ 29,807, p. 40,583 (No. 86-692, 1992) (finding constructive knowledge where employer "could have known of the condition with the exercise of reasonable diligence"); *Par Elec. Contractors, Inc.*, 20 BNA OSHC 1624, 1627, 2002 CCH OSHD ¶ 32,709, p. 51,793 (No. 99-1520, 2004) (noting that reasonable diligence involves "a

consideration of several factors," including employer's obligation to have adequate work rules and training programs, adequately supervise employees, anticipate employee exposure to hazards, and take measures to prevent violations). Smalis admitted that lead levels at the worksite were "high," and was specifically aware that lead levels in areas outside of the containment were high based on its prior experience in Allegheny County. Yet, the company failed to monitor this employee or otherwise monitor the levels of airborne lead topside to ensure the selection of an adequate respirator. In these circumstances, we find Smalis failed to exercise reasonable diligence, and had constructive knowledge of its failure to provide this employee with an appropriate respirator. Accordingly, we affirm Item 23(a).

Under Item 23(b), the Secretary alleged that Smalis failed to perform qualitative fit tests for employees wearing half mask respirators. The cited provision states as follows:

> Employers shall perform either quantitative or qualitative face fit tests at the time of initial fitting and at least every six months thereafter for each employee wearing negative pressure respirators. The qualitative fits tests may be used only for testing the fit of half-mask respirators where they are permitted to be worn, and shall be conducted in accordance with appendix D of this section. The tests shall be used to select facepieces that provide the required protection as prescribed in Table I.

29 C.F.R. § 1926.62(f)(3)(ii) (1993). The judge affirmed the violation based upon his finding that there was "specific evidence of record" that several Smalis employees had not been fit tested for their half-mask respirators, and any fit testing provided by Smalis was "haphazard." We affirm the judge.

In response to fit-test citations issued in 1992, Smalis had an outside contractor conduct on-site fit testing once in March 1993 for "whatever employees were there," and provide training to its supervisors so they could perform fit testing for other employees. Nevertheless, the unrebutted testimony of five employees establishes that Smalis never fit tested their respirators at this project. Although another employee testified that he was "fit tested" by his trained supervisor, he was told only to "hold my hands up and make sure I wasn't going to breathe anything in." This approach fails to conform to even the basic protocol set forth in Appendix D of the standard. 29 C.F.R § 1926.62 App. D (requiring, *inter alia*, that the test subject don the respirator mask several times and move the head side-to-side and up and down slowly while taking deep breaths and, for negative pressure testing, that the respirator is checked to ensure it

retains its tight seal on inhalation for at least ten seconds). Accordingly, we find Smalis failed to properly fit test employees as required by the cited provision.

In addition, we find Smalis could have known of the violative condition with the exercise of reasonable diligence. *Pride Oil Well Serv.*, 15 BNA OSHC at 1814, 1991-93 CCH OSHD at p. 40,583. The record shows Smalis had a safety rule stating that "[p]rior to wearing a respirator, a fit test must be performed by a qualified person," but the company failed to take measures to enforce the rule which, if followed, would have prevented the violation. Indeed, at least five employees were never fit tested and one was not properly fit tested. That Smalis's trained supervisor failed to properly fit test the employee who testified further demonstrates lax enforcement of Smalis's work rule. *Active Oil Serv., Inc.*, 21 BNA OSHC 1184, 1187, 2005 CCH OSHD ¶ 32,803, p. 54,498 (No. 00-0553, 2005) (holding foreman's failure to comply with company's confined space procedures was strong evidence of lax enforcement). Moreover, despite its awareness of previous fit-test violations, there is no evidence Smalis ever monitored this supervisor's compliance with fit-testing requirements or disciplined him for his failure to properly conduct fit testing. *Id.*, 2005 CCH OSHD at p. 54,498 (finding constructive knowledge where work rules unenforced). Under these circumstances, we find Smalis had constructive knowledge of the violative condition, and affirm Item 23(b).

4. Items 25(a) and 25(b): 29 C.F.R. § 1926.62(j)(1)(i) (medical surveillance—initial biological monitoring)

Under these grouped items, the Secretary cited Smalis for two conditions under the same provision. This provision requires the employer to "make available initial medical surveillance to employees occupationally exposed on any day to lead at or above the action level." 29 C.F.R. § 1926.62(j)(1)(i). Such surveillance "consists of biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin [("ZPP")] levels." *Id.* The Secretary alleged under Item 25(a) that Smalis failed to make blood lead level testing available to eight employees, and under Item 25(b) that Smalis failed to make ZPP testing available to any employee. The judge vacated Item 25(a) based on his finding that the record did not establish the requisite overexposure for any of the eight identified employees. He affirmed Item 25(b), however, based on his finding that the record established the requisite overexposure for other employees, and the undisputed fact that Smalis "neither offered nor had [ZPP] testing conducted on its employees at any [time] relevant . . . to this citation." We affirm the judge.

With respect to Item 25(a), payroll records show that three of the eight referenced employees did not work the day shift on days when blasting occurred, and two employees did not work at all on the Tarentum Bridge during these days. Although the three remaining employees worked one or more of these shifts, there is no direct evidence placing them inside the containment on any of these days. We therefore conclude the Secretary failed to establish the requisite overexposure for any of the referenced employees, and vacate Item 25(a).[15]

With respect to Item 25(b), the record establishes that the six employees OSHA sampled on December 9, 1993 were exposed to airborne concentrations of lead well above the PEL, and shows that several other employees were similarly overexposed while working inside the containment during the days thereafter when blasting occurred. Moreover, Smalis knew the blood testing it made available to its employees was limited to BLLs, and it is undisputed such testing did not include ZPP levels. Accordingly, we find Smalis knowingly failed to make available ZPP testing, and affirm Item 25(b).

5. *Items 25(c), 26, 27, 72 and 73: 29 C.F.R. § 1926.62(j)(2)-(3) (medical surveillance—provisions applicable where employee exposure is at or above the action level for more than 30 days in any consecutive 12 months)*

Under these items, the Secretary alleged violations of various medical surveillance provisions that are applicable only where employees "are or may be exposed by the employer at or above the action level for more than 30 days in any consecutive 12 months." 29 C.F.R. § 1926.62(j)(1)(ii). The judge vacated these items, finding the Secretary failed to establish the requisite exposure for any Smalis employee. We affirm the judge.

Regardless of their job classification, Smalis employees performed a variety of tasks. Those classified as abrasive blasters and sand suckers, for example, also painted and performed rigging activities. Thus, the mere fact that Smalis's payroll records specify that an employee worked as an abrasive blaster or sand sucker on a particular day, does not necessarily establish the employee performed only that particular work. Indeed, two abrasive blasters testified that, between August 1993 and January 1994, they spent only twenty to twenty-five percent of their

---

[15] Although the record indicates there were no blood lead test results for these employees, this fact alone, under the circumstances here, does not establish that Smalis failed to *make available* blood lead level testing, which provides an additional basis for vacating this citation item. Indeed, the evidence indicates Smalis contracted with Mercy Hospital to conduct BLL testing of Smalis employees.

work time blasting inside the containment, and other evidence indicates that blasting and painting generally would not occur at the same time. No other evidence indicates how often blasting occurred.

Even if we assume that blasting occurred once every fourth day—i.e., twenty-five percent of the time—the record fails to support a finding that any employee was, or could have been, exposed "at or above the action level for more than 30 days in any consecutive 12 months." 29 C.F.R. § 1926.62(j)(1)(ii). The payroll records in evidence date back only to July 1993. Using those records to calculate the total number of days that each listed employee worked between July 1993 and January 1994, and then dividing that number by four, results in only one Smalis employee being on site for more than thirty days when blasting presumably occurred. This employee, a foreman at the worksite, worked 156 days during this time period, for a total of thirty-nine blasting days while he was on site. There is no evidence, however, that his work activities as foreman subjected him to the same working conditions as those who worked inside the containment and were monitored by OSHA. In fact, the record suggests the foreman was not permitted to enter the containment due to his high BLL and, while CO Javorsky testified that she observed the foreman "working in and amongst equipment topside" during the inspection, she admitted that neither she nor CO Morris observed the foreman during most of that day. No other evidence in the record establishes the amount of time the foreman worked at the bridge each day, or his proximity to the containment while on the bridge. In the absence of any proof that a Smalis employee was or may have been exposed "at or above the action level for more than 30 days in any consecutive 12 months," the medical surveillance obligations set forth under the cited provisions are not applicable here.[16] Accordingly, we vacate these citation items.

---

[16] We note that OSHA's compliance directive states:

> Employees with an exposure at or above the action level are entitled to coverage in the medical surveillance program under (j)(2) and (j)(3), *as soon as the employer has reason to believe* that the employee will be so exposed for more than 30 days or the employee has been so exposed for more than 30 days in any 12 consecutive months.

Lead Exposure in Construction, OSHA Instruction CPL 2-2.58 App. A (Dec. 13, 1993) (emphasis added). Here, however, the Secretary has not established whether Smalis had reason for such belief.

6. Items 28 and 29: 29 C.F.R. § 1926.62(j)(2)(i)(C) (medical surveillance—biological monitoring of removed employees)

Under these items, the Secretary alleged, on a per-employee basis, that Smalis failed to make available the required follow-up biological monitoring to two employees who had BLLs of 67 μg/dl and 68 mg/dl on December 9, 1993. The cited provision states as follows:

> The employer shall make available biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels to each employee covered under paragraphs (j)(1)(i) and (ii) of this section on the following schedule: . . . (C) For each employee who is removed from exposure to lead due to an elevated blood lead level at least monthly during the removal period.

29 C.F.R. § 1926.62(j)(2)(i)(C). The judge affirmed both items based on his findings that (1) the two employees had been exposed to lead at or above the action level on the date of the inspection; (2) both employees "had a reasonable expectation of continued employment with Smalis at the time that they were laid off"; and (3) "the job was at a point where at least 30 more days of painting/blasting would be required to complete it," meaning that under the cited provision, Smalis was required to make at least one monthly blood test for BLL and ZPP available to these employees. We affirm the judge.

As discussed above, the referenced employees—who were also the subject of Items 5(b) and 10(b)—were exposed to lead well above the action level on at least one day and, therefore, qualified as "covered" employees under paragraph (j)(1)(i). 29 C.F.R. § 1926.62(j)(1)(i) (requiring that employer "make available initial medical surveillance to employees occupationally exposed on any day to lead at or above the action level"). Additionally, it is undisputed Smalis prohibited these employees from working at the bridge solely due to their elevated BLLs—which we find constitutes removal under § 1926.62(j)(2)(i)(C)—and failed to make ZPP testing available to them at any time. Finally, payroll records and employee testimony show that the Tarentum Bridge project continued for at least a month after Smalis removed the two employees. In view of Smalis's knowledge that it removed these employees due to elevated BLLs, and that the biological monitoring made available did not include ZPP testing, we find Smalis had actual knowledge of the violative conditions. Accordingly, we affirm Items 28 and 29.

7. Items 30 to 50: 29 C.F.R. § 1926.62(j)(2)(iv)(A) (medical surveillance— employee notification of blood test results)

Under these items, the Secretary alleged, on a per-employee basis, that Smalis failed to provide employees with their written individual BLL test results. The cited provision states, in pertinent part, that "[w]ithin five working days after the receipt of biological monitoring results, the employer shall notify each employee in writing of his or her blood lead level." 29 C.F.R. § 1926.62(j)(2)(iv)(A). The judge affirmed twelve of the twenty-one items based on his overexposure analysis.[17] Based on our overexposure analysis, which differs from that of the judge, we affirm eight citation items.

It is undisputed that Smalis failed to provide individual written BLL results to any of its employees. CO Morris testified that, when questioned, "[i]n no case did an employee [identified in these items] state that they had received a written result of the blood test taken." Although Mr. Smalis testified, and a Smalis employee confirmed, that Smalis posted the BLL results in the worksite trailer and employees also received their results verbally, either from Mr. Smalis or from the PennDOT project manager, Mr. Smalis admitted that he did not provide the results in writing to any employee.

However, the obligation set out in the cited provision is limited, as relevant here, to those "employees occupationally exposed on any day to lead at or above the action level." *See* 29 C.F.R. § 1926.62(j)(1)(i). As previously discussed, we find the Secretary established the requisite overexposure for the six sampled employees, who are referenced in Items 34, 37, 41, 43, 45 and 49. As to the remaining fifteen employees, direct evidence places only two of them—the employees referenced in Items 36 and 47—inside the containment during the December 9, 1993 day shift, or on any subsequent day when blasting occurred. Under the cited provision, Smalis was therefore required to provide written BLL results to the six sampled employees and these two additional employees.[18] Accordingly, we affirm Items 34, 36, 37, 41, 43, 45, 47, and 49, and vacate Items 30 to 33, 35, 38 to 40, 42, 44, 46, 48, and 50.

---

[17] The judge affirmed Items 30, 33, 34, 36 to 40, 41, 43, 45, and 49.

[18] As to the remaining thirteen employees at issue under these citation items, payroll records indicate the two employees identified in Items 30 and 31 only worked the night shift on December 9, 1993, and days thereafter when blasting occurred. Similarly, payroll records show the three employees identified in Items 35, 48, and 50 did not work any days on or after

8. Items 51 to 71: 29 C.F.R. § 1926.62(j)(2)(iv)(B) (medical surveillance—employee notification of Medical Removal Protection ("MRP") benefits)

Under these items, the Secretary alleged, on a per-employee basis, that Smalis failed to notify each employee with a BLL in excess of 40 µg/dl that the LICS requires temporary medical removal with MRP benefits. The cited provision states that "the employer shall notify each employee whose blood lead level exceeds 40 µg/dl that the standard requires temporary removal with [MRP] benefits when an employee's blood lead level exceeds the numerical criterion for medical removal under paragraph (k)(1)(i) of this section." 29 C.F.R. § 1926.62(j)(2)(iv)(B). The judge affirmed five of the twenty-one citation items based on his overexposure analysis.[19] Based on our overexposure analysis, we affirm two citation items.

Mr. Smalis admitted that he failed to notify any of the employees at issue here of the temporary medical removal requirement with MRP benefits, even though the record shows they all had BLLs in excess of 40 µg/dl while working at the bridge. In addition, CO Morris testified that none of the employees identified in these items indicated they were aware, or had been informed, of this particular requirement, and testimony from five of the employees at issue here confirms that none received such notification.

However, the obligation to provide such notification is limited, as relevant here, to "employees occupationally exposed on any day to lead at or above the action level." *See* 29 C.F.R. § 1926.62(j)(1)(i). The Secretary established that only two of the twenty-one employees at issue satisfied this requirement: the employee referenced in Item 62 was shown to be overexposed by OSHA's sampling on December 9, 1993, and direct evidence in the record places the employee referenced in Item 57 inside the containment during that day shift.[20]

December 9, 1993, when blasting occurred. Finally, payroll records indicate the remaining eight employees all worked the day shift on December 9, 1993, and/or at least some days thereafter when blasting occurred, but the record lacks direct evidence placing them inside the containment on those days. In these circumstances, we find that none of these employees were shown to be overexposed such that Smalis would have been required under the cited provision to provide them with written BLL results.

[19] The judge affirmed Items 51, 57, and 61 to 63.

[20] As to the remaining nineteen employees, payroll records indicate that the five employees referenced in Items 51, 52, 60, 65, and 70 only worked the night shift during the relevant period. Similarly, payroll records indicate that the seven employees referenced in Items 53, 56, 64, and 66 to 69 did not work on December 9, 1993, or any days thereafter when blasting occurred.

Moreover, Mr. Smalis specifically testified he knew these two employees had BLLs above 40 µg/dl and, as previously discussed, he also knew that lead concentrations inside the containment were high. Based on this evidence, we find Smalis failed to provide these employees with required notice of the information set forth in the cited provision. Accordingly, we affirm Items 57 and 62, and vacate Items 52 to 56, 58 to 61, and 63 to 71.

9. Items 74 to 84: 29 C.F.R. § 1926.62(k)(1)(i) (medical removal)

Under these items, the Secretary alleged, on a per-employee basis, that each employee "was transferred to a job duty where it had not been determined by [Smalis] that exposure levels to lead were below the action level." The judge vacated all of these items, except Item 76. For the following reasons, we vacate all of these citation items.

The cited provision states that "[t]he employer shall remove an employee from work having an exposure to lead at or above the action level on each occasion that a periodic and a follow-up blood sampling test conducted pursuant to this section indicate that the employee's blood lead level is at or above 50 µg/dl." 29 C.F.R. § 1926.62(k)(1)(i). Payroll records show that three of the eleven referenced employees did not work the day shift on days when blasting occurred. Although the eight remaining employees worked on one or more of these day shifts, the record lacks direct evidence that any of them worked inside the containment during this time. The Secretary, therefore, failed to establish that any of the employees referenced in Items 74 to 84 were, at any time, engaged in "work having an exposure to lead at or above the action level." 29 C.F.R. § 1926.62(k)(1)(i). Accordingly, we vacate Items 74 to 84.

10. Items 88 to 158: 29 C.F.R. § 1926.62(l)(1)(ii) (training)

Under these items, the Secretary alleged, on a per-employee basis, that Smalis failed to provide seventy-one employees with "lead training as per OSHA's Lead in Construction Standard and its appendices." The judge found the cited standard applied only to those employees shown to have been actually exposed to lead at or above the action level. Based on this finding, the judge affirmed eleven items, and vacated the remaining sixty items.[21] We reject

---

Finally, payroll records show that the remaining seven employees referenced in Items 54, 55, 58, 59, 61, 63, and 71, all worked day shift on December 9, 1993 and/or some days thereafter when blasting occurred, but the record lacks direct evidence that any of them worked inside the containment on those days.

[21] The judge affirmed Items 93, 94, 102, 108, 119, 121, 123, 126, 128, 137, and 142.

the judge's interpretation of the cited provision, affirm twenty-seven items, and vacate forty-four items, as follows.

The cited provision states that, "[f]or all employees who are *subject to* exposure to lead at or above the action level on any day . . . , the employer shall provide a training program in accordance with paragraph (l)(2) of this section and assure employee participation." 29 C.F.R. § 1926.62(l)(1)(ii) (emphasis added). In addition, the next paragraph of the training provision requires "[t]he employer [to] provide the training program as initial training *prior to the time of job assignment*." 29 C.F.R. § 1926.62(l)(1)(iii) (emphasis added). Based on the "subject to" wording of the cited provision, and requirement that training be provided "prior" to employee exposure to the hazardous conditions, we find the training requirement applies here to any employee who: (1) was hired to perform work that would have exposed him to lead at or above the action level, and (2) was present at the worksite at a time when he could have been called upon to perform that work. Consequently, we reject the judge's finding that the training requirement applies only where actual overexposure is shown. *See* 29 C.F.R. § 1926.62 App. B, pt. X ("All employees must be trained prior to initial assignment to areas where there is a possibility of exposure over the action level"); *cf.* Occupational Exposure to Lead, 43 Fed. Reg. 52,952, 53,005 (Nov. 14, 1978) (noting in reference to training provision of general industry lead standard, which also covers employees "subject to exposure to lead at or above the action level," that "the training program is required to be completed . . . for all new employees at the time of initial assignment to areas where there is a possibility of exposure over the action level," because "it is important to train employees as soon as possible in order to maximize the benefits of the training program"). *See also Gen. Motors Corp.* ("*GM*"), 22 BNA OSHC 1019, 1030, 2007 CCH OSHD ¶ 32,928, p. 53,611 (No. 91-2834E, 2007) (consolidated) (concluding, under lockout/tagout training standard, "it would be unreasonable to require that an employee be exposed to a hazard before requiring that he be trained to recognize and avoid that hazard").

As previously discussed, the Secretary established that employees who performed abrasive blasting, or sand sucking while blasting was ongoing, were exposed to lead well above the action level. Thus, Smalis was required to provide each employee hired to perform one of these job tasks with the training required under § 1926.62(l)(1)(ii). In addition to abrasive blasters and sand suckers, the record establishes that those hired as a groundsman, watchman, or laborer could also have been assigned sand sucking duties. The only enumerated employee not

included in one of these job classifications—the individual referenced in Item 117—was an apprentice, and there is no evidence that his responsibilities included job tasks that could result in overexposure.

Of the seventy employees assigned to a job classification that included sand sucking or blasting as one of its duties, the payroll records show that only twenty-seven employees—those referenced in Items 88, 92 to 94, 102 to 104, 108, 111, 119 to 121, 123 to 128, 130, 137, 138, 142, 143, 145, 147, 155, and 158—worked on the bridge on any one day when blasting occurred. The record evidence also shows Smalis failed to provide the required training to all twenty-seven employees. Indeed, none of the twenty-seven employees attended the union-sponsored class held in October 1993, and it is undisputed that these employees did not receive any compliant lead training. Moreover, by his own admission, Mr. Smalis knew the union-sponsored class could only accommodate twenty individuals, and that a second class would not be held until February 1994. Smalis also knew that almost all of the employees working on the bridge—many more than the twenty individuals who could participate in the union class—were assigned to job classifications that could have required them to perform sand sucking or abrasive blasting, which would have subjected them to lead overexposure.

In these circumstances, we find Smalis knowingly failed to provide required training to the referenced twenty-seven employees. Accordingly, we affirm Items 88, 92 to 94, 102 to 104, 108, 111, 119 to 121, 123 to 128, 130, 137, 138, 142, 143, 145, 147, 155, and 158. We vacate the remaining items, Items 89 to 91, 95 to 101, 105 to 107, 109, 110, 112 to 118, 122, 129, 131 to 136, 139 to 141, 144, 146, 148 to 154, 156, and 157, for lack of proof.

11. Item 159: 29 C.F.R. § 1926.62(l)(2)(v) (training program—engineering controls and work practices)

Under this item, the Secretary alleged that Smalis failed to assure that the nineteen employees who attended the union-sponsored class received "training in the engineering controls and work practices specific to their job assignments." The judge vacated this item, concluding that the alleged violation "is unnecessarily redundant in that it is a lesser included violation within [the other training] violations."[22] We disagree, and affirm the violation.

---

[22] In vacating this item, the judge appears to have found it redundant based on his mistaken assumption that the referenced nineteen employees were also the subjects of Items 88 to 158.

The cited provision states that "[t]he employer shall assure that each employee is trained in . . . [t]he engineering controls and work practices associated with the employee's job assignment including training of employees to follow relevant good work practices described in Appendix B" of the standard. 29 C.F.R. § 1926.62(l)(2)(v). It is undisputed the union-sponsored class included a review of the LICS. Nonetheless, the class instructor admitted that, "[o]ther than being asked specific questions by those in attendance," there was no "special information that pertained only to the Tarentum Bridge worksite that was included in the course," and the course material, which was admitted into evidence, includes no discussion of engineering controls and works practices specific to the worksite. Although the record does not show Smalis knew of this deficiency, reasonable diligence requires an employer to make some effort to determine whether the class satisfied the standard's requirements. *Par Elec. Contractors, Inc.*, 20 BNA OSHC at 1627, 2002 CCH OSHD at p. 51,793 (noting that reasonable diligence involves "a consideration of several factors," including employer's obligation to have adequate work rules and training programs, adequately supervise employees, anticipate employee exposure to hazards, and take measures to prevent violations). Here, there is no evidence Smalis made any effort to discover whether the union-sponsored course fully complied with the requirements of the standard. We find, therefore, that Smalis failed to provide adequate training in violation of the cited provision, and had constructive knowledge of the violation. *See Pride Oil Well Serv.*, 15 BNA OSHC at 1814, 1991-93 CCH OSHD at p. 40,583. Accordingly, we affirm Item 159.

B. Characterization

The judge characterized all of the items he affirmed as willful. Based on our review of the record evidence and applicable legal precedent, we characterize the majority of the items we affirm as willful, but conclude that a number of them are not willful, as follows.

Principles of Law

"The hallmark of a willful violation is the employer's state of mind at the time of the violation—an 'intentional, knowing, or voluntary disregard for the requirements of the Act or . . . plain indifference to employee safety.'" *Kaspar Wire Works, Inc.*, 18 BNA OSHC 2178, 2181,

---

However, the citation clearly indicates that the nineteen employees referenced in this item were not also referenced in Items 88 to 158.

2000 CCH OSHD ¶ 32,134, p. 48,406 (No. 90-2775, 2000) (citation omitted), *aff'd*, 268 F.3d 1123 (D.C. Cir. 2001).

> [I]t is not enough for the Secretary to show that an employer was aware of conduct or conditions constituting the alleged violation; such evidence is already necessary to establish any violation . . . . A willful violation is differentiated by heightened awareness of the illegality of the conduct or conditions and by a state of mind of conscious disregard or plain indifference . . . .

Hern Iron Works, Inc., 16 BNA OSHC 1206, 1214, 1993-95 CCH OSHD ¶ 30,046, pp. 41,256-57 (No. 89-433, 1993). This state of mind is evident where "'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.'" *AJP Constr. Inc. v. Sec'y*, 357 F.3d 70, 75 (D.C. Cir. 2004) (emphasis and citations omitted). A willful characterization is not justified, however, if an employer has "'a good faith, albeit mistaken, belief that particular conduct is permissible.'" *Manganas Painting Co.*, 21 BNA OSHC at 1991, 2007 CCH OSHD at p. 53,406 (citation omitted).

Analysis

1. Heightened Awareness

The record here shows that from the very start of the Tarentum Bridge project, Smalis was made aware of the lead hazards associated with its work activities and of its obligation to protect employees exposed to such hazards. Indeed, the July 1992 contract with PennDot required Smalis to implement health protection measures in accordance with the general industry lead standard, 29 C.F.R. § 1910.1025, as well as "all applicable OSHA General and Construction Standards," in order to "protect workers from overexposure to lead-containing dust." The contract further required that Smalis: (1) submit various documents, including a copy of its training program and work rules, to ensure compliance with OSHA's and PennDOT's requirements, and "not expose workers to lead-containing dust until such information has been deemed acceptable by the District Engineer"; (2) "[p]rovide the services of a reputable, experienced third party, acceptable to the District Engineer, to monitor the quality of the air being breathed by workers within the containment area, in conformance with OSHA requirements"; (3) provide employees working within the containment area, or handling lead-contaminated items, with washing facilities, changing areas, and separate storage for work and street clothes; and (4) test the BLL of each employee working in the containment area prior to the first day of work, retest after no more than 120 hours of exposure and again at intervals

relative to each employee's BLL increase rate, and assure that an employee is removed from further exposure if his BLL reaches 40 μg/dl.

The record also shows that prior to the December 1993 inspection at issue here, Smalis was further informed through its interactions with OSHA of its obligation to protect employees working in high-exposure areas and, more specifically, of the newly promulgated Lead in Construction Standard's applicability to activities on the Tarentum Bridge. OSHA first inspected the bridge worksite in September 1992, soon after Smalis commenced work there. At that time, OSHA's air monitoring inside the containment showed that employee exposure to airborne lead exceeded an eight-hour TWA of 1,100 $\mu g/m^3$. On December 17, 1992, OSHA issued Smalis three citations for various lead-related violations ("1992 Citations"). These citations included allegations that Smalis had overexposed two sand suckers and an abrasive blaster to airborne lead, and had failed to perform other required tasks identical or substantially similar to requirements at issue here under the LICS, such as conducting personal air monitoring to determine employee exposure, implementing feasible administrative or engineering controls, informing employees of their BLL results as soon as possible, and instructing employees exposed to airborne lead about its potential hazards. Smalis was also cited for failing to take various required personal hygiene and protective measures, such as providing employees with appropriate respirators and removing an abrasive blaster with a BLL of 153 μg/dl from further lead exposure.

Mr. Smalis personally attended the August 9, 1993 hearing regarding the contested 1992 Citations, at which the only witness was an expert in lead training and abatement methods. Addressing employer obligations prior to promulgation of the LICS, the expert identified specific elements of a comprehensive lead training course and explained how abrasive blasting inside a containment could result in extraordinarily high levels of airborne lead. Following that testimony, the parties agreed to settle the case, whereupon the judge exhorted Smalis to properly train its employees in accordance with OSHA standards. The order in that case, which became a final order of the Commission on October 19, 1993, affirmed all of the December 17, 1992 citations, and instructed Smalis to "provide suitable and appropriate training for its affected employees," which "shall be provided by any certified source to be selected at the sole discretion of [Smalis]."

In March 1993, OSHA inspected another Smalis bridge project, located in Jacksonville, Florida, involving the removal of lead-based paint. The resulting August 19, 1993 citations ("1993 Citations") included repeat violations alleging that Smalis failed to comply with respirator training and program requirements, and failed to conduct air monitoring to determine employee exposure. During a closing conference on August 18, Mr. Smalis asked the Assistant Area Director ("AAD") for Health Compliance in the Jacksonville Area Office whether OSHA would be enforcing the LICS, and Mr. Smalis was told that, "if they were at the jobsite August 3rd of 1993 or thereafter, [OSHA] would be fully enforcing the new standards." Mr. Smalis mentioned that his contract with the Florida Department of Transportation did not cover the extra cost of complying with the new standard, but the AAD "advised him that any extra costs would be between him and DOT." The AAD also "briefed" Mr. Smalis on the revised PEL, action level, engineering controls, work practice controls, and medical surveillance program that would be required under the LICS, and immediately mailed Smalis a copy of the LICS and a respiratory protection pamphlet.[23]

Finally, the record shows that, through various communications with Mercy Hospital ("Mercy"), Smalis received notice of its medical surveillance obligations, including those arising under the LICS. In March 1993, Smalis entered into a service agreement with Mercy to provide BLL screenings for Smalis employees. The service agreement specified that test results, as well as medical recommendations, would be sent to Smalis for each employee, and that, where an individual employee did not accept Mercy's referral for further medical treatment, Smalis had to "provide written verification to [Mercy] that the individual did receive appropriate follow-up medical care for the existence of lead in the blood system." Mr. Smalis's wife signed this agreement on behalf of the company, accepting its terms.

---

[23] We note that Mr. Smalis denied discussing the LICS with anyone from OSHA in Jacksonville or receiving a copy of the standard in the mail. We defer to the judge, however, who found Mr. Smalis's testimony "totally lacking in credibility" on this particular factual matter "given his lack of sincerity and his demeanor on the witness stand and in the hearing room and his repeatedly demonstrated marked antagonism toward OSHA, employees who complained or in any way testified as to anything negative about him and to the entire hearing process." *See Hern Iron Works, Inc.*, 16 BNA OSHC at 1214, 1993-95 CCH OSHD at pp. 41,256-57 (accepting judge's credibility assessment where it is based on "observations of a witness' demeanor and is clearly stated and explained").

In accordance with their agreement, Mercy corresponded numerous times with Smalis over the next four months, providing not only employee BLL results but also addressing the importance of medical surveillance for employees working in high lead-exposure areas and highlighting Smalis's obligations arising under the new LICS. In an April 1993 letter, for instance, Mercy's Account Executive informed Smalis that the hospital had verbally provided Smalis's office with BLL results pertaining to fourteen of its employees and faxed written recommendations from Mercy's occupational physician regarding those results. These recommendations, communicated to Smalis's office manager, addressed the need to remove three Smalis employees with BLLs over 60 μg/dl from lead exposure work, as well as the need for a specialist to evaluate them before returning to such work. The Account Executive stressed that because ten of the fourteen employees had tested in the "abnormal" range, it was important for the hospital "to know that these results were shared with [the test subjects] and that proper follow-up recommendations have been provided and hopefully followed." At the request of the Account Executive, Smalis provided Mercy with a statement—again signed by Mr. Smalis's wife—confirming that these actions had been taken.

Soon thereafter, in a June 1993 letter to Smalis's office manager, the Account Executive expressly stated that the newly promulgated LICS, which was not yet in effect, required testing for both ZPP and blood lead levels. The Account Executive also stated that Mercy's occupational physician was "curious as to the medical follow up . . . being provided for the individuals with high lead levels," and had recommended providing physicals to a number of employees "that include . . . ZPP lab tests." About a month later, in a letter sent to Mr. Smalis, Mercy's physician outlined certain requirements of the LICS that, in "his medical opinion," were important to Smalis's "medical monitoring decisions." The physician specifically referenced the action level and the revised PEL under the new standard, and summarized what type of medical surveillance program he believed the standard required, touching upon BLL and ZPP testing, medical examinations, and medical removal.

In addition to this correspondence, after the LICS went into effect, Mercy revised the form its physician used to communicate medical recommendations to include certain

requirements of the new standard.[24] A copy of the form, titled "LEAD LEVELS UNDER 29 CFR 1926 (FOR CONSTRUCTION TRADES)," was included with each employee BLL test result sent to Smalis on or after October 25, 1993. The form set forth detailed information about the medical surveillance requirements of the LICS, such as increased monitoring for employees whose BLLs ranged from 40 µg/dl to 49 µg/dl, and medical removal requirements for employees whose BLLs were 50 µg/dl or higher. The form also added a line for the physician to record ZPP test results, and quoted directly from the lead standard's provision requiring employers to notify all tested employees of their BLL test results in writing.

At the hearing, Mr. Smalis denied seeing any of the letters from Mercy before the issuance of the citations in this case, and claimed that no one in his office had brought the letters to his attention. Further, no evidence in the record indicates whether anyone at Smalis reviewed the medical recommendations from Mercy's physician. To the extent the record lacks direct evidence that Smalis managerial personnel reviewed these documents, we find that any such failure to review is consistent with Smalis's overall cavalier attitude towards its employees' medical needs. Indeed, at the very least, it appears likely that Smalis's office received the three letters from Mercy—the record shows that Mr. Smalis's wife responded to the April 1993 letter, and all three letters were sent to an address that Mr. Smalis himself identified as the company's official mailing address. *Manganas Painting Co.*, 21 BNA OSHC at 1985, 2007 CCH OSHD at p. 53,400 (noting presumption that postal service personnel "properly discharge their official duties"). Moreover, based on their written service agreement, Smalis was aware that Mercy would be sending medical recommendation forms which, in some cases, required action on the part of Smalis, yet Smalis did nothing to ensure that its office personnel transmitted these forms to a company official.

Taken together, we find this evidence establishes Smalis had a heightened awareness that its work activities at the Tarentum Bridge exposed many of its employees to high concentrations of airborne lead, posing a significant risk of lead toxicity. We also find this evidence—particularly Mr. Smalis's conversation with the AAD in Jacksonville—establishes that Smalis

---

[24] While the medical recommendation form used by Mercy prior to October 25, 1993 made no reference to the LICS, it did describe the "risk of lead poisoning" that each BLL posed to the employee, and how the employer should respond to that risk.

had knowledge of the existence of the LICS and confirmation that, as of August 3, 1993, the LICS was applicable to any projects that involved abrasive blasting of lead-based paint. *See Conie Constr. Inc.*, 16 BNA OSHC at 1872, 1993-95 CCH OSHD at p. 43,090 (imputing owner's knowledge to corporation). Finally, we find this evidence shows that Smalis either had actual knowledge of various LICS requirements, or failed to avail itself of several opportunities to learn of these specific requirements, including those pertaining to medical surveillance. *See United States v. Ladish Malting Co.*, 135 F.3d 484, 488 (7th Cir. 1998) (noting that "'actual knowledge and deliberate avoidance of knowledge are the same thing'"—"[b]ehaving like an ostrich supports an inference of actual knowledge" (citation omitted)); *NLRB v. Regal Aluminum, Inc.*, 436 F.2d 525, 527-28 (8th Cir. 1971) ("It is well-settled law that a party to a transaction, where his rights are liable to be injuriously affected by notice, cannot willfully shut his eyes to the means of knowledge which he knows are at hand, and thereby escape the consequences which would flow from the notice if it had actually been received." (quoting *The Lulu*, 77 U.S. 192, 201 (1869))).

2. Individual Citation Items

Smalis's heightened awareness of its employees' lead exposure and its compliance obligations under the Act, paired with its pervasive failure to provide employees with some of the most basic required protections, generally evinces a willful state of mind. *Hern Iron Works, Inc.*, 16 BNA OSHC at 1214, 1993-95 CCH OSHD at pp. 41,256-57 ("A willful violation is differentiated by heightened awareness of the illegality of the conduct or conditions and by a state of mind of conscious disregard or plain indifference."). Unlike the judge, however, we find that Smalis's state of mind is not "equally applicable" to each of the citation items we affirm. *See A. E. Staley Mfg.*, 19 BNA OSHC 1199, 1212-13 & n.28, 2000 CCH OSHD ¶ 32,220, pp. 48,908-09 & n.28 (No. 91-0637, 2000) (consolidated) (finding employer's heightened awareness of combustible dust hazard sufficient to support willfulness for all related violations throughout the plant, but rejecting a solely "general evidence" approach for other violations where employer's hazard awareness was not "equally applicable" to all of them), *aff'd*, 295 F.3d 1341 (D.C. Cir. 2002). Thus, in considering the characterization of these items, we examine the evidence relevant to each item in concert with our above findings. Our discussion below is divided into three sections—section (*a*) pertains to items where we find Smalis demonstrated a conscious disregard for the requirements of the Act, *GM*, 22 BNA OSHC at 1044, 2007 CCH

OSHD at p. 53,622; section (*b*) pertains to items where we find Smalis possessed a state of mind such that if it were informed of the pertinent requirements and the violative conditions, it would not have cared, *AJP Constr. Inc.*, 357 F.3d at 74; and section (*c*) pertains to items where we find Smalis lacked a willful state of mind.

a. Items 1(b) to 6(b), 10(b), 17(b), 21, 24(c), 88, 92 to 94, 102 to 104, 108, 111, 119 to 121, 123 to 128, 130, 137, 138, 142, 143, 145, 147, 155, and 158

Items 1(b) to 6(b), 10(b), and 17(b) pertain to Smalis's failure to implement engineering and work practice controls, in violation of § 1926.62(e)(1). Smalis was previously cited for a similar failure to implement engineering controls following OSHA's 1992 inspection of the same worksite. *See A.J. McNulty & Co. v. Sec'y of Labor*, 283 F.3d 328, 338 (D.C. Cir. 2002) ("[P]rior citations for identical or similar violations may sustain a violation's classification as willful."); *E.L. Davis Contracting Co.*, 16 BNA OSHC 2046, 2051-52, 1993-95 CCH OSHD ¶ 30,580, p. 42,342 (No. 92-35, 1994) (affirming violation as willful where employer was previously cited for similar violative conduct and city inspector warned of hazard). Specifically, the 1992 Citations alleged that, in violation of 29 C.F.R. § 1926.55(b), feasible administrative or engineering controls, such as increasing the ventilation in contamination areas and eliminating shot clean-up in the contaminate area during blasting, were not implemented to reduce employee exposure to lead. Smalis admitted to these allegations in the October 1993 settlement agreement, but failed to implement adequate engineering or work practice controls for overexposed employees working on the same bridge and performing the same types of activities in December 1993. *See Morrison-Knudsen Co./Yonkers Contracting Co.*, 16 BNA OSHC 1105, 1127, 1993-95 CCH OSHD ¶ 30,048, p. 41,284 (No. 88-572, 1993) (affirming violations as willful where employer failed to protect employees from lead hazards in disregard of consultant's advice and its own safety program).

Following the 1992 inspection, Smalis reconfigured the containment, purchased additional dust collectors, and required that employees entering the containment wear blasting hoods—all measures which, we note, did not slow its work progress and were visible to any outside observers. Nonetheless, Smalis continued to unnecessarily expose employees engaged in sand sucking by sending them to work inside the containment during abrasive blasting. Moreover, despite Allegheny County's request that Smalis reduce the number of blasters inside the containment to minimize lead debris, Smalis chose to *increase* the number of blasters once operations crossed the county line. In these circumstances, we conclude that Smalis's failure to

implement necessary and effective engineering and work practice controls was willful. *See GM*, 22 BNA OSHC at 1044, 2007 CCH OSHD at p. 53,622 (affirming violation as willful where evidence established "a conscious disregard for the requirements of the Act"); *Revoli Constr. Co.*, 19 BNA OSHC 1682, 1686, 2001 CCH OSHD ¶ 32,497, p. 50,378 (No. 00-315, 2001) (finding employer's "failure to have taken action previously when the prior citations left no doubt about what should be done" supports willful characterization).

Item 21, the merits of which are not on review, pertains to Smalis's failure to conduct representative personal full-shift air sampling to determine whether any employee may have been exposed above the action level, in violation of 29 C.F.R. § 1926.62(d)(1)(iii). Mr. Smalis admitted that he performed no personal air monitoring either inside or outside of the containment, but also admitted that he knew lead concentrations inside the containment were "high." At the hearing, Mr. Smalis indicated that he performed no personal air monitoring because, during "[t]he inspection in 1992, the compliance officer did some monitoring and we knew what the exposure was." At that time, however, OSHA monitored only employees working inside the containment during blasting, which would not have determined exposure levels for each job classification in other work areas, as required by the cited provision.

Moreover, Smalis was well aware of its obligation to conduct air monitoring, as OSHA had twice before cited Smalis for failures to monitor for lead exposure, the second of which alleged a repeat violation.[25] *See A.J. McNulty & Co.*, 283 F.3d at 338. In these circumstances, and particularly in light of Mr. Smalis's admitted knowledge that lead concentrations at the worksite were high, we find it implausible for Smalis to have believed that OSHA's limited monitoring was sufficient to comply with the company's obligation to collect representative samples. In fact, had Mr. Smalis actually relied upon OSHA's 1992 monitoring at the Tarentum Bridge, Smalis would have been required to continue monitoring on a regular basis. 29 C.F.R. § 1926.62(d)(6)(ii), (iii). Smalis's failure to conduct this additional monitoring belies its

---

[25] Both of the prior citations were alleged under 29 C.F.R. § 1910.134(b)(8) (1993), which at that time listed "[a]ppropriate surveillance of work area conditions and degree of employee exposure or stress" as one requirement for a minimally acceptable respiratory program. The factual allegations included in the citations, however, indicated that Smalis's noncompliance with § 1910.134(b)(8) was based on its failure to conduct air monitoring to determine employee exposure.

contention that it relied upon OSHA's monitoring to satisfy its obligation here. Accordingly, we affirm this violation as willful.

Item 24(c), the merits of which are not on review, pertains to Smalis's failure to conduct air monitoring to determine whether employees who wore half-mask respirators while performing certain job tasks were adequately protected, in violation of 29 C.F.R. § 1910.134(b)(8) (1993). Despite OSHA's issuance of two prior citations to Smalis for violating the identical standard, Smalis made no attempt to properly comply with the requirements of this provision. *See E.L. Davis Contracting Co.*, 16 BNA OSHC at 2051-52, 1993-95 CCH OSHD at p. 42,342. Indeed, Smalis conducted no monitoring during the entire Tarentum Bridge project, other than to collect samples from the clean air lines of employee blasting hoods in August 1992. Accordingly, we affirm this violation as willful.

Items 88, 92 to 94, 102 to 104, 108, 111, 119 to 121, 123 to 128, 130, 137, 138, 142, 143, 145, 147, 155, and 158 pertain to Smalis's failure to provide training to its employees, in violation of § 1926.62(l)(1)(ii). Mr. Smalis attended the August 9, 1993 hearing in the 1992 case, the transcript of which was admitted into evidence here. At the hearing, the judge emphasized that lead training is critically important:

> What's important in the case is what's going to happen to the guys who are painting for Smalis Painting Company next week and next year and two years from now. That's what I have to look out for and that's my main responsibility. The dollars are second to me.
>
> In this light, Mr. Smalis has agreed as part of his settlement agreement to abide by the OSHA rules and regulations and to be responsible for the proper training of employees and the proper enforcement of his own rules and regulations. . . .
>
> I don't feel it would be proper for me to specify who has to supply certain equipment or who has to do certain training programs. If a training program is conducted and it's properly trained employees, that's why we're here, to protect those employees. If a training program is done and it's not proper, no matter who did it, the employees are at risk. . . .
>
> The way to protect the employees is, as in this case, is for the company to agree that the employees will be trained as required by the OSHA regulations, and I believe that the parties are ready and willing to stipulate to that. . . .

Moreover, the judge's subsequent settlement order specified that Smalis "provide suitable and appropriate training for its affected employees."

Nonetheless, despite Mr. Smalis's knowledge that the union-sponsored class attended by Smalis employees in October 1993 had a twenty-person limit, and that a second class was not scheduled until February 1994, he made no effort to train any other employees working on this project, including the twenty-seven individuals referenced in these citation items. Moreover, based on their job classifications, Smalis knew that these employees had the potential to work inside the containment during blasting operations, and that such work would expose them to high levels of airborne lead. In these circumstances, we find that Smalis's failure to assure its employees' participation in a training program shows a conscious disregard for the requirements of the standard. *See GM*, 22 BNA OSHC at 1044, 2007 CCH OSHD at p. 53,622 (affirming violation as willful where evidence established "a conscious disregard for the requirements of the Act"); *A. G. Mazzocchi, Inc.*, 22 BNA OSHC at 1388 (affirming willful characterization despite partial compliance, because employer's "incomplete efforts" did not negate its decision to knowingly withhold required information); *see also Kaspar Wire Works, Inc.*, 268 F.3d at 1127-29 (affirming violation as willful, court emphasized "actual malice is not required; it is sufficient that there be substantial evidence of voluntary and intentional disregard for or indifference to the law"). Accordingly, we affirm these citation items as willful.

b. Items 23(a), 23(b), 24(a), 24(c), 24(e), 24(f), 25(b), 28, 29, 57, 62, and 85 to 87

This group of citation items includes violations pertaining to respiratory protection, medical surveillance, and medical removal and benefits under the LICS. For reasons previously discussed, we find that the evidence establishes Smalis had a heightened awareness of the lead hazards associated with the conditions underlying these items. We also find that Smalis, in some cases, had a heightened awareness of the particular requirements of the cited LICS provisions, and that where such awareness was lacking, Smalis failed to avail itself of several opportunities to learn of the requirements. *See Ladish Malting Co.*, 135 F.3d at 488 (noting that deliberate avoidance of knowledge and actual knowledge are the same). Although Smalis may not have appreciated in each circumstance that it was violating the Act, we find the evidence shows that, had Smalis been informed of its noncompliance with the applicable rule, it would not have cared. *See AJP Constr. Inc.*, 357 F.3d at 74 (stating that willfulness may be found in absence of actual knowledge where evidence shows that employer "possessed a state of mind such that if it were informed of the standard, it would not care"). Accordingly, as further discussed below, we affirm these items as willful.

Respiratory protection

Items 23(a) and 23(b) pertain to Smalis's failure to provide an appropriate respirator to one of its employees and perform qualitative fit tests on a number of its employees, in violation of 29 C.F.R. § 1926.62(f)(2)(i) and (3)(ii) (1993), respectively. Items 24(a), 24(b), 24(e), and 24(f), the merits of which are not on review, pertain to Smalis's failure to institute an appropriate respiratory protection program, instruct employees "in the proper use of respirators and their limitations," provide "fitting instructions including demonstrations and practice in how the respirator should be worn, how to adjust it, and how to determine if it fits properly," and provide an adequate program for "for maintenance and care of respirators," in violation of 29 C.F.R. § 1926.62(f)(4)(i) (1993), and 29 C.F.R. § 1910.134(b)(3), (e)(5)(i), and (f)(1) (1993).

The evidence does not establish that Smalis knew the precise exposure level of the employee referenced in Item 23(a). Therefore, Smalis may have been unaware that the half-mask air purifying respirator he used was inadequate. However, Smalis's lack of knowledge was a direct result of its conscious and deliberate failure to comply with the exposure assessment and monitoring provisions of the standard. In addition, the evidence shows Smalis was well aware that OSHA standards required it to provide employees with adequate respiratory protection. Although Smalis may not have had specific knowledge of the "program" requirement in § 1926.62(f)(4)(i), both the 1992 and 1993 Citations show it had a heightened awareness of many of the respiratory protection requirements set forth in § 1910.134. With respect to Smalis's failure to comply with fit-testing requirements, the 1992 and 1993 Citations alleged violations under § 1910.134(b)(3) and (e)(5)(i), two of the provisions at issue here. Moreover, the 1992 Citations alleged a violation under § 1910.134(e)(5) for Smalis's failure to provide any fit testing to employees who wore respirators.

Despite this specific knowledge of respiratory protection requirements, as well as Smalis's general understanding that it was obligated to protect employees from lead exposure hazards, the record shows that Smalis made little effort to ensure its employees were fully protected. After Smalis trained its supervisors in the rudiments of fit testing following the 1992 Citations, these supervisors failed to fit test many of the employees, in contravention of the requirements in Smalis's own safety program. Indeed, the foreman in charge of discipline at the worksite was one of the individuals responsible for failing to fit test employees, and there is no evidence that Mr. Smalis, or anyone else, ever monitored or disciplined him. Further, Smalis's

supervisors were aware that the air supply to the Bullard hoods would repeatedly "freeze up" during cold weather, sometimes forcing employees to remove their respirators while still inside the containment. Even if Smalis lacked specific knowledge of the respirator maintenance requirements of § 1910.134(f)(1), common sense dictates that failing to properly maintain the air compressors during cold weather, after repeated freeze warnings, would deprive workers inside the containment of uncontaminated air, and that storing respirators inside the lead-contaminated containment would undermine their effectiveness. Considering these circumstances, as well as other evidence discussed above, we find that the supervisors' noncompliance with the OSHA standard and the company's safety program reflects Smalis's lax approach to respiratory protection. *N & N Contractors, Inc.*, 18 BNA OSHC 2121, 2125-26, 2000 CCH OSHD ¶ 32,101, p. 48,242 (No. 96-606, 2000) (finding foremen's participation in violative conduct showed that "safety program was lax"), *aff'd*, 255 F.3d 122 (4th Cir. 2001); *CECO Corp.*, 17 BNA OSHC 1173, 1176, 1993-95 CCH OSHD ¶ 30,742, p. 42,703 (No. 91-3235, 1995) ("[W]e have found that a supervisor's failure to follow the safety rules and involvement in the misconduct is strong evidence that the employer's safety program was lax.").

Based on the foregoing evidence, we find that had Smalis known of its noncompliance with the cited provisions, it would not have cared. *See AJP Constr. Inc.*, 357 F.3d at 74. Accordingly, we affirm, as willful, Items 23(a), 23(b), 24(a), 24(b), 24(e), and 24(f).

Medical surveillance

Item 25(b) pertains to Smalis's failure to make testing for ZPP levels available to any of its employees, and Items 28 and 29 pertain to Smalis's failure to make testing for both blood lead and ZPP levels available at least monthly to two employees who were removed from exposure due to an elevated BLL, in violation of 29 C.F.R. § 1926.62(j)(1)(i) and (2)(i)(C). As discussed above, Mercy sent two letters to Smalis discussing, in detail, the medical surveillance requirements of the LICS, and emphasizing that Smalis should make ZPP testing available to its employees. Moreover, the hospital's occupational physician sent Smalis a recommendation form for each tested employee, including the ones at issue in Items 28 and 29. This form included a line at the top of the page to record ZPP test results and, as to any patient with an elevated BLL, advised that "follow-up by a physician familiar with lead poisoning should be taken even if the employee reports no complaints." As we have found, even if Smalis managerial personnel did not review these documents, any such failure is consistent with Smalis's failure to avail itself of

several opportunities to learn of its specific obligations under the LICS and reflects its overall cavalier attitude towards its employees' medical needs. *See Ladish Malting Co.*, 135 F.3d at 488. Finally, with respect to the employees referenced in Items 28 and 29, Smalis knowingly removed them due to elevated BLLs, and knew it failed to make biological monitoring available to them thereafter. Based on its contract with PennDOT, and its prior dealings with OSHA, Smalis also understood blood tests were an important part of any lead program and that these two employees had dangerously high BLLs.

Thus, the record shows Smalis was well aware of the lead hazards at its worksite and its obligation generally to make available required blood tests to its overexposed employees. Moreover, Smalis had in its possession information that, had it chosen to look, would have alerted it to the specific requirements at issue here. *Id.* In these circumstances, we find that even if Smalis had known of its noncompliance with the cited provisions, it would not have cared. *See AJP Constr. Inc.*, 357 F.3d at 74. Accordingly, we affirm Items 25(b), 28, and 29 as willful.

Medical removal and benefits

Items 57 and 62 pertain to Smalis's failure to notify its employees of medical removal protection benefits, and Items 85 to 87, the merits of which are not on review, pertain to Smalis's failure to provide such benefits to three employees who were removed, in violation of 29 C.F.R. § 1926.62(j)(2)(iv)(B) and (k)(2)(i). Each medical recommendation sent by Mercy's physician to Smalis explained that, within five working days, the "[e]mployer must notify . . . each employee whose value exceeded 40 µg/dl[] that the standard requires temporary medical removal with Medical Removal Protection benefits when an employee's blood lead level exceeds the numerical criterion for medical removal." While there is no direct evidence that Smalis reviewed these recommendations, as noted, any ignorance is consistent with the company's overall disregard for compliance with the LICS and the health of its exposed employees. *See Ladish Malting Co.*, 135 F.3d at 488. Indeed, given the economic concerns that Mr. Smalis expressed to the Jacksonville AAD and Smalis's emphasis on productivity over employee safety as evidenced by its decision to increase the number of blasters after crossing the Allegheny County line, we find that Smalis would not have complied with either the notification or provision of benefits requirements, even had it known of its obligations. *See AJP Constr. Inc.*, 357 F.3d at 74. Smalis's dismissive attitude toward employee safety was particularly apparent when, upon calling Smalis's office following his removal, the employee referenced in Item 87

was simply told to "collect unemployment." Under these circumstances, we affirm Items 57, 62, and 85 to 87 as willful.

c. *Items 34, 36, 37, 41, 43, 45, 47, 49, 159, 160 to 201, and 202*

Items 34, 36, 37, 41, 43, 45, 47, and 49 pertain to Smalis's failure to "notify each employee in writing" of his BLL, in violation of 29 C.F.R. § 1926.62(j)(2)(iv)(A). The employees referenced in these items received oral notification of their BLLs, and Smalis posted the written BLL results in the worksite trailer, apparently believing that the posting satisfied the standard's requirements. We find that Mr. Smalis could have believed in good faith that by posting the BLLs in this fashion, he satisfied the standard's requirement for "written" notification. Thus, we conclude the record does not support a finding of willfulness. *See Manganas Painting Co.*, 21 BNA OSHC at 1991, 2007 CCH OSHD at p. 53,406 (noting violation is not willful where employer has "'a good faith, albeit mistaken, belief that particular conduct is permissible'" (citation omitted)). Moreover, we affirm these items as unclassified violations, noting that their characterization will not "affect the abatement requirements or penalty, and none of the parties' rights will be adversely affected." *Foster-Wheeler Constructors Inc.*, 16 BNA OSHC 1344, 1349, 1993-1995 CCH OSHD ¶ 30,183, p. 41,526 (No. 89-287, 1993).

Item 159 pertains to Smalis's failure to train employees in "engineering controls and work practices associated with [their] job assignment," in violation of 29 C.F.R. § 1926.62(l)(2)(v). The employees referenced in this item all attended a lead training course sponsored by the union. The Secretary identified only one deficiency in the course—the failure to include engineering and work practice controls, as required by the standard. As there is no evidence Smalis actually knew of this deficiency, Smalis's negligence in this regard does not support a finding of willfulness. *See Trinity Indus., Inc.*, 20 BNA OSHC 1051, 1068, 2002 CCH OSHD ¶ 32,666, p. 51,414 (No. 95-1597, 2003) (finding violation not willful where "the Secretary introduced no evidence that Trinity knew that its training program failed to comply with OSHA standards or that Trinity would have failed to correct deficiencies in its program had it known of the duty to do so"), *aff'd without publication*, 107 Fed. App. 387 (5th Cir. 2004). We conclude, however, that this violation was serious because, as explained by the CO at the hearing, if employees utilize proper engineering controls and work practices, their work activities will likely result in lower lead exposure to themselves and their coworkers. *See* 29 U.S.C.

§ 666(k) (defining serious violation as one in which "there is a substantial probability that death or serious physical harm could result"); *Stanley Roofing Co.*, 21 BNA OSHC 1462, 1466, 2005 CCH OSHD ¶ 32,792, pp. 52,430-31 (No. 03-0997, 2006) (finding violation serious rather than willful where seriousness was evident from the record).

Items 160 to 201, the merits of which are not on review, pertain to Smalis's failure to record injuries and illnesses, in violation of 29 C.F.R. § 1904.2(a) (1993). The space reserved for listing injuries and illnesses on Smalis's recordkeeping forms provided to OSHA contained only the word "none." The evidence shows, however, that each of the employees referenced in these items had a BLL above 50 µg/dl, which should have been recorded as an illness on Smalis's log. *Johnson Controls, Inc.*, 15 BNA OSHC 2132, 2139, 1991-93 CCH OSHD ¶ 29,953, p. 40,965 (No. 89-2614, 1993) (finding elevated BLL constitutes recordable "illness"). There is no evidence, however, that Smalis knew an elevated BLL constituted an "illness" under the standard. Moreover, given the fact that Smalis maintained employee BLL results and provided them to OSHA, the evidence does not establish that Smalis would have failed to record these illnesses had it known of its duty to do so. Accordingly, we affirm these violations as other-than-serious. *See Kaspar Wire Works, Inc.*, 18 BNA OSHC at 2185, 2000 CCH OSHD at p. 48,410 (affirming non-willful recordkeeping items as other-than-serious).

Item 202, the merits of which are not on review, pertains to Smalis's failure to comply with a subpoena requiring production of certain medical records, in violation of 29 C.F.R. § 1910.20(e)(3). OSHA issued a subpoena to Smalis requesting, *inter alia*, "all records relating to the medical surveillance of employees." Smalis failed to produce the physician's recommendations it received from Mercy, but there is no evidence Smalis had actual knowledge of their contents. In these circumstances, we find the evidence insufficient to establish that Smalis's failure to provide all of the requested records to OSHA was willful. Additionally, we affirm this item as an unclassified violation, noting that its characterization will not "affect the abatement requirements or penalty, and none of the parties' rights will be adversely affected." *Foster-Wheeler Constructors Inc.*, 16 BNA OSHC at 1349, 1993-1995 CCH OSHD at p. 41,526.

C. Per-Employee Citation Authority

The Secretary cited, and the judge affirmed, a number of violations on a per-employee basis with individual penalties assessed for each item. The judge found these citations were "appropriately identified as separate violations of the Act because the clear language of each of

the standards . . . contemplates protection for each employee covered by the standard." Smalis argues that such instance-by-instance citation is inappropriate based on its contentions that the cited provisions can be resolved by a single method of abatement and the violations do not present a unique set of facts specific to the identified employees. For the following reasons, we find that the Secretary properly cited the items we affirm on a per-instance basis, as follows.[26]

1. Training

The Commission has consistently adhered to the general legal principle that "'per-instance violations and penalties are appropriate when the cited regulation or standard clearly prohibits individual acts rather than a single course of action.'" *GM*, 22 BNA OSHC at 1046, 2007 CCH OSHD at p. 53,625 (citations omitted). "'The key . . . [is] the language of the statute or the specific standard or regulation cited.'" *Id.* (citation omitted). Applying this principle in numerous cases, the Commission has addressed the appropriateness of per-instance citations to various regulations and standards, including those pertaining to recordkeeping, fall protection, medical removal, and respiratory protection. *E.g.*, *Caterpillar Inc.*, 15 BNA OSHC 2153, 2172, 1991-93 CCH OSHD ¶ 29,962, p. 41,005 (No. 87-0922, 1993) (upholding per-instance recordkeeping violations); *J.A. Jones Constr. Co.*, 15 BNA OSHC 2201, 2213, 1991-93 CCH OSHD ¶ 29,964, p. 41,033 (No. 87-2059, 1993) (upholding per-instance fall protection violations); *Manganas Painting Co.*, 21 BNA OSHC at 1995, 1999, 2007 CCH OSHC at pp. 53,409-10, 53,413 (finding LICS medical removal and respirator provisions susceptible to per-employee citation).

With respect to training, however, the Commission has specifically addressed the appropriateness of per-employee citation in just three cases. Under a construction training standard prescribing that an employer must "instruct each employee," the Commission stated

---

[26] As discussed above, we affirm Smalis's violation of 29 C.F.R. § 1926.62(e)(1) for its failure to utilize sufficient engineering, work practice, and administrative controls—Citation 2, Items 1(b) to 6(b), 10(b) and 17(b)—as willful. Although cited on a per-employee basis, we find it appropriate to assess a single penalty of $70,000 for Smalis's violation of this provision. "In these circumstances, we need not determine whether [Smalis's] noncompliance with th[is] provision[] comprises a single violation . . . or multiple violations . . . ." *Manganas Painting Co.*, 21 BNA OSHC at 1999, 2007 CCH OSHD at p. 53,413 (assessing single combined penalty for multiple items cited on per-employee basis where total penalty amount satisfied statutory minimum).

that the cited provision "clearly may be read to permit . . . separate violations based on the failures to train individual employees." *Andrew Catapano Enters., Inc.*, 17 BNA OSHC 1776, 1780, 1995-97 CCH OSHD ¶ 31,180, p. 43,607 (No. 90-0050, 1996) (consolidated) (affirming only one citation, as multiple citations were not based on number of untrained employees, but number of inspection days the same group of untrained employees worked). Similarly, under the lockout/tagout training standard prescribing that "[e]ach authorized employee shall receive training," the Commission found the employer's duty to train "runs to each [individual] employee." *GM*, 22 BNA OSHC at 1046-48, 2007 CCH OSHD at pp. 53,626-27. In contrast, the Commission found in a split decision that the general industry asbestos training standard prescribing a "training program for all employees," required only "one program for all employees" and, therefore, affirmed only one violation for the employer's failure to train all eleven of its employees. *Eric K. Ho*, 20 BNA OSHC at 1373-75, 2002-04 CCH OSHD at pp. 51,581-82 (consolidated).

Although the disparate results in these cases might be reconciled based on the differences among the cited training provisions' precise wording, we are nonetheless troubled by the appearance of inconsistency and the possibility that the approach taken by the Commission majority in *Ho* has proved unworkable in subsequent cases with respect to training. We note that the training provision at issue here is virtually indistinguishable from the training provision at issue in *Ho*. In addition, we note that in its split decision affirming the result in *Ho*, the Fifth Circuit employed a different legal analysis from that applied by the Commission, stating that "unlike the Commission, which found the standard to be stated solely in inclusive terms, we agree with the Secretary that the language of the asbestos training standard allows the Secretary, in her discretion, to reasonably [issue citations] on a per-employee basis." 401 F.3d at 372.[27] *Cf. Reich v. Arcadian Corp.*, 110 F.3d 1192, 1198-99 (5th Cir. 1997) (stating individual employee may be unit of violation where "regulated condition or practice is unique to the employee (i.e., failure to train or remove a worker)"). Finally, both the Commission's and court's decisions in *Ho* engendered well reasoned dissents. Based on the numerous views

---

[27] The Fifth Circuit majority, however, appears to have combined two distinct analytical inquiries in its opinion. However, because we overrule the Commission majority's holding in *Ho* that the asbestos training standard was not susceptible to per-employee citation, we need not reconcile or apply the Fifth Circuit's analysis here.

expressed by the Commission and the Fifth Circuit, as well as the disparity among the Commission's own decisions addressing per-employee training violations, we conclude that our precedent warrants reconsideration of this issue. As the instant case provides the first opportunity to reassess the viability of the *Ho* decision with respect to the appropriateness of per-employee citation under a similarly-worded training standard, we find it necessary and appropriate to do so at this time. *See Kenny Niles*, 17 BNA OSHC 1940, 1942, 1995-97 CCH OSHD ¶ 31,300, p.43,999 (No. 94-1406, 1997) (finding reconsideration of prior decision "necessary and appropriate" where called into question by intervening precedent); *Payne v. Tennessee*, 501 U.S. 808, 827 (1944) (stating that "when governing decisions are unworkable or are badly reasoned, 'this Court has never felt constrained to follow precedent'" (citation omitted)).

The Commission and courts have long recognized that a fundamental goal of the Act is to "prevent the first accident." *Arcadian Corp.*, 20 BNA OSHC 2001, 2008, 2005 CCH OSHD ¶ 32,756, p. 52,074 (No. 93-0628, 2004); *Mineral Indus. & Heavy Constr. Group v. OSHRC*, 639 F.2d 1289, 1294 (5th Cir. 1981). The vital role training plays in achieving this objective is apparent from the following statement contained in the preamble to the LICS, the standard at issue here:

> Information and training are an essential aspect of the overall protection of employees who can do much to protect themselves if they are informed of the nature of the hazards in the workplace. To be effective an employee education system must apprise the employee of the specific hazards associated with his work environment, protective measures which can be taken, and his rights under the standard.

58 Fed. Reg. 26,590, 26,606 (May 4, 1993). Accordingly, many OSHA training standards specifically require an employer to ensure that prescribed information is provided to and/or understood by "each" individual employee. *E.g.*, 29 C.F.R. § 1926.1101(k)(9)(viii) (asbestos training program must be "conducted in a manner that the employee is able to understand . . . [and] the employer shall insure that each such employee is informed"); 29 C.F.R. § 1926.62(l)(1)(ii) (employer must "assure employee participation" in lead in construction training program and "assure that each employee is trained"); 29 C.F.R. § 1910.147(c)(7)(i) (employer must provide lockout/tagout training "to ensure that the purpose and function of the energy control program are understood by employees" and "[e]ach" authorized and affected employee shall receive the requisite training). *See also Danis Shook*, 19 BNA OSHC 1497,

1500, 2001 CCH OSHD ¶ 32,397, p. 49,864 (No. 98-1192, 2001) (noting that under the construction industry general training standard, "'a reasonably prudent employer would attempt to give instructions that can be understood and remembered by its employees, and would make at least some effort to assure that the employees did, in fact, understand the instructions'" (citation omitted)), *aff'd*, 319 F.3d 805 (6th Cir. 2003). Nonetheless, the Secretary's use of different wording among the various OSHA training standards, particularly in the placement of the requirement to assure "each" employee's participation and comprehension, has led to apparent confusion as to whether the employer's duties also differ.

With respect to the three training standards previously considered by the Commission in decisions involving per-employee citations, those at issue in *Catapano* and *GM* explicitly describe the threshold training duty at the outset of the cited provisions as directed to "each employee." In *Catapano*, the cited provision initially states that "[t]he employer shall instruct each employee [with respect to job hazards and applicable regulations]." 17 BNA OSHC at 1780, 1995-97 CCH OSHD at p. 43,607. Similarly, in *GM*, the cited provision initially states "[t]he employer shall provide training to ensure that the purpose and function of the energy control program are understood by employees and that the [requisite knowledge and skills] are acquired by employees," and prescribes that "[t]he training shall include" that "[e]ach" authorized and affected employee receive the requisite training. 22 BNA OSHC at 1047, 2007 CCH OSHD at p. 53,626. Indeed, it is the placement of this language in the lockout/tagout training provision cited in *GM* that the Commission relied upon to distinguish the provision from that cited in *Ho*. *Id.*, 2007 CCH OSHD at p. 53,626 ("As with the training standard addressed in *Catapano*, and in contrast to the training standard addressed in *Ho*, the specific language of the . . . provision cited here identifies the subject of the training obligation as '[e]ach authorized employee.'"). Accordingly, the Commission concluded in *GM* that the lockout/tagout standard imposes a duty to train that runs to each employee, regardless whether the employer chooses to provide the required training individually or collectively. *Id.*, 2007 CCH OSHD at p. 53,626.

The first part of the asbestos training standard cited in *Ho*, however, provides only that "[t]he employer shall . . . institute a training *program* for all employees . . . and shall insure their participation in the *program*." 20 BNA OSHC at 1373, 2007 CCH OSHD at p. 51,583 (quoting 29 C.F.R. § 1926.1101(k)(9)) (emphasis added). The Commission majority interpreted this language to require "one program" for all employees, finding the "focus of the standard is on the

employer's duty to train and impart information to employees generally, and the workplace condition to which the standard is directed is the absence of the appropriate training program." *Id*. at 1374, 2002-04 CCH OSHD at 51,583. The majority decision also found that "contrary to the Secretary's contention," the additional citation to paragraph (k)(9)(i), which requires the program be conducted "in a manner that the employee is able to understand" and prescribes that "each such employee is informed of [prescribed information]," "does not demonstrate that these provisions define the relevant workplace conditions in terms of exposure of individual employees." *Id.*, 2002-04 CCH OSHD at p. 51,583. In our view, this interpretation elevates form over substance by emphasizing the coincidental placement of particular wording, and ignores the basic principle of statutory construction that regulations should be read as a consistent whole. 2A Norman J. Singer, *Statutes and Statutory Construction* § 46:05 (6th ed. 2000) ("A statute is passed as a whole . . . and is animated by one general purpose and intent. Consequently, each part or section should be construed in connection with every other part or section . . . [and] it is not proper to confine interpretation to the one section to be construed.").

In recognition of the overall purpose of training as an integral component of each employee's ability to protect himself or herself from workplace hazards and prevent the first accident, and the specific inclusion in the asbestos training standard of language establishing the individualized duty found to exist in the standards at issue in *Catapano* and *GM*, we disagree with the majority holding in *Ho* that per-employee citation under the asbestos training standard is impermissible. Rather, we find that when read in its entirety and in context, the asbestos training standard imposes a duty that runs to each employee. A unit of violation must reflect the substantive duty that a standard imposes, and therefore "any failure to train would be a separate abrogation of the employer's duty to each untrained employee." *GM*, 22 BNA OSHC at 1047. Accordingly, we hereby overrule the portion of the majority's decision in *Ho* which holds that the training provisions of the asbestos standard are not susceptible to per-employee citation.

Turning to the citation at issue here, the training provision under the LICS begins by stating that "the employer shall provide a training program in accordance with paragraph (l)(2) of this section and assure employee participation." 29 C.F.R. § 1926.62(l)(1)(ii). The incorporated paragraph specifies that "[t]he employer shall assure that each employee is trained" in a list of eight enumerated topics, including the nature of the operations that could result in lead overexposure; proper selection, fitting and use of respirators; the medical surveillance program

and health effects of lead overexposure; and engineering controls and work practices associated with the employee's particular job assignment. 29 C.F.R. § 1926.62(l)(2)(i)-(viii). Based on the language of the entire provision, which is nearly identical to that under the asbestos training standard at issue in *Ho*, we hold the cited training standard imposes a specific duty on the employer to train each individual employee. In these circumstances, we conclude this provision may be cited on a per-employee basis. *GM*, 22 BNA OSHC at 1048, 2007 CCH OSHD at p. 53,626 (upholding per-employee training citations where standard implicates protection of individual employees). Accordingly, we separately affirm each of the twenty-seven citation items discussed above, and assess an individual penalty for each item.

2. Medical surveillance and MRP benefits

Under well-settled Commission precedent, per-employee citation is permissible where the cited standard requires an evaluation "under certain unique circumstances peculiar to each employee." *Sanders Lead Co.*, 17 BNA OSHC 1197, 1200-03, 1993-95 CCH OSHD ¶ 30,740, pp. 42,695-96 (No. 87-260, 1995) (finding instance-by-instance citation permissible under MRP and respirator fit-test requirements of general industry lead standard). The medical surveillance and MRP violations we affirm—Citation 2, Items 28, 29, 34, 36, 37, 41, 43, 45, 47, 49, 57, and 62—were cited under provisions of the LICS that plainly impose obligations specific to each referenced employee. 29 C.F.R. § 1926.62(j)(2)(i)(C) (requiring biological monitoring be made available to "each" employee with the requisite lead exposure); 29 C.F.R. § 1926.62(j)(2)(iv)(A) (requiring notification to "each employee in writing of his or her blood lead level" test results); 29 C.F.R. § 1926.62(j)(2)(iv)(B) (requiring medical removal protection benefits notification to "each employee whose blood lead level exceeds 40 μg/dl"). Moreover, the provisions at issue here also address obligations triggered by "circumstances peculiar to each employee," including each employee's specific lead exposure level, each employee's individual written blood test report, and each employee's specific BLL. Under these circumstances, we find that the language of the above-noted provisions of the LICS permits citation on a per-employee basis. *Manganas Painting Co.*, 21 BNA OSHC at 1995, 2007 CCH OSHD at p. 53,409 (finding permissible per-employee citation for failure to remove enumerated employees with requisite elevated BLL under MRP provision of LICS). Accordingly, we separately affirm each of these citation items and assess an individual penalty for each item.

3. Recordkeeping

Under Citation 2, Items 160 to 201, the Secretary cited Smalis on a per-instance basis for violation of the OSHA recordkeeping regulation, 29 C.F.R. § 1904.2(a) (1993). As we have previously noted, "it is now well-settled Commission precedent that the Secretary has discretion to cite each recordkeeping error as a separate violation, and that the Commission has discretion to assess penalties for such violations on a per instance basis." *Kaspar Wire Works, Inc.*, 18 BNA OSHC at 2185, 2000 CCH OSHD at p. 48,410. Accordingly, we separately affirm each of these citation items and assess an individual penalty for each item.

III. Penalties

The Secretary proposed a total penalty of $5,008,500. She accorded Smalis no credit for size, history or good faith. The judge considered all four statutory factors—size, history, good faith, and gravity—and adopted the Secretary's proposed penalty amounts for each of the violations that he affirmed, for a total assessed penalty of $2,293,834. OSH Act § 17(j), 29 U.S.C. § 666(j). On review, Smalis contends the judge failed to make an "appropriate" penalty assessment, and failed to properly consider size, good faith and gravity.[28] The Secretary contends the judge's penalty assessments are appropriate, particularly in view of Smalis's "disregard of known obligations, its utter disregard for employee health, and its determination to avoid the costs of compliance."

As the judge correctly explained, "due consideration" must be given to the statutory penalty factors, with gravity accorded the greatest weight. *Contour Erection & Siding Sys. Inc.*, 22 BNA OSHC 1072, 1075 (No. 06-0792, 2007) (recognizing that Commission continues to view "gravity as the primary element for consideration" in determining penalty amount). Based on the circumstances here, the judge found Smalis was not entitled to any credit for size, good faith, or history. He also found that due to the serious health effects of lead absorption, the gravity of all of the violations he affirmed was "exceptionally high." Based on our analysis of the penalty factors with respect to each category of violations, we modify the judge's penalty assessments as follows.

---

[28] Smalis does not seek a penalty reduction based on history, and we find that such a reduction would be inappropriate based on Smalis's prior similar violations. *See Hackensack Steel Corp.*, 20 BNA OSHC at 1395, 2002-04 CCH OSHD at p. 51,559 (giving no penalty reduction for prior history in view of numerous prior violations of the same and similar standards).

Smalis employed ninety workers on the Tarentum Bridge between the end of July 1993 and early January 1994. Citing legal fees and lost business, Smalis asserts that the penalty amounts should be reduced because a "penalty assessment should not be such that it puts an employer out of business." The record, however, fails to substantiate Smalis's financial claims and, in fact, indicates it had ongoing prior contracts and a steady income. Accordingly, we reject Smalis's contention that its financial condition warrants a penalty reduction for size. *Hern Iron Works, Inc.*, 16 BNA OSHC 1619, 1624, 1993-95 CCH OSHD ¶ 30,363, p. 41,884 (No. 88-1962, 1994) (finding employer was not entitled to penalty reduction where its claim of financial harm was unsubstantiated).

We also reject Smalis's contention that it is entitled to good faith credit based on its efforts to provide employees with respiratory protection and its compliance efforts since the 1992 inspection. The record shows Smalis failed to enforce portions of its own safety program prescribing the use and proper maintenance of respiratory protection equipment which, according to employee testimony, was often stored inside the lead-contaminated containment overnight. *See Ed Taylor Constr. Co.*, 15 BNA OSHC 1711, 1718, 1991-93 CCH OSHD ¶ 29,764, p. 40,483 (No. 88-2463, 1992) (balancing "commendable measures" such as establishing a safety program with "clearly inadequate" implementation in denying good faith credit). Moreover, rather than increasing its compliance following the 1992 inspection, the record shows Smalis failed to take necessary and recommended steps to protect its employees despite being aware of its legal obligations and the hazards posed by lead exposure. In these circumstances, we agree with the judge that Smalis "vividly demonstrated lack of good faith."

With respect to gravity, the Commission generally considers factors such as "the number of employees exposed, the duration of the exposure, the precautions taken against injury, and the likelihood that any injury would result." *See J.A. Jones Constr. Co.*, 15 BNA OSHC at 2214, 1993 CCH OSHD at p. 41,033. We agree with the judge that the items in Citation 2 that pertain to Smalis's failure to comply with provisions of the LICS prescribing engineering controls, personal air monitoring, respirator selection and fit testing, a respirator program, follow-up blood sampling for medically removed employees, medical removal benefits, and employee training, are of the highest gravity. *See Manganas Painting Co.*, 21 BNA OSHC at 2000, 2007 CCH OSHD at p. 53,414 (finding high gravity for various violations affirmed under the LICS, including medical surveillance and training, based on evidence of "high ambient exposure

readings" and elevated BLLs). Indeed, those violations had the greatest adverse impact on employee safety and health. Smalis's reliance on engineering controls of questionable efficacy, combined with its increase in blasting and sand sucking activities, resulted in extraordinary levels of employee overexposure to lead, even outside the containment. Moreover, because Smalis did not conduct personal air monitoring, and failed to adequately enforce proper respirator maintenance, use, and selection, the protection afforded by respirators was significantly diminished.

The employee health consequences of Smalis's non-compliance with these provisions is demonstrated by testimony from toxicologist Dr. Thomas Martin linking the high BLLs and lead poisoning of a Smalis employee, who was "very close to the threshold of developing encephalopathy," to his January 1994 overexposure at the Tarentum Bridge. With respect to medical surveillance and removal benefits, Dr. Martin testified that these measures are essential to reduce risk of injury from lead overexposure because "you wouldn't be able to detect . . . continued elevations or failure of levels to drop and therefore the patients would be at greater risk of having toxicity or permanent damage from lead poisoning." *See L & L Painting Co.*, 22 BNA OSHC 1346, 1349, 2008 CCH OSHD ¶ 32,978, p. 54,054 (No. 05-0050, 2008) (noting the purpose of MRP benefits "is to provide employees with a financial incentive to participate in medical surveillance"). Finally, we agree with the judge's finding that Smalis's failure to provide its employees with the required training deemed "essential" to employee protection is also of the highest gravity.

Unlike the judge, however, we find the items in Citation 2 concerning initial biological monitoring in the form of ZPP testing, written BLL notification, insufficient training, and OSHA medical records access are of lesser gravity. Indeed, the record shows Smalis took some actions that mitigated the risks associated with these violations. Although Smalis failed to make ZPP testing available to its employees, it did make initial BLL testing available, the purpose of which overlaps with that of ZPP testing, thereby reducing the likelihood of injury. As for Smalis's failure to provide written BLL results, it is undisputed all of the employees at issue orally received their test results, which reduced the likelihood of any injury or illness from Smalis's failure to provide them in writing. Similarly, in accord with Commission precedent, we find Smalis's failures to provide medical removal benefits notification and comply with recordkeeping requirements to be of lesser gravity. *See Sanders Lead Co.*, 17 BNA OSHC at

1204, 1993-95 CCH OSHD at p. 42,696 (finding only moderate gravity regarding incorrect notification of predicate to medical removal); *Hern Iron Works, Inc.*, 16 BNA OSHC at 1216, 1993-95 CCH OSHD at p. 41,259 (applying Commission precedent that has long "categorized the gravity of recordkeeping as low").

With regard to job specific training, the record shows that Smalis provided the nineteen employees at issue with comprehensive lead training that excluded only information regarding engineering controls. The likelihood of adverse health effects directly related to this one deficiency, while serious, was relatively less substantial. Finally, with regard to medical records access, the record shows Smalis provided OSHA with summary lists of employee BLLs, and Mercy later forwarded more complete records to OSHA. Because the information provided to OSHA could have alerted it to any compliance failures, the gravity associated with this violation was also somewhat diminished. Under these circumstances, we find these particular violations were of lesser gravity.

Finally, we address the serious items in Citation 1 that are on review only as to penalty. These items concern shower use, the provision of lunchroom facilities/eating area, and medical removal record maintenance, and we find they are of moderate gravity. With regard to Smalis's failure to assure shower use by employees exposed above the PEL, the record shows Smalis had a rule requiring daily showers, and its foreman was directed to, and sometimes did, monitor the showers for compliance. *See Manganas Painting Co.*, 21 BNA OSHC 2043, 2056, 2008 CCH OSHD ¶ 32,945, p. 53,808 (No. 95-0103, 2007) (consolidated) (finding moderate gravity for failure to ensure exposed employees showered where employer "made some efforts to comply"), *rev'd on other grounds*, 540 F.3d 519 (6th Cir. 2008). With regard to Smalis's failure to provide lunchroom facilities or an eating area, the record shows employees ate in an area located seventy-five feet away from the containment, and Smalis provided a washing facility. Moreover, Smalis somewhat enforced, and some employees followed, its work rule requiring that employees wash their hands and faces, as well as remove overalls, before eating. All of these measures reduced the risk of illness associated with this violation. Finally, with regard to Smalis's failure to maintain proper medical removal records, the evidence shows Smalis did, in fact, record much of the required information, including the reasons for and location of transfers, BLL results and the dates of testing, and subsequent work assignments. *See* 58 Fed. Reg. at

26,607 (stating purpose of the cited requirement "is to enable . . . the Secretary to assess the operation of, and an employer's compliance with the medical removal protection program").

Based on the foregoing discussion, we find the following penalties appropriate.[29] For those Citation 2 items that we affirm as willful and find to be high gravity, we assess the following penalty amounts: Items 1(b) to 6(b), 10(b), and 17(b) - $70,000; Item 21 - $35,000; Items 23(a-b) - $35,000 (grouped); Items 24(a-c), 24(e-f) - $35,000 (grouped); Items 28 and 29 - $70,000 each; Items 85 to 87 – $70,000 each; and Items 88, 92 to 94, 102 to 104, 108, 111, 119 to 121, 123 to 128, 130, 137, 138, 142, 143, 145, 147, 155 and 158 - $17,500 each. For those Citation 2 items that we affirm as willful and find to be of lesser gravity, we assess the following penalty amounts: Item 25(b) - $25,000; and Items 57 and 62 - $10,500 each. For the Citation 2 item that we affirm as serious and find to be of lesser gravity, we assess the following penalty amount: Item 159 - $3,500. For those Citation 2 items that we affirm as other-than-serious and find to be of lesser gravity, we assess the following penalty amounts: Items 160 to 201 - $625 each. For those Citation 2 items that we affirm as unclassified and find to be of lesser gravity, we assess the following penalty amounts: Items 34, 36, 37, 41, 43, 45, 47, and 49 - $1,000 each; Item 202 - $1,000. For those Citation 1 items we affirm as serious and find to be of moderate gravity, we assess the following penalty amounts: Item 2 - $3,500; Item 3 - $3,500; and Item 4 - $3,500.

ORDER

We vacate Citation 2, Items 1(a) to 20(a), 7(b) to 9(b), 11(b) to 16(b), 18(b) to 20(b), 22, 25(a), 25(c), 26, 27, 30 to 33, 35, 38 to 40, 42, 44, 46, 48, 50, 51 to 56, 58 to 61, 63 to 71, 74 to 84, 89 to 91, 95 to 101, 105 to 107, 109 to 110, 112 to 118, 122, 129, 131 to 136, 139 to 141, 144, 146, 148 to 154, 156 and 157. We affirm Citation 2, Items 1(b) to 6(b), 10(b), 17(b), 21, 23(a–b), 24(a-c), 24(e-f), 25(b), 28, 29, 57, 62, 85-87, 88, 92-94, 102-104, 108, 111, 119 to 121, 123 to 128, 130, 137, 138, 142, 143, 145, 147, 155, and 158 as willful violations. We affirm Citation 2, Item 159 as a serious violation. We affirm Citation 2, Items 160 to 201 as other-than-serious violations. We affirm Citation 2, Items 34, 36, 37, 41, 43, 45, 47, 49, and 202 as

---

[29] Based on our analysis of the section 17(j) factors, we have raised the penalties assessed for Items 21, 23(a-b), 24(a-b), and 24(e-f). *See Valdak Corp.*, 17 BNA OSHC 1135, 1138, 1995 CCH OSHD ¶ 42,739, p. 30,400 (No. 93-0239, 1995) (noting Commission has discretion to raise or lower penalties within statutory limits where supported under § 17(j) factors).

unclassified violations. We affirm Citation 1, Items 2, 3, and 4 as serious violations. Accordingly, for the items we affirm herein, we assess a total penalty of $1,092,750, as follows:

Citation 2: Items 1(b) to 6(b), 10(b), and 17(b) - $70,000; Item 21 - $35,000; Items 23(a–b) - $35,000 (grouped); 24(a-c), 24(e–f) - $35,000 (grouped); 25(b) - $25,000; 28 and 29 - $70,000 each; 34, 36, 37, 41, 43, 45, 47, and 49 - $1,000 each; 57 and 62 - $10,500 each; 85 to 87 - $70,000 each; 88, 92 to 94, 102 to 104, 108, 111, 119 to 121, 123 to 128, 130, 137, 138, 142, 143, 145, 147, 155 and 158 - $17,500 each; 159 - $3,500; 160 to 201 - $625 each; 202 - $1,000.

Citation 1: Items 2 - $3,500; Item 3 - $3,500; Item 4 - $3,500.

Finally, we order Smalis to pay medical removal benefits to the three employees at issue under Items 85 to 87 in the following amounts, which are not disputed on review: employee #18 - $3,121; employee #2 - $4,428; employee #43 - $1,588.

_/s/_____
Thomasina V. Rogers
Acting Chair

_/s/_____
Horace A. Thompson, III
Commissioner

Dated: April 10, 2009

UNITED STATES OF AMERICA
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

SECRETARY OF LABOR, Complainant, v. E. SMALIS PAINTING COMPANY, INC., Respondent.	DOCKET NO. 94-1979

Appearances: Howard K. Agran, Esq. and Theresa C. Timlin, Esq.
Office of the Solicitor
U. S. Department of Labor
For Complainant

Joseph R. Rufolo
JW Rufolo Associates, Inc.
For Respondent[1]

BEFORE: MICHAEL H. SCHOENFELD,
Administrative Law Judge

DECISION AND ORDER

Procedural History

This case arises under the Occupational Safety and Health Act of 1970, 29 U.S.C. § § 651 - 678 (1970) ("the Act").

Having had its worksite inspected by a two Industrial Hygienists ("compliance officer" or "CO") of the Occupational Safety and Health Administration ("OSHA"), E. Smalis Painting

[1] Joseph Paranac, Esq. and William Healey, Esq. of Jasinski and Paranac, P.C. of Newark New Jersey, represented Respondent at the hearing.

Company, Inc., ("Respondent" or "Smalis") was issued one citation alleging 202 willful violations and one citation alleging 4 serious violations. Civil penalties totaling $5,085,500.00 were proposed by OSHA. Respondent timely contested.

Following the filing of a complaint and answer and pursuant to a notice of hearing, the case came on to be heard between March 2 and April 10, 1995 in Pittsburgh, Pennsylvania. No affected employees sought to assert party status. Both parties have filed post-hearing briefs and reply briefs or supplemental statements.

Jurisdiction

Complainant alleges and Respondent does not deny that it is an employer engaged in Industrial Painting. It is undisputed that at the time of this inspection Respondent was sandblasting and repainting the Tarentum Bridge in Tarentum, Pennsylvania. Respondent does not deny that it uses tools, equipment and supplies which have moved in interstate commerce. I find that Respondent is engaged in a business affecting interstate commerce.

Based on the above finding, I conclude that Respondent is an employer within the meaning of § 3(5) of the Act.[2] Accordingly, the Commission has jurisdiction over the subject matter and the parties.

Background

The Tarentum Bridge, carrying Pennsylvania State Route 366, spans the Allegheny River from Tarentum, Pennsylvania in Allegheny County to New Kensington, Pennsylvania in Westmoreland County on the other side. Work on the Tarentum Bridge had its genesis in a contract between Respondent and the Commonwealth of Pennsylvania. Smalis had submitted its bid in June 1992 and was awarded the contract in July of that year by the Pennsylvania Department of Transportation ("PENNDOT").

On December 9, 1993, two OSHA Industrial Hygienists conducted an inspection of the painting and abrasive blasting operation conducted by E. Smalis Painting Company, Inc. at the

---

[2] Title 29 U.S.C. § 652(5).

Tarentum Bridge.[3] One of the COs had previously inspected work on the same bridge in September of 1992.

The Tarentum Bridge is about one and one-half mile in overall length and consists of a poured concrete roadbed about 70' wide which is supported underneath by steel framework which, in turn, is supported by a series of concrete piers sunk into the riverbed and nearby shore. Each section of the bridge spanning the distance from one concrete pier to another is known as a "span'" and each section of steel framework from one major cross member to another is known as a "bay."

The work performed by Smalis Painting Company consisted of the removal of old paint and rust from the steel framework by abrasive blasting and then repainting. Smalis' work was done in sections, with one area at a time being blasted and repainted before moving on to the next area. Each work section was formed from between one and four or five bays each of which was between 25' and 55' in length. Each work section was first rigged with steel cables which held in place a series of clamped together canvas panels ("tarps") which had been draped over the side of the bridge and which extended below and entirely across the lowest level of steel framework ("bottom" or "floor" tarps). Additional panels closed off each end of the working section. Each such "containment" was thus an enclosed tent-like structure. As the work progressed from one end to the other, a sequence of containments was erected, each being set up, used until blasting and repainting of the section was complete, then dismantled.

Smalis' work was accomplished by first setting up a containment and erecting or placing scaffolds ("pics") in various places within the steel framework inside the containment. Employees ("blasters") climbing about inside the containment on steel girders or pics would then operate blasting hoses with nozzles directing steel grit or fine steel shot (not sand) powered by high pressure compressed air against the steel surfaces which had previously been painted with lead-based paint. The resulting debris containing the removed lead paint and some rust, swirled about inside the containment. Debris and steel grit not removed by exhaust hoses operating in static locations during blasting came to rest on the steel framework or dropped down to the bottom tarp which extended across the entire width of the bridge underneath the bottom of the steel framework. While blasting

---

[3] A similar project of Smalis Painting Company, the Hart Bridge in Jacksonville, Florida, was inspected on March 11, 1993 resulting in a citation being issued to Smalis on August 19, 1993.

was underway, other Smalis employees ("sandsuckers") were inside the containment, usually crawling or on their knees on the bottom tarp or along steel beams, using hand-held vacuum hoses to collect the mixture of spent grit and debris. This mixture was carried by the vacuum system to equipment outside the containment on the bridge's road surface ("deck") where it was processed. The steel grit separated out of the mixture was then cleaned and recirculated to be used again. The remaining debris was disposed of. After blasting removed the paint from the surfaces, the structural steel framework was cleaned with compressed air alone to remove any fine debris. The resulting dust was vacuumed up and removed. Upon successful paint removal, cleaning of the steel and receiving permission from PENNDOT, Smalis employees (often the same men who blasted away the old paint) would enter the containment and repaint the now clean steel surfaces while standing, sitting, kneeling or crawling along steel beams or pics. The new paint contained no lead. This process was essentially repeated with one containment supplanting another as work progressed across the bridge.

At the time of the September 1992 inspection the Tarentum project was just beginning so the blasting that was taking place at that time was inside a containment at the entry ramp to the bridge at the Tarentum end. By the time of the second inspection in December 1993, the job was almost complete with the last of the work being done in a containment at the other end (New Kensington) of the bridge. Both the September 1992 and December 1993 inspections included visual observation of the general work areas, except inside the containment, and air sampling, the results of which were sent to the OSHA laboratories in Salt Lake City, Utah for analysis. After obtaining the results of the December 9, 1993 air sampling, the compliance officers sought myriad documents by administrative subpoena from Smalis. In addition, the compliance officers conducted numerous interviews and collected many documents from many sources other than Smalis who were familiar with or related to either the industry in general or the Tarentum Bridge project.

As a result of the September 1992 inspection multiple citations relating to the exposure of employees to airborne lead at Tarentum were issued to Smalis in December 1992. In August 1993, Smalis was in Court before this Administrative Law Judge in the resulting contested case. The matter was settled in the courtroom with Smalis withdrawing his notice of contest to the Serious, Willful and Other Citations in their entirety and paying a reduced penalty of $50,000.00. In addition, Smalis agreed to train all of its exposed employees as required by the lead standard before

they started back to work on the Tarentum Bridge project.

As a result of the December 9, 1993 inspection two citations were issued to Smalis. Citation 1 alleged four serious violations of the Act and Citation 2 alleged two hundred and two willful violations. Penalties of $28,000 and $4,980,500 were proposed, respectively. These citations and proposed penalties are now at issue here.

Validity of the Inspection

Respondent challenges the validity of the December 9, 1993 inspection in its entirety arguing that "the inspection was improperly conducted" because it "consisted of one day on site and countless days off site collecting information," and because the compliance officers "did not utilize the CPL 2-2.58," nor did the inspecting officers have "previous experience with this type of worksite" as required by the CPL. (Resp. brief, Pp. 12-13). These arguments are insufficient to invalidate the inspection for two reasons.

First, the fact that the compliance officers spent only one day on the site does not, by itself invalidate the inspection in any way. To the degree that Respondent's argument concerning the specific amount of time the inspectors spent at the Tarentum Bridge might be a claim that insufficient evidence supports the alleged violations, it is rejected as a whole in light of the discussions of the evidence relating to each individual item. Respondent presents no other reason that the one day on-site inspection by the compliance officers should or must invalidate the entire inspection.

Second, the document relied upon by Respondent is advisory to OSHA personnel, not mandatory. The Compliance Directive CPL 2-2.58, is an OSHA Compliance Directive (also known as an "OSHA Instruction") entitled "Lead Exposure In Construction, Interim Final Rule-- Inspection and Compliance Procedures." Its stated purpose is;

> A. Purpose. This instruction provides uniform inspection and compliance guidance for Lead Exposure in Construction, 29 CFR 1926.62, Interim Final Rule, published in the Federal Register May 4, 1993, that became effective June 3, 1993.

Respondent correctly notes that the CPL provides:

> D. Action. OSHA Regional Administrators and Area Directors

> shall use the guidelines in this instruction to ensure uniform enforcement of the Interim Final Rule for Lead Exposure in Construction, 29 CFR 1926.62.
>
> * * *
>
> I. Inspection Guidance. Inspections to assess compliance with 29 CFR 1926.62 must be conducted by a Compliance Safety and Health Officer (CSHO) appropriately trained in conducting inspections in the construction industry (e.g., thoroughly familiar with all effective provisions of 29 CFR 1926.62 and with the guidelines in this instruction). Citations issued for violations of 29 CFR 1926.62 must be reviewed by the supervisory industrial hygienist.

Respondent argues that the requirements of the CPL were not met because the only experience of Compliance Officer Morris was his previous inspection of Smalis and that Compliance Officer Javorsky had no previous experience with this type of worksite.

While Respondent's rendition of the degree of experience of the inspectors is correct, its conclusion as to the impact of those facts is not. Compliance Directives do not have the force and effect of law. They neither impose obligations nor confer any substantive or procedural rights upon employers. Thus, an inspection or other enforcement action taken by OSHA personnel in contravention of a provision in a Compliance Directive is not grounds to set aside the inspection or enforcement action. See, *DeKalb Forge Co.,* 13 BNA OSHC 1146 (No. 83-299, 1987) (Held: inspection not invalid because it was conducted pursuant to unpublished Field Operations Manual.)

Accordingly, Respondent has not shown that the inspection of December 9, 1993 was improper, invalid or void.

Citation 1, Item 1
29 C.F.R. § 1926.62(f)(2)(i)

Citing the standard at § 62(f)(2),[4] the Secretary alleges in the citation that Respondent "did

---

[4] The standard provides;

> (2) *Respirator selection*. (i) Where respirators are used under this section the employer shall select the appropriate respirator or combination of respirators from Table I below.

not select an appropriate respirator or combination of respirators from Table One of 29 C.F.R. § 1926.62(f)(2)" for each of five employees who worked in the containment on the day of inspection and are listed in sub-items "a" through "e."

The Secretary notes, and it is undisputed that each of the individually identified employees were sampled for exposure to airborne lead on December 9, 1993. They were shown to be exposed to amounts of airborne lead measuring[5] from 12,600 $\mu g/m^3$ to 33,500 $\mu g/m^3$. Each wore a type CE Bullard Abrasive Blasting Helmet. Respondent incorrectly maintains that the equipment was adequate. The Compliance Officer satisfactorily and without rebuttal explained why the Bullard Hood in use at the time of the inspection did not meet the requirements of the standard. The hood is not a device which has a "fit around the face of the wearer." (Tr. 1042-43). Nonetheless, the item cannot stand as a violation.

Although usually considered to be an affirmative defense to be pled and proven by the employer, in this case the Secretary has asserted and shown that compliance with the standard was impossible or infeasible. The lack of a pleading or presentation of evidence by Respondent as to impossibility or infeasibility thus cannot be said to be either a surprise or prejudicial to the Secretary, the two anchors on which the pleading and proof requirements are built. Under these circumstances, applying the principles of the "defense" is appropriate. At the hearing the Compliance Officer rather equivocally stated:

> [A]t the time that the Lead in Construction Standard went into effect in August of 1993, the availability of a respirator that meets the approval requirement as listed in table 1 **was limited**.

(Tr. 738) (Emphasis added.) The context of the rest of his answer demonstrates that by "limited" the Compliance Officer clearly meant that such respirators were not available to Respondent at that time. The Secretary's brief continues the obfuscation. It states that due to the "difficulty in obtaining the required respirators" it would have "accepted as compliance" proof that, among other

---

[5] The amount of lead in the air is generally measured in units of micrograms of lead per cubic meter of air, abbreviated as "$\mu g/m^3$." See, footnote 15, infra.

things, the employer researched the market of available respirators and found "the absence of approved respirators." (Sec. brief, p. 519-520).[6] More candid is the citation itself which informs Respondent that as the first step required for abatement:

> Abatement of this item can be achieved by:
> 1. Investigating the market place availability of approved respirators for this level of exposure and introduce approved respirators **as soon as they become available.**

(Emphasis added.) On this evidence, the fact is that "approved respirators" did not exist at the time of the alleged violation. I thus conclude that the Secretary has asserted and shown that Respondent could not have possibly complied with the cited standard at the time of the alleged violation.[7] Thus, this item of the citation cannot be sustained. Accordingly,

Item 1 of citation 1 is VACATED.

Citation 1, Item 2

Item 2 - 29 C.F.R. § 1926.62(i)(3)(ii)

---

[6] There is a significant difference between the parties as to the appropriate "protection factor" to be assigned to the Bullard Blasting hood. (See, Resp brief, p, 34 and post-hearing submissions by Respondent and the Secretary). While it would appear that if OSHA finally decided that a protection factor of 1,000 for the Bullard Hood is the correct one that the same protection factor would have been applicable when that hood was used in the past as well as to future uses. There is no evidence that the hood was changed, only that the protection factor assigned to it by OSHA was.

The issue of the correct protection factor, however, need not be resolved in light of the discussion determining this alleged violation.

[7] It would be patently unfair for the Secretary to insist on compliance with a specification standard with which it is impossible to comply and then seek to place the burden on the employer to show that it did the research necessary to find out it was impossible. Moreover, requiring a Respondent to initially show that it did all it reasonably could have under such circumstances, in effect reassigns the burden of proof to the employer and would change a specification standard into a performance standard. Were that so, in this case I would find that Respondent was supplying what it reasonably believed to be the best protection device available for the blasters.

See also, *Columbia Presbyterian Hospital,* 17 BNA OSHC ____ (No. 93-0298, 1995) (ALJ)(Secretary cannot require hospital to supply to employees respiratory protection which was not in existence at time of alleged violation.)

Item 2 alleges a violation of a provision requiring that employers, where feasible, provide shower facilities at a worksite where any of its employees are exposed to airborne lead above the PEL (Permissible Exposure Limit) of 50 μg/m^3 (TWA), and to assure that such employees shower at the end of their work shift.[8]

The standard applies to employees whose exposure is shown to be above the PEL for airborne lead, 50 μg/m^3 (TWA). As discussed in detail, *Exposure Finding*, infra., at least some of Smalis' employees have been shown on this record to have been so exposed. (Exposure Finding). There is no dispute that shower facilities were present at the Tarentum Bridge worksite. Since a preponderance of the evidence demonstrates that Smalis did not effectively assure that any employees showered before leaving the worksite at the end of the day, the Secretary has, perforce, shown the violation existed as to the employees shown on this record to have been overexposed to airborne lead on December 9, 1993.

Under § 62(i)(3)(ii), an employer must "assure" showers are taken by overexposed personnel. In this context, "assure" must mean that an employer is required to take steps reasonably calculated to achieve the goal of having every overexposed employee shower at the end of every work day during which they were overexposed. Respondent is found to be in violation of this requirement because the record in this case demonstrates that, even if it had such a requirement, it did not effectively communicate the requirement to its employees and did not take reasonable steps to enforce it.

The compliance officers saw no indication that any employees showered before leaving the site on the day of the inspection. (Tr. 741-742). At least nine employees (five of whom are among those specifically shown to have been overexposed) stated that they never took showers at Tarentum.

---

[8] The standard cited provides:

> (3) *Showers*. (i) The employer shall provide shower facilities, where feasible, for use by employees whose airborne exposure to lead is above the PEL.
>
> * * *
>
> (ii) The employer shall assure, where shower facilities are available, that employees shower at the end of the work shift and shall provide an adequate supply of cleansing agents and towels for use by affected employees.

(Tr. 741, 742, 1200, 1240, 1421, 1456, 1612, 1781, and 1545.) Several employees (including at least three whom were found to have been overexposed) testified that they were never informed of a shower requirement. (Tr. 1370, 1387, 1421, 1456, 1534, 1545 and 1612). On the other hand, employee witnesses, including some called by Smalis to testify, stated that they were directed to take showers (Tr. 1838, 1898 and 2069). Several of the employees who testified on behalf of Smalis, however, admitted that some number of Smalis employees did not shower. (Tr. 1838, 1842, 1989, 1905, 2069 and 2082). At least two employees testified that they had never seen anyone shower at Tarentum. (Tr 1370, 1387, 1421, 1456, 1534, 1545 and 1612.). Regardless of this conflict in testimony as to whether employees were told to shower, it is clear that a significant number of employees did not, in fact, shower before leaving the worksite at the end of their shift. Just as important, no witness testified, and there is no other evidence of record, that an employee had ever been disciplined in any way for not showering.

The precise number or percentage of Smalis employees who did not shower daily is unclear. Whether all, most, or just many employees did not shower at the end of their shifts is not determinative. The fact that a significant number of employees did not shower, combined with the knowledge of many employees both that others were not showering and that those employees who did not shower were neither disciplined nor rebuked, amply demonstrates that whatever "requirement" or "rule" Respondent might claim to have had about showering it was either ineffectively communicated or enforced, or both. Under those circumstances, I find that Smalis failed to assure that overexposed employees showered at the end of their work shifts. Respondent thus failed to comply with the standard cited in item 2 of citation 1. Accordingly,

Item 2 of citation 1 is AFFIRMED.

Citation 1, Item 3

29 C.F.R. § 1926.62(i)(4)(i)

Item 3 alleges that Respondent failed to provide a lunchroom facility or eating area for

employees overexposed to lead.[9]

This is another standard which, by its own terms, applies to employees whose exposure is shown to be above the PEL for airborne lead, 50 μg/m^3 (TWA).

There is no dispute that Smalis did not provide a lunchroom facility or designate a specific area for eating. Employees ate wherever they chose. Several employees testified that they, and others, ate at various places on the bridge deck, including inside the change trailer, on the steps to the change trailer or, for warmth, near the compressors. Some others ate in their own or other's trucks. Some left the bridge, going to local fast food restaurants. (See, *e.g.,* Tr. 218, 226 1208, 1241,1248, 1369, 1386, 1411, 1455, 1533, 1534, 1550, 1595, 1611, and 1780.) Employees who were either sampled or inside the containment on the day of the inspection testified similarly. The fact that employees ate in various areas in and about the bridge does not, by itself, necessarily mean that a lunchroom or eating facility was not provided. The compliance officers could not identify any separate lunch facility during their inspection. (Tr. 218). Finally, Mr. Smalis' testimony reasonably infers that a separate lunch facility was supplied for the first time after the inspection. (Tr. 2031-2032.) The absence of a separate eating facility or area on the very day that employees known to be overexposed ate their lunches at various places on the Tarentum Bridge site constitutes a violation of the standard. Accordingly,

Item 3 is AFFIRMED.

Citation 1, Item 4

29 C.F.R. § 1926.62(n)(3)(i)

Citation 1, Item 4, alleges a violation of 29 CFR § 1926.62(n)(3)(i) which provides "[t]he employer shall establish and maintain an accurate record for each employee removed from current exposure to lead pursuant to paragraph (k) of this section." The record which the employer must

---

[9] The standard cited provides:

> (4) *Eating facilities*. (i) The employer shall provide lunchroom facilities or eating areas for employees whose airborne exposure to lead is above the PEL, without regard to the use of respirators.

"establish and maintain" is defined at 29 CFR § 1926.62(n)(3)(ii) as follows:

> (ii) Each record shall include:
> (A) The name and social security number of the employee;
> (B) The date of each occasion that the employee was removed from current exposure to lead as well as the corresponding date on which the employee was returned to his or her former job status;
> (C) A brief explanation of how each removal was or is being accomplished; and
> (D) A statement with respect to each removal indicating whether or not the reason for the removal was an elevated blood lead level.

The facts are undisputed. In response to the administrative subpoena, Smalis produced a document identified as "Tarentum Blood Levels Over 50." (Tr. 746, 747, Ex. C-18). Smalis produced no other records or documentation specifically regarding employees removed from lead exposure. A review of the document reveals that it does not contain the social security numbers for each employee, the date of each occasion that an employee was removed with the corresponding date on which that employee was returned to his former job status or an explanation of how each removal eliminated further exposure to lead. (Tr. 747, 748; Exhibit C-18). These facts constitute a failure to comply with the cited requirements. Accordingly,

Item 4 is AFFIRMED

Validity of Citations Alleging Overexposure of Smalis Employees to Airborne Lead

Smalis argues that none of the items alleging overexposure of any of its employees to airborne lead resulting from the December 9, 1993 inspection can be affirmed.[10] Respondent maintains that "[b]ased on the Final Order of October 8, 1993, Smalis had until January 18, 1994 to abate the overexposure violation." (Resp. brief, p. 4).

---

[10] Alleged overexposure of employees to airborne lead is alleged in Citation 2, Items 1a through 20a.

The facts are not in dispute.

From September 1, 1992 to September 25, 1992, an OSHA inspection of the Tarentum Bridge was conducted. As a result of the inspection, on December 17, 1992, OSHA issued serious, willful and other-than-serious citations and proposed a total penalty of $75,000.00.[11] (Tr. 169; Joint Exhibit 1). The December 1992 citations were based on the Act and other standards because the Lead in Construction Standard, 29 C.F.R. § 1926.62, had not been promulgated at that time.[12] The "overexposure violation" referred to by Respondent cited in December 1992 was contained in Serious Citation Item 2a which cited as a violation of 29 CFR § 1926.55(a), the overexposure of three Smalis employees to the then current permissible exposure limit for airborne lead. The citation set forth a "multistep" abatement requirement for this item which provided, in pertinent part,

> Step 1: Submit to the Area Director a written detailed plan of abatement outlining a schedule for the implementation of engineering and/or administrative measures to control employee exposure to [lead].

The abatement plan was required to including target dates "consistent with the abatement dates required by this citation" for the evaluation, selection, procurement, installation, operation, testing, redesign (if necessary) of controls. Step two of the abatement directed by the citation stated that "[a]batement shall have been completed by the implementation of feasible engineering and/or

---

[11] The 1992 citations included one willful violation of section 5(a)(1) of the Act for failure to remove a blaster with high blood lead levels (153 μg/dl) from further lead exposure. The 1992 citations for serious violations were as follows; Section 5(a)(1) of the Act, (not requiring employees to shower, no separate storage facilities for work and street clothes, smoking permitted in lead contaminated areas and employees not promptly informed of blood test results); 29 C.F.R. § 1926.55(a), (overexposure of three employees to airborne lead); § 1926.55(b) (failure to implement feasible engineering or administrative controls); 29 C.F.R. § 1910.134(b)(2), (failure to instruct employees in fit, use and maintenance of respirators); § 1910.134(e)(5), (failure to perform fit testing); § 1926.21(b)(3) (failure to instruct regarding hazards, hygiene and protection in dealing with lead); § 1910.28(a) (failure to provide full body protective clothing); § 1926.50(a) (lack of medical consultation); and § 1926.59(h)(lack of information and training regarding lead, paints and solvents.) In addition, other-than-serious violations for failure to assure proper respirator selection under § 1910.134(b)(1) and failure to conduct personal air sampling under § 1910.134(b)(8), were issued

[12] The Interim Rule Governing Lead In Construction Work ("Lead in Construction Standard") was published on May 4, 1993, 58 F.R. 26590 - 26627.

administrative controls upon verification of their effectiveness in achieving compliance." Under the terms of the citation step one was to be abated by "02/23/93"' while step two "must be abated" by "03/17/93." Completion of abatement was thus required by OSHA to be accomplished no later than three months from the date of the issuance of the citation in December 1992.

The December 17, 1992 Citations were contested by Respondent and were assigned OSHRC Docket No. 93-0260. On August 9, 1993, the parties, including Mr. Ernest Smalis, appeared before this Administrative Law Judge for the trial scheduled in that matter. At trial that day, the contested Citations were settled. On the record, in open court, Respondent agreed, among other things, to withdraw its notice of contest to the Citations as written.

On August 27, 1993 this Judge issued a written Decision and Order setting forth the terms of the settlement that had been presented by the parties in the courtroom on August 9, 1993. A Notice of Decision and Order were filed with the Executive Secretary of the Review Commission on September 17, 1993. No Commissioner directed review. The Order thus became a final Order of the Commission thirty (30) days later on October 18, 1993. (Joint Exhibit 1, Paragraph 8 - Exhibit D) (See, Commission Rule 90, 29 C.F.R. § 2200.90.)

The essence of Respondent's argument is that because the overexposure item of the December 1992 citation was contested, the time permitted for its abatement tolled until the settlement agreement became a final order of the Commission. Thus, reasons Respondent, it was not required to abate the item until January 18, 1994, three months after the "final order" date.

Respondent's argument is rejected.

First, it is somewhat disingenuous. Even if Respondent is correct in its conclusion that the time permitted for abatement tolled during the pendency of the matter[13], Step 1 of the abatement required for the overexposure item required the submission of the abatement plan some 60 days after the issuance of the citation (December 17, 1992 to February 23, 1992, excluding Christmas and New Year's Day). If the 60 days for the filing of the abatement plan began to run on October 18, 1993, as Respondent urges, the plan would have been required to have been filed no later than December 18, 1993. Granted that such a due date is approximately nine days after the inspection here, it is

---

[13] Respondent apparently disregards any portion of the period allowed for abatement which might have lapsed between the issuance of the citation and the filing of its notice of contest.

many months before these citations were issued and no plan has ever been filed by Smalis.

Secondly, as the work progressed across the bridge, blasting (and the accompanying sand-sucking) took place in a series of separate and distinct containments. As previously discussed in more detail, each containment was fabricated as the section or sections were serially prepared to be blasted and painted. Each containment was thus unique in size, configuration and in relation to the bridge as a whole. It is also a matter of record as well as logic that circumstances such as the number of blasters/sand-suckers working, the condition of the tarps used to make up the particular containment and other such factors were highly mutable from containment to containment. The amount of lead, dust and debris in each containment would thus be variable. Thus, what constituted effective engineering or administrative controls for one containment might, or might not, be effective for others. Even though engineering/administrative controls could perhaps be designed on a "worst case" basis, contemplating the highest predictable concentrations of airborne likely to arise in any containment, the conditions varied enough so that abatement for each containment was somewhat unique. Different conditions in different work areas, even at the same establishment have been regarded as proper foundations for separate inspections and violations (even of the same standard). See, *Simmons, Inc.,* 6 BNA OSHC 1157 (No. 12862, 1977) (different locations represented different hazards thus different violations of the same standard); *J.A. Jones Construction Co.,* 15 BNA 2201, 2212 (No. 87-2059, 1993) (approval of separate citations for violations of same standard taking place on different floors and different locations within floors of a very extensive worksite.)

I thus conclude that Respondent was properly subject to being cited for overexposing its employees to lead based on the inspection of December 9, 1993.

Citation 2, Items 1a, 2a, 3a, 4a, 5a, and 6a
29 C.F.R. § 1926.62(c)(1)

The cited standard, 29 CFR § 1926.62(c)(1)[14] requires that the employer assure that no employee is exposed to airborne lead at concentrations greater than fifty micrograms per cubic meter

[14] See Appendix A for text of standard.

of air ($\mu g/m^3$)[15] averaged over an eight-hour period (time weighted average or "TWA".)

On December 9, 1993, Industrial Hygienists John Morris and Maria Javorsky sampled six Smalis employees at the Tarentum Bridge for exposure to airborne lead. The results from this sampling showed overexposure of each of the six workers. No employee sampling yielded results showing exposure to lead at levels below the permissible levels. (Exhibits C-12, C-28).[16]

The Secretary takes the position that despite some irregularities in the testing, the results are reliable and accurate enough to show a violation. Respondent argues that the sampling conducted at the bridge "was not valid and did not accurately reflect true employee exposure to lead." (R. Brief, p. 13) It relies first on the conclusion of its expert, Robert Leighton, who was "suspicious" of the results because employees he felt should have had the highest level of potential exposure (blasters) had a lower measured exposure than some other employees who "we would suspect would have lower exposure." (Tr. 2234, 2236-2237.) Mr. Leighton's "suspicion" coupled with his conclusion that the compliance officers lacked information as to precisely what transpired while the sampled employees were inside the containment and his knowledge "that the pumps came off the workers" were the three factors which led him to conclude that the samples were "absolutely"

---

[15] The cited standard sets forth a permissible exposure limit measured in ***micro***grams per cubic meter of air ($\mu g/m^3$). In addition to measurements of airborne lead in this case being referred to as measured in micrograms per cubic meter of air, some measurements of airborne lead in this case are expressed in units of ***milli***grams per cubic meter of air (mg/m^3).

One ***milli***gram equals 1,000 ***micro***grams. One **milli**gram equals 1 one-thousandth of a gram. One **micro**gram equals 1 one-millionth of a gram. Thus, the permissible exposure level to airborne lead may be expressed as 50 micrograms per cubic meter of air (50 $\mu g/m^3$) or 0.05 milligrams per cubic meter of air (50 mg/m^3).

[16] According to the results of the sampling, employee ***(redacted)*** was exposed to lead at a concentration of 32 milligrams of lead per cubic meter of air (mg/m^3) time weighted average ("TWA"), which is 644 times the permissible exposure limit of 50 micrograms of lead per cubic meter of air ($\mu g/m^3$) set forth in the standard. (Tr. 308) ***(redacted)*** was exposed to 12.6 mg/m^3 TWA which is in excess of the permissible exposure level by a factor of 252 times. (Tr. 246-247, 319) ***(redacted)*** was exposed to 23 mg/m^3 TWA, 460 times the permissible exposure level. (Tr. 248-249, 326) ***(redacted)*** was exposed to 33.5 milligrams per cubic meter of air TWA, or 669 times the permissible exposure level. (Tr. 249, 329). ***(redacted)*** was exposed to 32.5 mg/m^3 TWA, 650 times the permissible exposure level. (Tr. 253, 337, Exhibits C-12, C-28) Even ***(redacted)***, who was employed on the top of the bridge outside the containment, had an exposure of 0.91 mg/m^3, 18 times the permissible level. (Tr. 250-253, 333).

invalid. (Tr. 2236-2237). Respondent's post hearing brief, however, identifies the faults in the sample collection and results as follows:

> a. Sampling devices were improperly positioned on employees; b. sampling devices were [de]attached and reattached by the employees themselves; c. sampling devices fell off employees inside the containment area; d. samples were collected outside of the respiratory protection worn; e. Employees sampled were not observed by the CHSO's during sampling; f. the sample results were not adjusted due to the error associated with the sampling procedures, and g. employees were wearing the best respiratory protection available, the Bullard Type CD Abrasive Blasting Helmet.

(R. Brief, Pp. 13-14).

A great deal of detailed testimony was elicited from the inspecting compliance officers describing the preparation of the equipment for the sampling, how the sampling was carried out, and the handling of the samples following the inspection. In addition, there is ample testimony as to how OSHA conducted its analysis of the samples collected and obtained and calculated the results.[17] (See, Secretary's brief, Pp. 418-422). Respondent's challenges to the sampling, outlined above, are basically limited to the facts and circumstances surrounding the collection of the samples during the inspection itself.

First, although Respondent points to no specific evidence, it appears to claim that improper positioning of the cassettes (perhaps with the openings upward) allowed lead to fall into or otherwise enter the test cassettes that would result in higher lead readings than were actually experienced in the employee's breathing zones (a., above). Even if one of the cassettes may have been so attached (Tr. 1431) there is no showing of any significant impact on the test results. Similarly, since the sampling equipment was placed on the employees while they were on the open deck of the bridge and they had to remove the cassettes in order to put on their blasting helmets once inside the containment, they necessarily had to detach and reattach the cassettes. By itself, this additional handling of the cassettes would not have any effect on the sampling results. Respondent merely makes such a claim (b., above). It points to no evidence, nor could any be found supporting such

---

[17] Respondent nowhere challenges the chain of custody, methodology of analyzing the samples or the results reported of testing. Indeed, Respondent's expert did not review the OSHA laboratory data. (Tr. 2260).

an inference.

Thirdly, (c., above) Respondent argues that pumps and cassettes falling off employees in the containment led to invalid sampling results. This is one the three "factors" which led to Mr. Leighton's conclusion that the results were invalid. There is some evidence that at least some of the samples may possibly have been contaminated by the cassette or whole apparatus being exposed to areas of concentrated paint dust and accumulated blasting shot rather than remaining in the general area of the employee's breathing zone. Each of the six employees sampled testified. ***(redacted)*** testified that the sampling equipment fell off his person on to the bottom ("belly") tarps where the dust and materials just blasted away from the steel collected. He could not state how long the sampling equipment remained there, but agreed that it could have been as long as an hour. (Tr. 1918, 1931-32). ***(redacted)***, who did not work in the containment, but rather worked out-of-doors, "on the deck," got into a position or bumped into a piece of equipment during the morning which could have resulted in additional lead containing material, not in the breathing zone, to fall into his sampling cassette. (Tr. 213, 1613-1614). ***(redacted)*** stated that "occasionally" the sampling cassette, normally attached near his shoulder, fell off. On each occasion he would pick it back up and re-attach it. (Tr. 1782-1783). Another sampled employee, ***(redacted)*** described the "whole unit," including both the sampling pump and cassette, falling off and landing "down into the contaminated area." He stated the first time that happened, the equipment lay there for about one half hour before he retrieved it and put it back on. It fell off again, this time remaining on the belly tarp for "a good hour." He retrieved it but it started to fall off again, so he placed it on a nearby scaffold ("pic") until he left the containment and returned it to the compliance officers. (Tr. 1893-1894). On cross examination, ***(redacted)*** re-confirmed his initial testimony. (Tr. 1901-1903). ***(redacted)*** testified initially that although he felt the equipment slipping off when he crawled under a beam, he pushed it back so "it didn't fall or anything." (Tr. 1411). When questioned about the same event by Respondent's counsel, however, ***(redacted)*** stated that he noticed the cassette but not the pump had fallen off. He replaced the cassette within one minute. (Tr. 1431). The sixth employee sampled, ***(redacted)***, testified that he no problems or difficulties with the sampling equipment. (Tr. 1207)

Respondent's expert, Mr. Leighton, offered the opinion that if a monitor dropped off an

employee during sampling under such circumstances that the industrial hygienist did not know how long it was detached or otherwise out of place, the sample would have to be invalidated. (Tr. 2249). Brief detachments however, observed and corrected quickly, might not invalidate the sample. (*Id.)*

The Secretary does not challenge the credibility of the factual assertions by some sampled employees regarding the falling off of equipment. (S. Brief, p. 423). He argues that even if credible, "there has been no impact on the accuracy of the results...." (*Id.*)[18] The Secretary argues that "several factors" support and "buttress" the validity of the sampling results. First, the Secretary maintains that the "consistency" of the samples is evidence of the validity of the inspection sampling as a whole, and is demonstrated by the fact that the samples taken inside the containment "were close to each other in magnitude, with little variability."[19] (Sec. Brief, p. 427). I find that Complainant's argument as to the consistency of the sampling results is highly persuasive. While Respondent's expert mentions sophisticated statistical requirements for testing and sampling (*e.g.,* Tr. 2263) such are generally applicable to political polls and the like (Tr. 2289) and he never explains any statistical failings in Complainant's methods. Moreover, Mr. Leighton's concern appears to relate more to the possibility of applying data from sampling some employees to reach conclusions as to the degree of exposure to other employees in the vicinity who were not individually subjected to sampling. (Tr 2288-2289.) Layman such as Complainant's counsel or this Administrative Law Judge have some ability to "eyeball" test results and reach a conclusion that they are "close" or that they vary "little." In the absence of expert testimony otherwise, I find that the results of the testing in this case are consistent with one another. Here, the highest measured exposure of an employee inside the containment (33.5 mg/m^3) is more than two and one-half times the lowest measured exposure of an employee inside the containment (12.6 mg/m^3.) Is it

---

[18] Despite disdaining the impact of findings of credibility as to the employee's claims as to contamination during the sampling process the Secretary seeks to cast doubt on the statements of one employee. (S. Brief, p., 423). He also notes that in the one instance where the possible contamination was reported to the compliance officers promptly, the cassette was immediately replaced. (*Id.*).

[19] The sampling of employees who worked inside the containment yielded the following results; ***(redacted)*** (Blaster), 12.6 mg/m^3; ***(redacted)*** (Blaster), 23 mg/m^3; ***(redacted)*** (Blaster), 33.5 mg/m^3; ***(redacted)*** (Sand Sucker), 32 mg/m^3 and ***(redacted)*** (Sand Sucker) 32 mg/m^3. In addition, the one employee who worked "topside" ***(redacted)*** was sampled with a result of 0.9 mg/m^3.

appropriate to "drop" or ignore the lowest or highest or both measurements, similar to the scoring in ice skating or diving competitions, in considering "consistency" and "variability ?" Perhaps, or perhaps not. It must be recognized, however, that even the lowest measured sample from an employee within the containment was 23mg/m^3, an exposure 252 times the permissible exposure limit even though it was assumed that he was exposed to no lead at all for one-half of his work day.[20]

In addition, the sampling of the one employee as to whom there is no claim or evidence of contaminated or improper sampling, ***(redacted)***, yielded results 650 times the permissible exposure limit. For these reasons, I find that the weight of the credible evidence of record demonstrates that the sample results obtained during the inspection are sufficiently reliable so as to provide a valid basis for the calculations of the amounts of lead to which the sampled employees were exposed on the day of the sampling.

Respondent next (d., above) complains that "the samples were collected outside of the respiratory protection worn." Respondent here attacks the accepted method of measuring exposure to toxic materials in the breathing atmosphere - outside respiratory protective devices. Indeed, the standard directs that "employee exposure is that exposure which would occur if the employee were not using a respirator." 29 C.F.R. § 1926.62(d)(1)(ii). Measuring levels inside the employees' respirators would render the protection factor provisions (*supra.)* superfluous. This argument is no basis to reject or find invalid the Secretary's sampling results.

Respondent's next argument, that employees sampled were not observed by the Compliance Officers during the sampling (e., above) is rejected. The failure or inability of the Compliance Officers to continually observe those employees being sampled is not, by itself, a reason to reject the sampling results. Even if continuous or frequent monitoring of employees during sampling is the generally accepted methodology and is included in instructions issued to Compliance Officers, their failure to do so has not been shown to have affected, no less invalidated, the results of the sampling in this case. See, *Dover Elevator Co.,* 14 BNA OSHC 1579 (No. 89-1127, 1990)

---

[20] The sample from ***(redacted)*** was taken for a work period of about four hours (242 minutes). The accepted method of calculating an "eight hour, time-weighted exposure" is to assume that for all untested portions of a work day, the employee was not exposed to any of the toxic material being sampled during his working time. (Tr. 2286). Respondent, through its expert, conceded that OSHA's calculations regarding ***(redacted)*** exposure were correctly performed. (Tr. 2263-64).

(ALJ)(Digest). Moreover, bulletins, compliance manuals and the like, do not create substantive rights in employers. See, *Catepillar, Inc.,* 15 BNA OSHC 2153, 2173 n. 24 (No. 87-0922, 1993).

Respondent's next argument (f., above), that the sample results "were not adjusted due to the error associated with sampling procedures," is unexplained and lacking in any references to the record. As such it is rejected.

Finally, Respondent claims that its "employees were wearing the best respiratory protection available..." (g., above). Respondent seeks to argue that the measurements of the employee exposure to airborne lead must be reduced by a factor of 1000 because the Bullard respirators used by the employees in the containment warrant a "protection factor" of 1,000. (R. Brief, p. 14). Applying a protection factor of 1,000 would result in all of the "adjusted" sample results being within the permissible exposure limit.

The Secretary does not challenge Respondent's arithmetic. That is, if a protection factor of 1,000 were to be applied, there would be no violations as alleged in these items. Nor does the Secretary argue that a lesser protection factor should be assigned to the Bullard hoods worn by the employees in the containment because at the time of the inspection such apparatus was assigned a protection factor of 25 with the increase to 1,000 in the protection factor occurring during the pendency of this case.[21] The Secretary correctly contends that under the facts of this case any protection factor assigned to the equipment used by the sampled employees may not be applied so as to increase the level of permissible exposure. (Sec, reply brief, Pp. 5-6.) The availability of a "protection factor" which, in effect, increases the permissible exposure levels (measured outside the protective equipment) to which employees may be exposed, is limited to those situations in which all of the requirements of 29 C.F.R. § § 1926.62(e)(1) and (f) have been met.[22] Whether this

---

[21] The increase in the protection factor from 25 to 1,000 for the Bullard Model 77 Abrasive Blasting Hood was brought about primarily due to a detailed study of the hood's operation commissioned by Bullard and carried out by Leighton Associates, whose founder and President, Robert I. Leighton, testified as an expert for Respondent. (Tr. 2237-2242, 2256).

[22] See, 29 C.F.R. § 1926.62(c)(3) which provides, in pertinent part:

> (3) When respirators are used to limit employee exposure as required under paragraph (c) of this section **and all the requirements of**

(continued...)

provision is an "exception" under which Respondent bears the burden of proof, or part of the Secretary's *prima facie* case, is moot, because, as discussed elsewhere in this decision, Respondent was in violation of subsections (e) and (f) of 29 C.F.R. § 1926.62.

For the above reasons, despite Respondent's claims that the Secretary's testing was flawed, a preponderance of the evidence of record supports the finding that the measurements taken during the course of the inspection and sampling were reasonably accurate and that the reported results of exposures to airborne lead as an eight hour time weighted average placed in evidence by the Secretary are reliable and appropriate measures upon which a determination of the violations alleged as to the six sampled employees may rest.

Under the comparable general industry lead standard, the Commission has held that air sampling done during a compliance officer's inspection which reveals that employees were exposed to lead above the permissible exposure level establishes a violation of 29 CFR § 1910.1025(c)(1). *Interstate Lead Co*., 15 BNA OSHC 1989, 1995 (Nos. 89-2088P, 89-3296, 1992); *Wheelabrator Concord Co.*, 15 BNA OSHC 2018, 2019 (No. 91-2358, 1992); See also, *Plano Metal Specialties, Inc*., 14 BNA OSHC 1649 (No. 89-677, 1990) (ALJ)(Digest)(Held; in the absence of any other reason to find that either of two testing results were inaccurate, the Secretary's test results constituted a *prima facie* showing of a violation even though results of Respondent's testing conducted 48 to 76 days after OSHA's testing showed no overexposure.)

In this case, the Secretary has demonstrated that on the day of the sampling, December 9, 1993, the six sampled employees of Respondent were exposed to airborne lead in excess of the permissible exposure limit. I find that Respondent was in violation as alleged in Citation 2, Items 1a, 2a, 3a, 4a, 5a and 6a. Accordingly,

---

[22](...continued)

> **paragraphs (e)(1) and (f) of this section have been met**, employee exposure may be considered to be at the level provided by the protection factor of the respirator for those periods the respirator is worn. Those periods may be averaged with exposure levels during periods when respirators are not worn to determine the employee's daily TWA exposure.

(Emphasis added.)

Items 1a, 2a, 3a, 4a, 5a and 6a are AFFIRMED.

Citation 2, Items 1b, 2b, 3b, 4b, 5b and 6b
29 C.F.R. § 1910.62(e)(1)

Items 1b, 2b, 3b, 4b, 5b and 6b of Citation 2 allege that Respondent failed to implement feasible engineering and work practice controls to reduce and maintain the exposure of each of the six sampled employees identified in items 1a through 6a, to airborne lead levels at or below the permissible exposure limits in violation of the cited standard[23] The Secretary, in the citation, identifies three controls (reducing the size of the containment, increasing the mechanical ventilation and limiting the number of blast nozzles in use at one time) which he alleges were feasible.

On the record before me, the Secretary presented evidence of feasible engineering controls, and Smalis presented no evidence of infeasibility. Compliance Officer Morris testified as to "general application" methods of controlling contaminants including increasing ventilation, reducing the size of containments, and reducing the number of locations where the contaminant is generated. (Tr. 313). More importantly, Complainant's evidence in this regard is primarily from its highly qualified expert, Mr. John Cignatta. He described engineering controls as the use of mechanical or structural design to reduce the exposure of a worker to the toxic material. (Tr. 1703). He reviewed the ventilation equipment in place and operating at the Tarentum Bridge and opined that it could

---

[23] The standard provides:

> (e) *Methods of Compliance.* (1) Engineering and work practice controls. The employer shall implement engineering and work practice controls, including administrative controls, to reduce and maintain employee exposure to lead to or below the permissible exposure limit to the extent that such controls are feasible. Wherever all feasible engineering and work practices controls that can be instituted are not sufficient to reduce employee exposure to or below the permissible exposure limit prescribed in paragraph (c) of this section, the employer shall nonetheless use them to reduce employee exposure to the lowest feasible level and shall supplement them by the use of respiratory protection that complies with the requirements of paragraph (f) of this section.

have been replaced by a different system which could have reduced the levels of airborne lead to below 200 μgm^3 by pulling more air out of the containment. (Tr. 1705, 1707, 1739). He also opined that individual exposure could have been reduced by the altering the size and configuration of the containment into smaller, sub-divided areas with two to three employees working in each. (Tr. 855, 1732, 1739; Exhibits C-43, C-44). According to Mr. Cignatta, the use of dust collectors with a greater capacity to draw air out of the containment or increasing the number of 18,000 cfm (cubic feet per minute) dust collectors in use at one time would have increased air flow within the containment. (Tr. 1740-1741, 1751-1752, 2344; Exhibit C-42). He noted that dust collectors with a capacity of 30,000 to 40,000 cfm are available on the market. (Tr. 1741). Mr. Cignatta performed a computer simulation which predicted that reducing the size of the containment could have reduced lead exposure to less than 500 $\mu g/m^3$ per cubic meter. (Tr. 1741-1742; Exhibit C-45). According to Mr. Cignatta, limiting the number of blast nozzles in use at one time would also have reduced the opportunity for excessive exposure to employees working in the vicinity of the blasting. (Tr. 321-322). Another engineering control, the use of localized exhaust vacuum shrouded power tools, was identified as one which could reduce lead exposure. None were in use on this project. (Tr. 2346).

Relying on decisions[24] dealing with the general industry lead exposure standard, 29 C.F.R. § 1910.1025(e)(1), the Secretary argues that an employer under the Lead in Construction Standard bears the burden of proving that engineering and administrative controls are infeasible. Complainant's argument is rejected.

The standard under which Respondent has been cited and those at issue in the cases relied upon by the Secretary have crucial differences in language and history. First, the lead in construction standard under which Smalis has been cited states, in pertinent part, "the employer shall implement...controls...to the extent that such controls are feasible." On the other hand, the general industry lead exposure standard states, "the employer shall implement ... controls ... except to the extent that the employer can demonstrate that such controls are not feasible." The unambiguous language of the latter clearly places the burden of proof on a respondent claiming that controls are

---

[24] *Advance Bronze, Inc.*, 14 BNA 1179 (No. 88-313, 1989)(ALJ)(Digest), *aff'd. sub. nom. Advance Bronze Inc. v. Secretary of Labor*, 917 F2d 944 (6th Cir., 1990)("*Advance Bronze")* and *Interstate Lead Co.,* 15 BNA 1989 (No. 89-3296, 1992).

infeasible. See, *Stanbest, Inc.,* 11 BNA OSHC 1222, 1226 (No. 76-4355, 1983) (Held: the party claiming the benefit of an exception has the burden of proving that its claim comes within the exception.) In addition, where a safety standard makes feasibility an element of the violation, the burden of proving that controls are feasible is on the Secretary. *Boise Cascade Corp. v. Secretary of Labor,* 694 F.2d 584, 589 (9th Cir., 1982). Moreover, as the Court of Appeals for the Sixth Circuit pointed out in *Advance Bronze, Inc.,* 917 F.2d 944, 952 (6th Cir., 1990), the Court of Appeals for the D.C. Circuit in *United Steelworkers of America v. Marshall*, 647 F.2d 1189, *cert. denied,* 453 U.S. 913 (1981), affirmed the Secretary's determination, made during the process of promulgating the general industry lead standard, that all lead industries could feasibly achieve a 200 $\mu g/m^3$ level of exposure for their employees.[25] Thus, under the general industry lead standard, an employer is assigned the burden of proving the infeasibility of engineering and administrative controls. Since there is no such requirement under the lead in construction standard, I hold that in order to prove an employer is in violation of 29 C.F.R. § 1926.62(e), the Secretary must prove, among other things, 1) that the employer failed to use controls in existence which would reduce and maintain employee exposure to lead at or below the permissible exposure limit and that such controls are feasible, or 2) that the employer failed to use such feasible controls which are in existence which would reduce employee exposure to the lowest feasible level and failed to supplement the controls by the use of proper respiratory protection.

Respondent's post hearing brief makes scant mention of the feasibility of controls. It merely notes that the inspecting compliance officers did not testify as to what specific engineering controls

---

[25] See, section 6(b)(5) of the Act, 29 U.S.C. § 655(d)(5), which states in pertinent part:

> (5) The Secretary, in promulgating standards dealing with toxic materials or harmful physical agents under this subsection, shall set the standard which most adequately assures, *to the extent feasible*, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life.

(emphasis added.) See also *ASARCO, Inc. v. OSHA,* 841 F.2d 1006 (9th Cir., 1984)(feasibility under the inorganic arsenic exposure standard, 29 C.F.R. § 1910.1018 (1983).

were in use at the time of the inspection (Resp. brief, p. 17). Respondent makes no argument and points to no evidence contradicting or rebutting the Secretary's evidence, described above, as to the feasibility of controls.

The Secretary's evidence of the existence and effect of feasible engineering and work practice controls, and Smalis's failure to present evidence of infeasibility, satisfies the Secretary's burden of proof in establishing violations of 29 CFR § 1926.62(e)(1). Accordingly, Items 1b, 2b, 3b, 4b, 5b, and 6b are AFFIRMED.

Citation 2, Items 7 - 20
Items 7a - 20a: 29 C.F.R. § 1926.62(c)(1)
Items 7b - 20b: 29 C.F.R. § 1926.62(e)(1)

OSHA also cited fourteen instances (items 7a - 20a) of alleged overexposure of Smalis employs to airborne lead under 29 CFR § 1926.62(c)(1) and fourteen instances (items 7b - 20b) of failure to implement feasible engineering, work practice and administrative controls under 29 CFR § 1926.62(e)(1)[26]. The employees identified as being exposed to these alleged violative conditions are Smalis employees who were not individually monitored, but who, the Secretary claims, worked within the containment on the job site on the day of the inspection (December 9, 1993). Inasmuch as the cited standards both require a showing that each employee cited was overexposed, "instance by instance" citations under these standards, as in this case, must be based upon a finding that for each of the "instances" the particular employee identified in the item was overexposed. Thus, items 7 through 20 each refer to a particular employee whom, the Secretary alleges, was exposed to atmospheric lead in amounts greater than that specified by the Permissible Exposure Limit.

The Secretary's task of proving the second element of the alleged violation, non-compliance with the standard[27], as to these items is no simple matter. "Overexposure" under these standards is

---

[26] Full text of standards appear in Appendix A.

[27] In general, to prove a violation of a standard, the Secretary must demonstrate by a preponderance of the evidence (1) that the cited standard applies, (2) non-compliance with the terms of the standard, (3) employee exposure or access to the hazard created by the non-compliance, and (4) the employer knew or, with the exercise of reasonable diligence, could have known of the condition. *Astra*
(continued...)

determined by a time weighted average. Two essential components of measurement must be present in order to find overexposure - first; how MUCH lead exposure was there (quantity of exposure) and, second, for how LONG did the exposure last (duration of exposure).

First, as to quantity of exposure.

The difficulty with these items for the Secretary is that he must somehow show both the quantity and the duration of exposure to airborne lead of employees who were not sampled. For the following reasons, I find that the evidence of record and the reasonable inferences to be drawn therefrom establish that the untested employees cited in items 8 through 12 and 14 through 19 were exposed to a quantity of airborne lead ranging from 20,000 to 30,000 $\mu g/m^3$ of air during their working time within the containment on the day of the inspection. This is established because the cited but untested employees worked within a clearly definable area which was essentially shut off from the outside and independent evidence shows that the atmosphere within that area contained large amounts of airborne lead.[28]

The Secretary's expert as well as the compliance officers conceded that the employees sampled were not scientifically selected to assure that they would be statistically representative of the entire population of employees working that day. In the absence of such a showing, it cannot, as argued by the Secretary, be assumed that the sampled and unsampled employees worked under atmospheric conditions so similar as to warrant the reasonable inference that their exposures to airborne lead, had they been measured, would be relatively the same or substantially similar. There is however, an appropriate basis to find as fact that these eleven employees were exposed to large quantities of airborne lead.

At the time of the inspection, the containment extended from the abutment on the New Kensington side of the bridge out past the first pier in the water. (Tr. 108, 2115-2117, 2135-2135; Exhibit C-5). The interior of the containment was divided into three or four "sections" separated

---

[27](...continued)
Pharmaceutical Products, Inc., 9 BNA OSHC 2126, 2129 (No. 78-6247, 1981).

[28] Different facts mandate different findings, conclusions and results regarding employees ***(redacted)***, ***(redacted)*** and ***(redacted)***, identified in items 7, 13 and 20, respectively. See, note 31, *infra*.

by tarps or plastic curtains that draped down and were attached to the tops, bottoms, and sides of the containment. (Tr. 114, 121) Each subdivision or section was approximately three to four bays in size (75 to 100 feet long). On December 9, 1993 all blasters and sand suckers (both sampled and not sampled) were working in the same section of the containment. (Tr. 1198, 1782).

The unrebutted and credited testimony of John Cignatta, based upon a computer simulation, establishes that the airborne lead dust concentrations within the containment ranged from 20,000 to 30,000 $\mu g/m^3$ whenever men were blasting. He testified that the airborne lead level during blasting operations would have been within this range regardless of whether the containment was 75 feet or 250 feet long (Tr. 1707, 1749-1750, 1756, 1765, 1791, 1795-96, 1810, 1820-22, 2346). He explained that based on the nature of their equipment and his knowledge of the industry, exceedingly high levels of lead accumulated in the high pressure regions around where each man was blasting. According to Mr. Cignatta, anyone working beneath the blasters at that time, such as sand suckers vacuuming up waste abrasive, was also drawing this dust cloud of 20,000 to 30,000 $\mu g/m^3$ down and working in it. (Tr. 1756-1757). He advised that the ventilation system in use mixed the contaminated air with uncontaminated air and dispersed the mixture rather uniformly throughout the space.[29] He later expanded upon his estimates stating that approximately 90 percent of the

---

[29] Mr. Cignatta indicated that there were some exceptions. He stated:

> So there were areas in the containment with fairly low levels of lead, that would be at the gaps and seals and windows -- actually pardon me gaps and seals, there were no windows in this enclosure, up near where the tarps were pushed up and pulled up in contact with the bridge decking and at the pass through points, so at those points furthest removed from where the men were blasting, air could be sucking in, or some places dirty air was blowing out, depending on where you were with respect to the men blasting, but the fact is, those areas, if you were in those locals, you could literally be below 5,000 micrograms per cubic meter of lead dust.
>
> But any time you went further into the enclosure where the men were blasting, you would be in a 20 to 30,000 microgram per cubic meter dust cloud.

Tr. 1757.

containment would have been at the 20,000 to 30,000 μg/m^3 level. (Tr. 1812). He also concluded that the sand suckers working in the containment would not have had a statistically significant lower level of lead exposure. (*Id.*) Accordingly, I find that a preponderance of the evidence of record and the reasonable inferences arising from that evidence demonstrate that any employee of Smalis who worked within the containment during the day of December 9, 1993, worked in an atmosphere with at least 20,000 μg/m^3 for the duration of their time in the containment.

Having established as a fact the nature of the atmosphere inside the containment when blasting was in progress during the day of December 9, 1993, evidence of record must also place the employees cited in items 7 - 20 inside the containment on that day.[30] While not direct, the evidence

[30] The following data is compiled from Respondent's payroll records (Ex. C-17) which were admitted into evidence without objection. (Tr. 265).

Citation 2 Item #	Employee	Job Classification	Hours Worked Dec. 9, 1993	Rate of Base Hourly Pay
7	***(redacted)***	Sand Sucker	7	08.50
8	***(redacted)***	Blaster/Painter	7	21.00
9	***(redacted)***	Sand Sucker	9	08.98
10	***(redacted)***	Blaster/Painter	8	19.98
11	***(redacted)***	Blaster/Painter	6	19.98
12	***(redacted)***	Blaster/Painter	6	21.06
13	***(redacted)***	Blaster/Painter	6	22.00
14	***(redacted)***	Blaster/Painter	6	19.98
15	***(redacted)***	Blaster/Painter	9.5	21.06
16	***(redacted)***	Blaster/Painter	8	19.98
17	***(redacted)***	Blaster Painter	8	19.98
18	***(redacted)***	Blaster/Painter	7	19.98
19	***(redacted)***	Blaster/Painter	8	19.98
20	***(redacted)***	Blaster/Painter	8	19.98

of record raises the reasonable inference that the employees identified in items 8 - 12 and 14 - 19, worked inside the containment during the day on December 9, 1993 [31]

Citation items 7 through 20 refer to fourteen Smalis employees identified by payroll records as Blaster/Painters and two identified as Sand Suckers who worked on December 9, 1993.[32]

Payroll records establish that E. Smalis Painting Company paid 39 employees for work on the Tarentum Bridge done on December 9, 1993. (Tr-2005, Exhibit C-17)

The major job categories on a bridge painting job include Blaster/Painters, who blast away old lead paint and then spray paint the structural steel (Tr. 1630) and often do rigging. (Tr. 1632). Also included are Sand Suckers who vacuum up the dust, debris and abrasive shot that falls into the belly of the tarps. They may also work on equipment, take care of traffic control, or man the rescue boat below the bridge. (Tr. 1632) Groundmen carry out the same duties as a sand sucker as well as supply materials needed by the Blaster/painters. Equipment maintenance, or equipment tender is a job title given to a worker who takes care of the equipment on the bridge. (Tr. 1634-1635).

During the day shift on December 9, 1993 between nine and twelve blasters were working in the containment. (Tr. 855, 870, 1414) Mr. Smalis told one of the inspecting compliance officers that the equipment on the site could handle a dozen blasters at once. (Tr. 855-856) According to employees ***(redacted)*** and ***(redacted)***, between four and eight sand suckers were working during the day shift on December 9, 1993. (Tr. 1196, 1235).

Usually, on bridges, blasting is not done at the same time as spray painting because so much dust and dirt is in the air during blasting. It is standard practice for the same worker to first strip the

---

[31] Items 7, 13 and 20 are hereby vacated because the reliable evidence of record does not place them inside the containment during the day of December 9, 1993. Mr. Smalis explained that on the handwritten payroll sheets, names listed below foreman ***(redacted)*** worked during the day while names listed below the night foreman ***(redacted)*** worked during the night shift. Items 7, 13 and 20 identify employees ***(redacted)***, ***(redacted)*** and ***(redacted)*** all listed as having worked during the night shift. No blasting occurred during that shift. (Tr. 1366-11367). There is, therefore, no evidentiary basis upon which it can be found or reasonably inferred that these men were exposed to any particular level of airborne lead on that date.

Whether or not there might have been additional employees overexposed but not the subject of any citations is totally irrelevant to dismissing these allegations. See, Sec. brief, p. 436, n. 14.

[32] Sec brief, p. 435. No reference to the record is identified.

old paint from the steel, then clean the steel, and finally, apply new paint in that same area. (Tr. 1417-1418, 1435, 1450). On the Tarentum bridge, painting could not start until the Pennsylvania Department of Transportation ("PENNDOT") inspectors inspected and approved the results of the blasting. (Tr. 1195). It is undisputed that blasting inside the containment took place on December 9, 1993. Therefore it is reasonable to infer that none of the Blaster\Painters who worked in the containment on that day were doing painting. Moreover, none of the employees that the Industrial Hygienists spoke with that day described their job as painting. It is thus inferred that none of the employees listed on payroll records as blasters/painters were painting on December 9, 1993. (Tr. 873-875)

Respondent apparently presses two points. Respondent argues that there is no evidence as to where the unsampled employees worked within the containment and that there is no evidence as to the activities of the unsampled but cited employees. In its post-hearing brief Respondent points out that each of the three job classifications involved, Blaster, sand sucker and ground man, could include job duties requiring the employee to be working outside the containment. (R.Brief, Pp. 18-19) While Respondent may be properly portraying the locations in which some of the cited but unsampled employees could have been working at other times, it does not challenge or in any way rebut the Secretary's contention that these individuals worked inside the containment during blasting that day. Nor does Respondent point to evidence supporting its conjecture. Although employee ***(redacted)*** thought that some workers might have been rigging at the end of the bridge on December 9, 1993, inspecting officer Morris did not see anyone rigging that day. (Tr. 882, 1417-1418)

Mr. Leighton, Respondent's expert opined that information as to what all of the employees did inside the containment during the sampling period was necessary to use the sampling data to represent the exposure of other, non-sampled, employees. (Tr. 2233). Respondent's positions are rejected as not sufficiently substantiated so as to rebut the inference to be drawn from the record.

I thus find that the employees identified in Citation 2, Items 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19 were exposed to airborne lead in the amounts of 20,000 to 30,000 $\mu g/m^3$ on December 9, 1993[33].

---

[33] The Secretary's statement that "Given the results of the air monitoring, clearly every employee (continued...)

Second, as to duration of exposure.

Quantity of exposure (at least 20,000 μg/m^3) having been established, the duration of exposure must also be considered.[34] Doing so demonstrates that the employees identified in items 8 - 12 and 14 - 19 were exposed to airborne lead in excess of that permitted by 1926.62(c)(1) on a time weighted average.

Calculating the exposure of any of the employees identified in items 7 - 20 is somewhat mechanical. Even assuming that any of the identified employees worked as little as one hour inside the containment that day[35], applying the appropriate formula for calculating a time weighted average results in an exposure exceeding the PEL.[36]

---

[33](...continued)
working on the Tarentum Bridge on December 9, 1993 was exposed to lead above the PEL." (Sec. brief, p. 439). Is without foundation in fact or reason. It is dismissed as mere hyperbole.

[34] Mr. Cignatta, in considerable detail, explained the implications upon overexposure under the lead in construction standard of his computer generated calculation that the atmosphere within the containment would have measured between 20,000 and 30,000 μg/m^3 of lead. He testified:

> A No, sir. I'm not working on time weighted averages, I'm actually working on what is the condition in the containment once we get into this dynamic condition of men blasting and men working.
>
> If a man is only in there for one hour of a day, he's only going to be having exposure of one hour of that condition. The other seven hours he'd be outside and those other seven hours of zero exposure plus the one hour of exposure at 20,000 to 30,000 would come up with his time weighted average exposure....

[35] Inasmuch as Respondent's payroll records indicate that these men were each paid for at least 6, and as many as 9.5 hours of work, for December 9, 1993, it is reasonable to infer that they actually worked for at least one hour. That they worked inside the containment for at least one hour is discussed in detail above.

[36] An employee working in an atmosphere of 20,000 μg/m^3 for a period of one hour out of an eight hour work day would have an 8 hr TWA exposure of 2,500 μg/m^3. (1 hour @ 20,000 + 7 hours @ 0.0 = 20,000. 20,000 ÷ 8 = 2,500.) Note that 2,500 μg/m^3 is 5 TIMES the permissible exposure limit of 50 μg/m^3. An employee who worked for 1 hour inside the containment during the course of a nine and one-half hour work day would also exceed the permissive exposure limit. (1 hour @ (continued...)

Considering both the quantity and duration of exposure to airborne lead as discussed above, I find that each of the employees identified in items 8 - 12 and 14 - 19 of Citation 1 were exposed to amounts of airborne lead which exceeded the permissible exposure limits under 29 C.F.R. § 1926.62(c).

Accordingly, items 8a, 9a, 10a, 11a, 12a, 14a, 15a, 16a, 17a, 18a and 19a are AFFIRMED.

For the reasons discussed in regard to items 1b - 6b, I conclude that Respondent was in violation of 29 C.F.R. § 1926.62(e)(1) as alleged in items 8b, 9b, 10b, 11b, 12b, 14b, 15b, 16b, 17b, 18b and 19b. Accordingly, those items are AFFIRMED.

Citation 2, Item 21
29 C.F.R. § 1926.62(d)(1)(iii)

The Secretary alleges that Smalis failed to collect personal samples of airborne lead exposure as required by the cited standard[37].

It is undisputed that Respondent did no personal sampling. (Tr. 269, 357, 358-362, 1268-1269, 1455, 1980, 2118, 2119, 2120, 2123-2124, 2146-2147) The Secretary notes that the response to the subpoena requesting documents, in which OSHA asked Smalis for all documents related to personal air monitoring on the Tarentum Bridge, (Tr. 357; Exhibit C-16) did not include any information about personal air monitoring. (Tr. 269, 357; Exhibit C-16) Instead, Smalis provided a report from the Allegheny County Health Department on environmental air monitoring they had done previously. The Secretary argues that "these old surveys were not specific employee exposure assessments where employees on site actually wore sampling equipment, and therefore are not sufficient to satisfy the standard." (Tr. 269, 1268-1269; Exhibit C-16). The Secretary also states that at the deposition of Mr. Ernest Smalis he was asked whether personal air monitoring had been conducted on the Tarentum Bridge. He responded that personal air monitoring had not been done.

---

[36](...continued)
20,000 - 20,000 + 8 ½ hours @ 0.0 = 20,000. 20,000 ÷ 9.5 = 2,105). Note that the permissive exposure limit for an employee who works 9 and one-half hours in one day is 42.10 $\mu g/m^3$ because the work day is more than eight hours. 29 C.F.R. § 1926.62(c)(2).

[37] See Appendix A for full text of standard.

(Tr. 358-359) Additionally, at the hearing, Mr. Smalis admitted that Respondent did not do any monitoring within the containment in 1992 at the Tarentum site, and never did any personal air monitoring of employee exposures on the Tarentum Bridge at any time. (Tr. 1980, 2123-2124).

Mr. Smalis knew that there was a significant amount of airborne lead on the bridge job. (Tr. 2119) He stated at his deposition that "We knew that inside the containment, that the concentration . . . [of lead] was high." (Tr. 2119) He was made aware of the requirements of this standard by the 1992 Citation and its subsequent settlement, (Tr. 361-362, 2146-2147; Joint Exhibit 1) as well as by a Citation from the OSHA Area Office in Jacksonville, Florida relating to the failure to do air monitoring at another job site. (Tr. 362; Joint Exhibit 1).

Respondent posits that the standard does not apply. It argues that sections (d), (e), (f) and (j) of the Lead in Construction Standard, 29 C.F.R. § 1926.62, cannot apply to the job at the Tarentum bridge because they became effective on June 3, 1993, more than a year after the Tarentum job began in August 1992. (Resp. brief, P. 20-21. p. 20). Respondent's position is rejected. There is nothing in the standard cited in this item to support Respondent's contention. It is clear from the wording of the standard that even if a job were underway at the time the standard became effective that compliance could have been accomplished by conducting the required personal sampling within a reasonable time after the effective date of the standard.

Respondent relies on 29 C.F.R. § 1926.62(d)(3)(iii)[38], which states, in part:

> [W]here the employer has previously monitored for lead exposures and the data were obtained within the past 12 months....the employer may rely on such earlier monitoring results to satisfy the requirements of paragraphs (d)(3)(i) and (d)(6) of this section...

(Resp. brief, Pp. 21-22) (Tr. 2146-47). The "previous" monitoring relied upon by Smalis was that done by OSHA in September of 1992.

Even though Smalis' argument is consistent with its response to OSHA's subpoena and Mr. Smalis' testimony at the hearing (both of which inquired specifically as to monitoring previously done by Smalis, not by others) its argument is rejected. First, regardless of what OSHA did or did not do during the earlier inspection of the Tarentum bridge, clearly Respondent never had personal

---

[38] See Appendix A for full text of standard.

sampling done as is required by the standard. Second, Smalis itself has argued that the conditions had changed significantly from the 1992 to the 1993 inspections, noting that the 1992 samples were taken in a far different work area. Moreover, Respondent maintains that additional filtering and recirculating equipment was operational at the time of the 1993 inspection. It is also undisputed that significantly more blasters were working at the time of the 1993 inspection than were working during the 1992 inspection. Under such circumstances, the 1992 samples taken by OSHA, even if considered to have fulfilled Respondent's duty to obtain samples, could not be considered to be "representative of a full shift including at least one sample for each job classification...."

In light of these facts, Smalis is found to have violated 29 CFR § 1926.62(d)(1)(iii).

Accordingly, Item 21 of Citation 2 is AFFIRMED.

Citation 2, Item 22
29 C.F.R. § 1926.62(e)(2)(i)

The cited standard, 29 C.F.R. § 1926.62(e)(2)(i), provides that, "[p]rior to the commencement of the job each employer shall establish and implement a written compliance plan to achieve compliance with paragraph (c) of this section."

The Secretary argues that "the standard requires that a written compliance program be developed and implemented before the onset of work that would cause employee lead exposure." (Sec. brief, p. 443). He goes on to note that no such program was provided to OSHA in response to its subpoena. He claims that none ever existed.

The Secretary's argument ignores the clear and plain wording of the standard. As argued by Respondent (Resp. brief, Pp. 20- 21, ¶ ¶ 33, 35) the Lead in Construction Standard became effective on June 3, 1993, at the earliest. It is undisputed that work on the Tarentum bridge commenced in August of 1992. Simply stated, the standard became effective after the commencement of the Tarentum bridge job. Thus, the cited standard, which requires that certain actions be taken "before the onset of work," could not possibly apply to the work Respondent was performing at the Tarentum bridge site.

Inasmuch as the cited standard does not apply, Item 22 of Citation 2 is VACATED.

Citation 2, Item 23

Item 23a: 29 C.F.R. § 1926.62(f)(2)(i)
Item 23b: 29 C.F.R. § 1926.62(f)(3)(ii)

Item 23a

Complainant alleges in part a of item 23 that Respondent did not provide the appropriate respirator or combination of respirators to employee ***(redacted)*** as required by the cited standard.[39]

The facts are undisputed. Employee ***(redacted)*** was working "topside," primarily tending equipment, on the day of the inspection, December 9, 1993. (Tr. 366-369, 1610-1611, 1613, 1619-1620). Reasonably accurate and reliable monitoring for exposure to airborne lead on that day showed ***(redacted)*** eight hour, time weighted average exposure to airborne lead was 910 μg/m^3. This is more than eighteen (18) times the permissible exposure level. (Tr. 366-367). ***(redacted)*** was wearing a half-mask type cartridge respirator, fitting over his nose and mouth, with screw-in cartridges and attachment caps over the tops of the cartridges. (Tr. 366-367, 1613, 1619-1620). He described his half-mask respirator as one that he had pieced together with parts he found in the foreman's truck because no new half-mask respirators were available when he started working at Tarentum Bridge. (Tr. 1610-1611, 1619-1620).

Table 1, referred to by the cited standard, assigns a "protection factor" of 10 to the half-mask type respirator worn by ***(redacted)*** that day. (Tr. 366-367; Appendix A, p. 10.) ***(redacted)*** measured exposure to airborne lead was 18.2 times the permissible exposure level, which is considerably above the range of protection for this type of respirator. (Tr. 366-367). Table 1 permits the use of half-mask respirators in environments containing airborne lead "not in excess of 500 μg/m^3" (10 times the permissible exposure level) provided they are equipped with "high efficiency filters." Footnote 3 of the Table notes that "[a] high efficiency particulate filter (HEPA) means a filter that is a 99.97 percent efficient against particles of 0.3 micron size or larger." Thus, on the day of the sampling, the half-mask respirator employee ***(redacted)*** was wearing was not

---

[39] The cited standard provides:

> (2) *Respirator selection*. (i) Where respirators are used under this section the employer shall select the appropriate respirator or combination of respirators from Table I below.

appropriate under the cited standard. In addition, Smalis knew about the requirements for selecting appropriate respirator equipment because a Compliance Officer had had "extensive discussions" with Mr. Smalis after the 1992 inspection about the need to provide proper respirators. (Tr. 368-369).

Respondent merely denies the allegation without presenting any argument or pointing to any relevant evidence. (Resp. brief, ¶ 42, p. 22).

Based on these undisputed facts, I find that Smalis violated 29 CFR § 1926.62(f)(2)(i).

Accordingly, Item 23a of Citation 2 is AFFIRMED.

Item 23b

The standard cited in part b of item 23[40] requires face fit tests at the time of initial fitting and at least every six months thereafter for each employee using the kind of half-mask respirators distributed to Smalis employees at the Tarentum Bridge site. A preponderance of the evidence shows that Smalis failed to perform such fit tests.

Regardless of broad claims made by the Secretary as to lack of fit testing for "numerous" Smalis employees at Tarentum[41], there is specific evidence of record that at least several men who

---

[40] In part, the cited standard provides:

> (ii) Employers shall perform either quantitative or qualitative face fit tests at the time of initial fitting and at least every six months thereafter for each employee wearing negative pressure respirators.

See Appendix A for full text of standard.

[41] The Compliance Officer initially stated that this item of the citation was based upon "interviews with numerous people." Vigorous efforts at cross examination were made extremely difficult by the Compliance Officer's excessive evasiveness. (*e.g.,* Tr. 868, line 21 to Tr. 869, line 21; Tr. 903, lines 7 - 22.) After the inspection, OSHA sent letters to people identified by Smalis payroll records as having worked for Smalis at some time on the Tarentum bridge. Approximately 80 to 90 such people were so identified.(Tr. 918.) The letters asked the recipients to phone or otherwise contact OSHA. Of those receiving the letter, an unquantified number were interviewed by phone. No standard interview form or list of questions was used and much of the information assertedly received from employees by phone was preserved, if at all, merely as contemporaneous unorganized random handwritten notations made by several OSHA personnel. Only six signed statements from

(continued...)

worked for Smalis at Tarentum had not been fit tested with their half-mask respirators. Employees ***(redacted)*** (Tr. 369, 370, 1611), ***(redacted)*** (Tr. 1210), ***(redacted)*** (Tr. 1381), ***(redacted)***(Tr. 1594),***(redacted)*** (Tr. 1408), ***(redacted)*** (Tr. 1531) and ***(redacted)*** (Tr. 1547) all gave testimony that either directly or by reasonable inference demonstrates that they were not fit tested by Smalis for their respirators at the Tarentum bridge job. Other employees testified that they had been fit tested at bridge painting jobs other than Tarentum. Some of those jobs were Smalis projects (Tr. 1372, 1957). One was that of another contractor (Tr. 2071, 2083-2084).

In its post hearing brief Smails maintains that "[e]mployees stated that they were fit tested by the union (TR. 869, 919)" and that "[a] representative of Mine Safety[42] conducted fit testing on site." (Tr. 373, 1977, 1978). (Resp. brief, ¶ 43, p. 22.) Mr. Smalis, in his testimony, asserted that Mine Safety trained his supervisors so they could perform fit testing. Such training and perhaps fit testing was, however, admittedly available only to "whatever employees were there." (Tr. 2141-2142). Training and fit testing by Mine Safety personnel was thus haphazard. In sum, there is no specific claim or evidence that the employees identified above were, contrary to their testimony, fit tested. Moreover, the standard requires testing of all employees issued half-mask respirators "at the time of the initial fitting" as well as on a regular basis thereafter. The evidence shows that Smails did not have any organized or concerted effort to assure that all employees at the site were fit tested, either initially or on a regular basis. It thus violated the cited standard.

Accordingly, Item 23b of Citation 2 is AFFIRMED.

Citation 2, Item 24

Item 24a: 29 C.F.R. § 1926.62(f)(4)(i)
Item 24b: 29 C.F.R. § 1910.134(b)(3)
Item 24c: 29 C.F.R. § 1910.134(b)(8)

---

[41](...continued)
Smalis employees who worked at the site were taken by OSHA. (Tr. 928-929) About ten employees who were "interviewed" by phone were identified by the Compliance Officer as having "made some reference in the interview to respirator training for fit testing." (Tr. 918.) Of these, some indicated that they received fit testing or training from their union which, the Compliance Officer conceded, could have been a "valid fit test." (Tr. 919-920).

[42] Mine Safety Appliances is a manufacturer of respirators.

Item 24d: 29 C.F.R. § 1910.134(d)(2)(ii)
Item 24e: 29 C.F.R. § 1910.134(e)(5)(i)
Item 24f: 29 C.F.R. § 1910.134(f)(1)

Item 24a

The standard cited in part a, 29 C.F.R. § 1926.62(f)(4)(i), provides, in its entirety,

> (4) *Respirator program.* (i) The employer shall institute a respiratory protection program in accordance with 29 CFR 1910.134 (b), (d), (e) and (f).

Under the plain and clear meaning of this regulation, in order to show a violation, the Secretary must show either that an employer had no respiratory protection program at all or that a program in place failed to meet at least one requirement contained in the specified subsections of § 1910.134.[43] Thus, where an employer has some kind of respiratory protection program, § 1926.62(f)(4)(i) cannot be violated in and of itself.[44] Indeed, an examination of the standards cited in the following sub-sections of item 24 reveals that each is a different manner in which Smalis' activities regarding respiratory protection is alleged to have been insufficient under § 1910.134. Moreover, in reading the Secretary's post hearing brief in regard to part a of Item 24 (Sec.brief, Pp. 450-451), it becomes apparent that the Secretary is actually arguing that the essence of the alleged violation is the failure of Smalis to have any written or organized respiratory protection program at

---

[43] An examination of the headings of each of the sub-parts of § 1910.134 confirms that each refers to a different facet of one overall scheme for proper respiratory protection. Those headings are as follows: (a) *Permissible practice*; (b) *Requirements for a minimal acceptable program*; (c) *Selection of respirators; (d) Air quality*; (e) *Use of respirators*; (f) *Maintenance and care of respirators*, and (g) *Identification of gas mask canisters*.

[44] Even the wholesale adoption of another company's operating procedures governing the selection and use of respirators has been found to satisfy the requirements of § 1910.134(b)(1), which specifically requires the establishment of a written program. *G-UB-MK Constructors*, 16 BNA OSHC 1814, 1819 (No. 92-3040, 1994)(Salyers, ALJ)(Digest). It is noted that the Secretary's statement in regard to the ALJ's decision that "the court affirmed the citation...." (Sec. brief, p. 452) is incorrect. There is no record of the Commission or any court reviewing the decision of the ALJ. An unreviewed decision of a Commission Administrative Law Judge, while perhaps instructive and persuasive, does not have the force and effect of precedent. *Leone Construction Co.*, 3 BNA OSHC 1979 (No. 4090, 1976).

all in a situation where respiratory protection is needed. (Tr. 380-381). The Secretary pointed out that Smalis, despite a subpoena request for it, has never come forward with a written respiratory protection plan. Nor has one been shown to exist. I find that Respondent has not instituted a respiratory protection program. I conclude that failing to do so is violative of § 1926.62(f)(4)(i). Accordingly, Item 24a of the citation is AFFIRMED.

Item 24b

Item 24b refers to the standard at 29 C.F.R. § 1910.134(b)(3), which requires that employees who use respirators be "instructed and trained in the proper use of respirators and their limitations."[45]

The evidence in regard to lack of training in the use of respirators is essentially similar to that reviewed in connection with the lack of fit testing (Item 23b). Several employees specifically testified that they had received no training in respirator use or limitations. The Compliance Officers related that interviews revealed that "many employees" had not received respirator training (Tr. 878, 912). Several employee witnesses testified similarly as to lack of training at Tarentum (Tr. 1210, 1380-1381, 1610-1611, 1619-1620, 1407, 1546, 1531, 1593). While others indicated they had some respirator training from other employers. There is an indication that some of Smalis' employees received general training in construction which included some lead in construction training from the local union. Also, some Smails employees might have received some acceptable training from Mine Safety Appliances personnel. Such evidence is undisputed and is reliable. As with the fit testing, in the absence of an effective respiratory protection program, there could be no organized, effective training. What training in respirator selection and use was received by Smalis employees was haphazard and fortuitous. I thus find that there were at least some Smalis employees on the Tarentum Bridge project who were using respirators but who had received no training in respirator use or limitations.. Respondent is found to have been in violation of § 1910.134(b)(3). Item 24b is AFFIRMED.

Item 24c

---

[45] The full text of the standard appears in Appendix B.

The Secretary maintains that a violation of the standard at § 1910.134(b)(8)[46] has been shown because ;

> When there is no question that the employer failed to conduct tests or sample the air in the work area, it should also be found that the employer failed to maintain appropriate surveillance of the worksite and degree of employee stress.

(Sec. Brief, p. 456). The Secretary recites essentially the same evidence discussed in regard to Item 21 in which it was found that Respondent failed to conduct personal sampling of its employees known to be exposed to airborne lead at the Tarentum Bridge site. He relies upon and cites the Commission decision in *Atco Structures, Inc.,* 14 BNA OSHC 1173 (No. 87-0223, 1989) (Digest)(ALJ Botkin). In that case Judge Botkin concluded that a violation of 1910.134(b)(1) where "an employer failed to conduct tests or sample the air in the work area" is also a *per se* violation of 1910.134(b)(8). Given the wording of the two standards, there is no quibble with Judge Botkin's results.

Smalis had been cited twice previously, once on this work site, and once on a job in Florida, for violations of this standard. He admittedly knew that the concentration of lead inside the containment at Tarentum was high. (Tr. 2119). Yet, there is no evidence that Smalis did anything to check into the circumstances under which his employees were working other than to have the general environment tested when required to do so by a county health department. (Tr. 861-862, 1268-1269). Item 24c is AFFIRMED.

Item 24d

Item 24d claims that Respondent did not comply with § 1910.134(d)(2)(ii). It is alleged in this item that Respondent failed to frequently test the breathing air being produced by a compressor and being fed as breathing air into the hoods of the blasters working inside the containment.[47]

Respondent defends solely on the facts, claiming that Respondent did test the air. (Resp brief, ¶ 189, p. 69). Respondent's defense is rejected.

---

[46] The standard provides: "(8) Appropriate surveillance of work area conditions and degree of employee exposure or stress shall be maintained."

[47] See Appendix B for full text of cited standard.

The Compliance Officer testified that testing breathing air could be done by continuous monitoring or by "grab" sampling. (Tr. 386). He stated that OSHA takes the position that unless there is continuous monitoring, carbon monoxide testing of the air must be done at least daily. (Tr. 389). The Compliance Officer, however, was unable to recall the factual basis for this item of the citation (Tr. 390-391, 898-899). Smalis hired a professional consultant in August 1992 to test the air being fed into the hoods. It did so on one occasion. (Tr. 2097-2098).

The Secretary has failed to meet the burden of proving that Respondent failed to test frequently enough. The frequency with which the air was tested is a factual question. No reliance whatsoever can be placed on the earlier testimony of the compliance officer in light of his quite frank admission that, after trying to do so, he simply could not recall the facts upon which he based this item. (Tr. 898). The only other possibly relevant testimony of record which could be found, the statement by Mr. Smalis regarding the testing done by a consultant, is of little or no assistance to the Secretary's case. Mr. Smalis was asked if the August 1992 test by the consultant company "was the one and only time *they* did that test." (Tr. 2098). His affirmative answer to this specific question says nothing about what, if any, carbon monoxide testing was done by anyone else after August 1992. In the absence of such evidence it must be found that the Secretary failed to make out a *prima facie* case of the alleged violation. Because the Secretary failed to prove that there was non-compliance with the terms of the standard cited, item 24d is VACATED.

Item 24e

Every employee who uses a respirator is required by § 1910.134(e)(5)(i), the cited standard, to receive instructions, demonstrations and practice in respirator fitting.[48] The Secretary maintains that fitting instructions are different from fit tests (Item 23b). He again relies on Smalis' lack of any response to the administrative subpoena item requesting all records relating to the Smalis respirator program (Tr. 388, Ex. C-16) as evidence that Respondent had no established regimen of instructing employees in respirator fitting. In addition, the Secretary once again relates that seventeen employees of the approximately two dozen interviewed (See, note 41) "made some reference to fitting instructions not being provided." (Sec. brief, p. 462). Smalis had previously been cited for

[48] For full text of standard, see Appendix B.

a violation of this standard. (Tr. 390, Ex. J.-1).

As with item 23b, there is unrebutted evidence in the form of employee testimony of men who worked for Smalis at the Tarentum site who received no instructions, demonstrations or practice in respirator fitting. It appears that except for those employees who happened to be at the site when a represenative of a respirator manufacturer visited, Smalis employees were simply given or directed to the location of a respirator and were told in the most general terms to use it. Respondent presents no defense except to the degree that its arguments in response to item 23b are applicable. Those arguments are rejected. Item 24e is AFFIRMED.

Item 24f

The standard cited, 29 C.F.R. § 1910.134(f)(1) requires employers to establish a program for the care and maintenance of respirators appropriate for the conditions at the particular site and to properly maintain respirator equipment.[49]

The violation described by the citation is that "[a]ir line respirators used by the abrasive blasters were not properly maintained during cold weather to ensure against air line freeze up." The Secretary's case consists of testimony of employees who worked within the containment that the blasting hoods which were fed with breathing air under pressure from a compressor on the bridge deck[50], would occasionally "freeze up". (Tr. 391, 1452-1453, 1415, 1418-1419, 2083-2084). In addition, the Secretary cites unrebutted evidence that hoods and other respirator equipment was left inside the containment for some time (Tr. 924, 1238, 259, 1405-1407) which would preclude appropriate maintenance and cleaning of the equipment.

The Secretary's case for the lack of a "program" for respirator care and maintenance seems to rest on whether evidence of air compressor breakdowns and leaving equipment in the containment raises the reasonable inference that there was no organized effort by Respondent to assure that its respirator equipment was properly cared for and maintained. Under the circumstances of this case, it does. The evidence is that breakdowns in the system of air supply to the hooded blasters working

---

[49] For full text of standard, see Appendix B.

[50] The same compressor is the subject of item 24d.

in the containment and who were known to Smalis to be exposed to very high concentrations of airborne lead, happened repeatedly. They were complained of to Smalis supervisors (Tr. 391). Blasting hoods and respirators left in the containment area during non-blasting periods of time should have been visible to supervisors and foreman. Smalis thus knew or reasonably should have known of the practice. Leaving respiratory equipment in an area laden with lead dust invites continued use of contaminated equipment and prevents regular cleaning and maintenance. I thus find that Respondent failed to properly maintain its respirator equipment. It was in violation of § 1910.134(f)(1). Item 24f is AFFIRMED.

Exposure of Smalis Employees to Airborne Lead - Who and How Much ?
Exposure Finding

A number of contested items of the citations require the factual determination as to which, if any, Smalis employees who worked at the Tarentum Bridge project were exposed to airborne lead in amounts equal to or exceeding the action level (30 $\mu g/m^3$ TWA). For the following reasons, on this record, only seventeen employees have been shown to have been exposed to airborne lead in such concentrations. Moreover, on this record, their exposure has been shown for a period of only one day.

The Secretary takes the position that any Smalis employee who worked anywhere on the Tarentum Bridge at any time during the duration of the project, was exposed to at least 30 $\mu g/m^3$ of airborne lead (TWA) each and every single day he worked at the bridge. (Sec. brief, Pp. 469-470). It is this factual assertion which is unwarranted logically and unsupported by the evidence of record or reasonable inferences to be drawn from that evidence. As such, it is rejected.

For the following reasons, I find that the record does not demonstrate by either reliable evidence or reasonable inference based upon reliable evidence, the amount of airborne lead to which Smalis employees on the Tarentum Bridge were exposed on any day or in any place other than those six sampled or the eleven within the penumbra of the computer model.

Actual measurement of the amount of airborne lead to which any Smalis employees were exposed was done on one day (December 9, 1993). A computer generated model, accepted into evidence and relied upon, reasonably demonstrates the amount of airborne lead in the containment

as it existed during the day on December 9, 1993. Based upon this evidence of record, I have previously found as fact that the six sampled employees and the eleven other employees who worked in the containment on the day of the inspection were exposed to airborne lead in excess of 50 $\mu g/m^3$ (TWA) on that date. There is no factual record which has been subject to examination or cross-examination of any other reliable measurements of either individual sampling or atmospheric conditions under which Smalis employees worked during the entire one and one-half year duration of the project.[51]. Thus, there is no direct evidence of the level of exposure of Smalis employees to airborne lead on any other date or at any other location than on the date and at the places of the December 1993 inspection. Moreover, the computer modeling, found to be a reliable basis upon which to base a factual finding as to the level of atmospheric lead within the containment on the day of the inspection, has neither been claimed nor shown to be applicable to any other day or set of circumstances except varying lengths of possible containments. Thus, it would not be reasonable to infer what atmospheric conditions were like on any other day or at any other place based on the modeling.

The Secretary seeks to use the data regarding the level of exposure arrived at by sampling on December 9, 1993 and projections of atmospheric lead levels in the containment on that date arrived at by the computer modeling and make them applicable to the whole Tarentum Bridge project for the entire time during which it was underway. Respondent's questioning of the Compliance Officer at the hearing elicited the testimony that he relied exclusively on the sampling which was done on December 9, 1993 for his conclusions as to the amount of lead exposure to

---

[51] As a result of the September 1992 inspection of the Tarentum Bridge Smalis was issued a citation alleging, among other things, that three employees had been exposed to airborne lead in the amounts of 1,130 $\mu g/m^3$; 220 $\mu g/m^3$; and 240 $\mu g/m^3$, respectively. The applicable standard at that time, 29 C.F.R.§ 1926.55(a), permitted exposures up to 200 $\mu g/m^3$. Smalis, as part of a settlement agreement, withdrew its notice of contest to the citation (Joint Exhibit 1). While Smalis' withdrawal of its notice of contest admitted the violation it does not establish as fact, for the purpose of this case, or for any other purpose, the amounts of airborne lead to which employees were exposed at the time of the September 1992 inspection. Moreover, there is now additional evidence that conditions at that time of the September 1992 inspection, such as the location of the work, the size and configuration of the containment used, the number of blasting hoses in operation and the local pollution control requirements, were considerably different than those which existed during the December 1993 inspection.

employees on other days and at other places on the bridge. (Tr. 930-931, 936-937). The compliance officer finally conceded that his conclusion that virtually all employees on the site at virtually any time performing virtually any job "would certainly have been (exposed to lead) over the action level" was based solely on his "professional judgment." (Tr. 937).

The Secretary suggests in several places and in several ways that the employees sampled (and those shown to be within the parameters of the computer model) performed the same duties under the same conditions as all Smalis employees would have done on any other day they worked on the bridge. Such a suggestion is not supported and, in some respects, is inconsistent with the record in this case. There is no substantial evidence either that the actual duties performed or the conditions under which Smalis employees worked on other days and in other locations on the project were similar enough to those of the employees who were sampled or worked in the containment on the day of inspection so as to warrant a reasonable inference that their exposure to airborne lead was substantially similar.

Similarity of job classification titles is, by itself, an insufficient basis to find that all those within the same classification performed substantially similar duties under substantially similar circumstances, especially for periods of 30 days or more. (See discussion regarding items 7-20, supra.) This is so especially where, as here, the number of job classifications is limited and independent evidence shows that persons within each classification were called upon to perform numerous duties including some inside and some outside the containment and some duties entirely away from the immediate area where blasting was underway. Moreover, even the blasting was conducted section by section within a series of containments each one of which was fabricated for one specific portion of the job. Each containment was thus of a different configuration and size. It is axiomatic to say that each employee's exposure to airborne lead as an 8-hour time-weighted average, would vary depending upon the specific tasks he was performing, the specific locations in which he was working and the duration of the work. The Secretary frequently refers to payroll records. He relies on them too heavily. The fact that an employees name appears on payroll records for specific days as having worked for a specified amount of time in a particular job classification, is strong evidence that he worked on those days in that job classification and at the specified salary for the number of hours entered in the record. Without additional, reliable evidence, such records say nothing of the specific amount of time an employee might have spent in any particular location

at the job, the atmospheric conditions he encountered or the actual tasks he performed. The payroll records are thus silent as to the amount of airborne lead to which the employee might have been exposed.

The Secretary himself advances the argument that the facts and circumstances surrounding the working conditions changed considerably from time to time. He maintains, even if in a different context and for a different reason,[52] that the sites of the 1992 and 1993 inspections were "separate and distinct" locations (Sec. brief, p. 406). He acknowledges that employees working at the time of the previous inspection (September 1992) were, even though on the same bridge structure, in a different county over one and one-half miles away. In seeking the validate the 1993 inspection, the Secretary points to many factual differences in the nature of the work being done in September of 1992 as compared to December of 1993 and finally argues that "the December 1993 inspection of the site was justified since this [1993] inspection pertained to working conditions different from those present during the prior inspection." (Sec. brief, p. 409).

Given the size of the worksite consisting of several miles of bridge, the ever-changing configuration of the containment in which some painters, blasters and sand suckers worked some of the time, the one and one-half year duration of the job, as well as the uncountable other variables such as wind, weather, particular configuration of the containment on any given day and condition of the tarps, there is simply no valid quantification of exposure to airborne lead for any persons at Tarentum other than those sampled or within the containment on the day of the inspection.

In sum, there is, on this record, no evidentiary or supportable rational basis upon which to find or assume that any employee of Smalis who worked at the Tarentum Bridge was exposed to any given amount of airborne lead at any time or any place other than those specifically sampled during the December 1993 inspection or those inside the containment on that day.[53] Being without

---

[52] See discussion regarding the validity of the 1993 inspection which took place before all of the abatement dates resulting from the 1992 inspection had passed. Supra.

[53] OSHA, in contemplation of similar circumstances under which employees are working in the presence of airborne lead before samples are taken and results received created a series of "task triggers" "the performance of which in the presence of lead trigger basic protective provisions prior to air lead monitoring." *Preamble,* 58 F.R. at p. 26595. A series of standards create presumptions (continued...)

foundation or rationale this suggested result is rejected.

I thus find as fact in this case[54] that the only employees of Smalis who have been exposed to airborne lead at or in excess of the action level of 30 μg/m^3 (TWA) are those six who were sampled and those eleven who have been shown to have been working in the containment on the day of the inspection on December 9, 1993.[55]

I further find as fact in this case that no employee of Smalis has been exposed to airborne lead at or in excess of the action level of 30 μg/m^3 (TWA) for more than one day.

Applicability of Medical Surveillance Requirements of the Lead in Construction Standards To Smalis Employees

Citation 2 includes approximately fifty-one (51) alleged violations[56] of various subsections of the medical surveillance requirement[57] of the Lead in Construction standard. A close examination of the medical surveillance requirement is necessary.

The regulatory scheme for medical surveillance is well described in the preamble to the

---

[53](...continued)
of exposure levels where specified tasks, including blasting in the presence of old lead based paint as in this case, are performed. These standards dictate that the employer implement certain protective measures (depending upon the level of exposure presumed) until such time as air sampling has been completed and results received. See, § 1926.62(d)(2)(i) through (v).

No motion to amend has been made nor, notwithstanding item 24d of citation 2, has any issue of any violation of 1926.62(d)(2)(i) - (iv) been tried by the consent of the parties.

[54] This factual finding regarding exposure (hereinafter "exposure finding,") will be applied to the discussions of numerous alleged violations.

[55] The following employees have been so identified: ***(redacted), (redacted)***, ***(redacted)***, ***(redacted)***, ***(redacted)*** and ***(redacted)***. (Sampled employees). ***(redacted)***, ***(redacted)***, ***(redacted)***, ***(redacted)***,***(redacted)***, ***(redacted)***, ***(redacted)***, ***(redacted)***, ***(redacted)*** and ***(redacted)***. (Shown to have been in containment).

[56] Items 25 through 73, inclusive.

[57] Subsection (j) of 1926.62, and its numerous and detailed sub-parts, set forth the coverage and requirements for medical surveillance.

publication of the lead in construction standard, *Preamble to OSHA's Interim Rule Governing Lead in Construction Work,* 58 F.R. 26590 - 26627 (May 4, 1993) ("*Preamble").*

> The medical surveillance provisions contemplate two phases of medical surveillance: one is initial medical surveillance, the other is a medical surveillance program. The employer is required to provide initial medical surveillance to employees occupationally exposed to airborne concentration of lead on any one day at or above the action level.
>
> * * *
>
> If an employee's airborne lead exposure is at or above the action level for more than 30 days a year, the employer shall provide a medical surveillance program to the employee....

(*Preamble*, 58 F.R. at 26603).

The two "phases" of medical surveillance are established by the standards involved, 29 C.F.R. § § 1926.62(j)(1)(i) and (ii). They provide:

> (j) *Medical surveillance*-(1) *General.* (i) The employer shall make available **initial medical surveillance to employees occupationally exposed on any day to lead at or above the action level.** Initial medical surveillance consists of biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels. (ii) The employer shall institute **a medical surveillance program** in accordance with paragraphs (j)(2) and (j)(3) of this section **for all employees who are or may be exposed by the employer at or above the action level for more than 30 days in any consecutive 12 months.**

(Emphasis added.)

The "phases" of medical surveillance differ in two very important respects: first, there are different "triggers" and, second, each phase imposes a different obligation upon employers.

The "triggers" are, as the authors of the preamble recognized; "the criteria by which the applicability of the standard and of particular provisions of the standard" are invoked. The preamble notes that "[t]he most basic trigger determines whether an employer is covered by the [lead in construction] standard at all. In addition, specific provisions of the standard can be triggered by other criteria or exposure levels." *Preamble,* 58 F.R. at 26593. Based upon the unambiguous wording of § § 62(j)(1)(i) and (ii), as well as the explanatory material in the *Preamble,* it is clear that the "trigger" which invokes the requirement that an employer "make available initial medical

surveillance" is the exposure of the employee **"on any day to lead at or above the action level.**" It is equally clear that the "trigger" which invokes the requirement that an employer "institute a medical surveillance program" is the exposure of employees "**at or above the action level for more than 30 days in any consecutive 12 months.**"

The actions required of an employer who is required to conduct "initial medical surveillance" differ from those required of an employer who has to establish "a medical surveillance program." Initial medical surveillance requires only biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels. (§ 62(j)(1)(i); *Preamble,* 58 FR at p. 26603). A medical surveillance program, on the other hand, must include all elements of biological monitoring as listed in § 62(j)(2) and, in addition, medical examinations and consultations as specified in § 62(j)(3).

One of these two "triggers" must be demonstrated to be present before an employer's obligation to comply with any of the varied and detailed requirements of either "initial medical surveillance " or establishing a "medical surveillance program" is imposed. In the parlance of alleged violations, the "triggers" control the applicability of the requirements contained in the subsequent sub-parts of § 62(j). As with any other alleged violation of § 5(a)(2) of the Act, for alleged violations under § 62(j) or any of its sub-parts, the Secretary must, as an essential element of his burden of proof, demonstrate that the cited standard is applicable. *Astra Pharmaceutical Products, Inc.*, 9 BNA OSHC 2126, 2129 (No. 78-6247, 1981).

Regardless of which subsection of § 62(j) is cited in a particular item, in order to demonstrate that any of the provisions under any part of § 62(j) apply, the Secretary must show that the Smalis employee(s) identified in the alleged violation were exposed to airborne lead either at or above the action level[58] on any day, or at or above the action level for more than 30 days in any consecutive 12 months. A review of the evidence of record and the Secretary's brief demonstrates that, with few exceptions as discussed in regard to individual items of the citation, he has not done so.

---

[58] "Action level" is defined as "exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air (30 $\mu g/m^3$) calculated as an 8-hour time-weighted average (TWA)." 29 C.F.R. § 1926.62(b).

Citation 2, Item 25

Item 25a: 29 C.F.R. § 1926.62(j)(1)(i)
Item 25b: 29 C.F.R. § 1926.62(j)(1)(i)
Item 25c: 29 C.F.R. § 1926.62(j)(1)(ii)

Item 25a

Item 25a identifies eight employees of Smalis who worked on the Tarentum Bridge at one time or another. It is alleged that "[t]he employer did not make available initial medical surveillance to [the eight identified] employees occupationally exposed to lead, on any day, at or above the action level."

None of the eight specifically identified employees in this item have been shown to have been exposed to airborne lead in excess of the action level. (See, *Exposure Finding*, supra.) Thus, the cited standard does not apply.

Accordingly, Item 25a is VACATED.

Item 25b

Citing the same standard as in item 25a, the Secretary charges that Smalis failed to make available initial zinc protoporphyrin level testing results to any of its employees.

Again, a violation of this standard must rest, if at all, upon a showing that employees were exposed to airborne lead in excess of the action level (30 $\mu g/m^3$) for one work day. For the reasons discussed, *Exposure Finding,* supra., only seventeen Smalis employees can be found to have been exposed to levels of airborne lead equal to or above the action level for a day. Thus, those seventeen employees are the only ones to whom this standard applies.

It is undisputed that Smalis neither offered nor had zinc protoporphyrin tests conducted on its employees at any time relevant to this citation. (Tr. 2038-2039). Respondent's claim that it was unaware that zinc protoporphyrin testing was required by the lead in construction standard is rejected. Such testimony is entirely inconsistent with letters sent to Respondent by Mercy Hospital and Dr. Pierson (Ex. C-8, C-9; Tr. 973) and conversations testified to by Mercy personnel (Tr. 164, 165).

Accordingly, item 25b, as it applies to seventeen specific employees, is AFFIRMED.

Item 25c.

As a separate sub-item, the Secretary charges Smalis with a violation of the standard at 29 C.F.R. § 1926.62(j)(1)(ii). The Secretary identifies 25 employees of Smalis as exposed to lead at or above the action level for more than 30 days and who did not receive zinc protoporphyrin blood tests.

As discussed, supra., *Exposure Finding,* the Secretary has failed to show that any employee of Smalis was exposed to airborne lead in excess of 30 μg/m^3 for more than one day. Thus, as discussed under Medical Surveillance Applicability, the cited standard does not apply.

Accordingly, Item 25c is VACATED.

Citation 2, Item 26

29 C.F.R. § 1926.62(j)(1)(ii)

Item 26 alleges a violation of the same standard as is cited in item 25c. This item identifies 14 Smalis employees. It is alleged that they were exposed to airborne lead above the action level (30 μg/m3 TWA) for more than 30 days while working on the Tarentum Bridge, had blood lead levels measured in excess of 40 μg/dl^3, and did not receive a medical examination or consultation.

There has been no showing that any of Smalis' employees were exposed to airborne lead at or above the action level for more than one day. (*Exposure Finding*, supra., and *Applicability of Medical Surveillance Standards*, supra.) Thus, the standard does not apply.

Accordingly, Item 26 is VACATED.

Citation 2, Item 27

29 C.F.R. § 1926.62(j)(2)(i)(A)

Referring to the schedules of required blood lead level testing, the cited standard provides, "(A) For each employee covered under paragraph (j)(1)(ii) of this section, at least every 2 months for the first 6 months and every 6 month thereafter."

As discussed under *Exposure Finding*, supra., there is no showing that the employees identified in this item, or any other Smalis employees, were exposed to airborne lead at or in excess

of the action level for a period of 30 days or more. The standard thus does not apply. (See discussion under *Applicability of Medical Surveillance Standards*, supra.)

Accordingly, Item 27 is VACATED.

Citation 2, Items 28 and 29

29 C.F.R. § 1926.62(j)(2)(i)(C)

These items of the citation allege that Smalis did not make available monthly blood tests for lead and zinc protoporphyrin to two employees (***(redacted)*** and ***(redacted)***) who were removed from duties exposing them to airborne lead.[59] Because both identified employs were exposed to airborne lead in excess of the action level on the date of the inspection and because both had been removed from their duties exposing them to lead, Respondent was obligated to provide monthly blood testing during the period they had been removed. Respondent did not do so.

As discussed under *Exposure Finding,* supra., and as found in regard to items 5 and 10, the sampling of ***(redacted)*** and the presence of ***(redacted)*** in the containment on the day of inspection includes them within the group of seventeen Smalis employees found to have been exposed to airborne lead at or above the action level on the date of the inspection. The cited standard thus applies. There is, however, a question as to whether these two employees were "removed" within the meaning of the standard.

"Removal" as to these two employees consisted of being laid off, not being transferred to other duties. As a result of being laid off, neither of them remained an employee for at least 30 days after they ceased duties in areas exposing them to airborne lead. (Tr. 1442, 1616-1617). Did Smalis

---

[59] The cited standard, in context, provides:

> (2) *Biological monitoring*- (i) *Blood lead and ZPP level sampling and analysis.* The employer shall make available biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels to each employee covered under paragraphs (j)(1)(i) and (ii) of this section on the following schedule:
>
> * * *
>
> (C) For each employee who is removed from exposure to lead due to an elevated blood lead level at least monthly during the removal period.

then remain obligated to provide monthly blood testing to two men who were no longer employees by virtue of their being laid off ? The Secretary argues that "had they not been removed [laid off] both [employees] would have continued to work at the site for another month." (Sec. brief, p. 474.) The Secretary's position amounts to an argument that the standard should be interpreted to mean that the monthly blood testing requirement for employees removed from high lead level tasks is applicable both to employees who were removed by being transferred to other duties with the same employer and also to those ex-employees who were "removed" by lay-off or being fired but would have continued working for the same employer had they not been involuntarily separated from their employer.

Under the Secretary's interpretation, an employer would be obligated to provide monthly follow-up blood testing to ex-employees who were covered while they were employees, had blood lead level testing which showed high blood lead levels, and were laid off or fired, as well as to those who continued working for the employer but were transferred to lower lead exposure tasks. In order to avoid an unjust situation[60] and to interpret the standard in a manner affording the most protection to employees, I conclude that the Secretary's interpretation is reasonable. It thus warrants deference. *Secretary of Labor v. OSHRC* (C.F. & I. Steel), 499 U.S. 144 (1991).

The portions of the record relied on by the Secretary show that the two employees had a reasonable expectation of continued employment with Smalis at the time they were laid off. Based upon each employee's experience in bridge painting, knowledge of the Tarentum Bridge job and awareness of the progress being made, I find credible and reliable their statements that the job was at a point where at least 30 more days of painting/blasting would be required to complete it. These comments are reasonably reliable statements of employees as to how long they would have continued working for Smalis had they not been "removed" by being laid off or fired. The Secretary has thus demonstrated that the employees identified in this item were covered, were removed from duty due to high blood lead levels and that Smalis did not make available to them follow-up blood lead level testing. The violation has been established.

---

[60] That is - an employer laying off or firing an employee who shows high blood lead levels, then, on the basis that the employee is no longer employed, claiming that it does not have the duty to provide follow-up blood testing.

Accordingly, items 28 and 29 are AFFIRMED.

Citation 2, Items 30 - 50
29 C.F.R. § 1926.62(j)(2)(iv)(A)

In items 30 through 50, the Secretary has cited Smalis for twenty-one separate violations of the cited standard in regard to employees who were interviewed by the compliance officers and who, according to the officers' testimony, stated they had not received written blood test results "any time during the period when they worked on the Tarentum Bridge." The Secretary maintains that "Smalis violated [the cited standard] by failing to give written notification of blood lead test results to twenty-one (21) employees. (Tr. 657)." (Sec. brief, p. 476).

The standard, in context. provides;

> (j) *Medical Surveillance-*
>
> * * *
>
> (2) *Biological monitoring-* (i) *Blood lead and ZPP level sampling and analysis.* The employer shall make available biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels to each employee covered under paragraphs (j)(1)(i) and (ii) of this section on the following schedule:
>
> * * *
>
> (iv) *Employee notification.* (A) Within five working days after the receipt of biological monitoring results, the employer shall notify each employee **in writing** of his or her blood lead level.

(Emphasis Added.)

As previously discussed under *Applicability of Medical Surveillance Requirements*, supra., and *Exposure Finding*, supra. p. 49, only seventeen Smalis employees are covered by the medical surveillance provisions of 62(j)(2) since they are the only ones shown to have been exposed to airborne lead at or above the action level for one day.

The cited standard applies to twelve of the twenty one individuals who are the subject of citation 2, items 30 through 50[61] but not to the other nine.[62] The latter nine will thus be vacated.

---

[61] The Smalis employees who are the subject of any of items 30 - 50 and who have previously been identified as amongst the seventeen Smalis employees covered by 62(j)(2) are as follows; ***(redacted)***
(continued...)

According to the compliance officers, all twenty one of the employees identified in items 30 through 50 were interviewed and stated that they did not receive written notifications of their blood lead level test results. In addition, Mr. Smalis conceded that prior to the date of the inspection Smalis had not provided written notification of blood lead level testing to any of its employees (Tr. 2040). Thus, Smalis was in violation of the cited standard as alleged in items 30, 33, 34, 36, 37, 38, 39 40, 41, 43, 45, and 49.

Accordingly, items 30, 33, 34, 36, 37, 38, 39 40, 41, 43, 45, and 49 are AFFIRMED and items 31, 32 35, 42, 44, 46, 47, 48 and 50 are VACATED.

Citation 2, Items 51 - 71
29 C.F.R. § 1926.62(j)(2)(iv)(B)

Under the standard cited in each of these alleged violations, the employer must notify employees who have been exposed to airborne lead at or in excess of the action level for one day or for more than 30 days, and whose blood lead level exceeds 40 μg/dl, "that the standard requires temporary medical removal with Medical Removal Protection benefits."[63]

---

[61](...continued)
(Item 30), ***(redacted)*** (Item 33), ***(redacted)*** (Item 34), ***(redacted)*** (Item 36), ***(redacted)*** (Item 37), ***(redacted)*** (Item 38), ***(redacted)*** (Item 39), ***(redacted)*** (Item 40), ***(redacted)*** (Item 41), ***(redacted)*** (Item 43), ***(redacted)*** (Item 45) and ***(redacted)*** (Item 49).

[62] Smalis employees who are the subject of any of items 30 - 50 but who have not been previously identified as covered by 62(j)(2) are as follows; ***(redacted)*** (Item 31), ***(redacted)*** (Item 32), ***(redacted)*** (Item 35), ***(redacted)*** (Item 42), ***(redacted)*** (Item 44), ***(redacted)*** (Item 46), ***(redacted)*** (Item 47), ***(redacted)*** (Item 48) and ***(redacted)*** (Item50).

[63] The standard, in context, provides;

> (2) *Biological monitoring*- (i) *Blood lead and ZPP level sampling and analysis.* The employer shall make available biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels to each employee covered under paragraphs (j)(1)(i) and (ii) of this section on the following schedule:
>
> * * *
>
> (iv) *Employee notification.*
>
> * * *

(continued...)

As with other, similar standards under the Medical Surveillance requirements, under section 26(j)(2) and its sub-parts, the standard cited in these instances is applicable to those employees shown to have been exposed to airborne lead at or above the action level. Based on *Exposure Finding, supra.,* and *Applicability of the Medical Surveillance*,supra., the standard cited in items 51 through 71, inclusive, is applicable to five of the Smalis employees identified.[64] Inasmuch as the standard does not apply to the other items citing the same standard[65], they will be vacated.

As with other notification requirements, there is virtually no dispute that Smalis did not inform its employees about the availability of Medical Removal Protection Benefits. Employees interviewed confirmed that they had not been so advised by Smalis (Tr. 662-662, 1382-1382, 1439, 1598, 161-1617, 2077). Mr. Smalis admitted that Smalis did not routinely notify employees about Medical Protection Benefits when their blood lead levels exceeded 40 µg/dl. (Tr. 663-664, 962, 2041). Documentary exhibits demonstrate that each of the five employees to whom the standard applies had test results showing blood lead levels over 40 µg/dl. (Exhibits. C-10 and C-11). These facts constitute a violation of the cited standard as to the five covered employees. Accordingly,

Items 51, 57, 61, 62 and 63 are AFFIRMED and items 52, 53, 54, 55, 56, 58, 59, 60, 64, 65, 66, 67, 68, 69, 70 and 71 are VACATED.

Citation 2, Items 72 and 73
29 C.F.R. § 1926.62(j)(3)(i)(B)

The cited standard compels an employer to make available to certain employees medical

---

[63](...continued)

> (B) the employer shall notify each employee whose blood lead level exceeds 40 ug/dl that the standard requires temporary medical removal with Medical Removal Protection benefits when an employee's blood lead level exceeds the numerical criterion for medical removal under paragraph (k)(1)(i) of this section.

[64]***(redacted)*** (Item 51), ***(redacted)*** (Item 57), ***(redacted)*** (Item 61), ***(redacted)*** (Item 62) and ***(redacted)*** (Item 63).

[65] Items 52 (***(redacted)***), 53 (***(redacted)***), 54 (***(redacted)***), 55 (***(redacted)***), 56 (***(redacted)***), 58 (***(redacted)***), 59 (***(redacted)***), 60 (***(redacted)***), 64 (***(redacted)***), 65 (***(redacted)***), 66 (***(redacted)***), 67 (***(redacted)***), 68 (***(redacted)***). 69 (***(redacted)***) 70 (***(redacted)***) and 71 (***(redacted)***).

examinations and consultations under certain circumstances.[66] The Secretary acknowledges in his post-hearing brief that this standard "covers employees who are or may be exposed to lead at or above the action level for more than 30 days in any consecutive twelve months." Section 62(j)(1)(ii). (Sec. brief, p. 481).

As with Item 26, there has been no showing that any of Smalis' employees were exposed or may have been exposed to airborne lead at or above the action level for more than one day within the meaning of § 62(j)(1)(i). (See, *Exposure Finding* and *Applicability of Medical Surveillance Standards,* supra.). The cited standard does not apply.

Accordingly, items 72 and 73 are VACATED.

Citation 2, Items 74 through 84
29 C.F.R. § 1926.62(k)(1)(i)

The cited standard requires that employers;

> remove an employee from work having an exposure to lead at or above the action level on each occasion that a periodic and a follow-up blood sampling test conducted pursuant to this section indicate that the employee's blood lead level is at or above 50 μg/dl;

The cited standard has its own "trigger" or coverage provision. Each time an employee's testing reveals two successive blood lead levels at or above 50 μg/dl, the employee must be removed from work which exposes him to lead at or above the action level (30 $\mu g/m^3$ TWA). The eleven items (74 - 84, inclusive) each allege that Respondent failed to remove a particular employee from work which exposed him to lead at or above the action level.[67] Only one of these employees, ***(redacted)***, who is the subject of item 76, has been shown by the Secretary to have been exposed to airborne lead at or above the action level. (See, *Exposure Finding*, supra.) The ten items referring to employees who have not been shown to have been exposed to airborne lead at or above the action

---

[66] Text of the standard appears in Appendix A.

[67] The items relate to the following employees; ***(redacted)*** (74), ***(redacted)***(75), ***(redacted)*** (76), ***(redacted)*** (77), ***(redacted)*** (78), ***(redacted)*** (79), ***(redacted)*** (80), ***(redacted)*** (81),***(redacted)*** (82), ***(redacted)*** (83) and ***(redacted)*** (84).

level must be vacated.[68]

The Secretary's case against Smalis in regard to ***(redacted)*** is built primarily on the argument that he should have been removed from his job on the Tarentum Bridge due to the results of a blood level test taken on October 19, 1993.[69] (Sec. brief, Pp. 488-490). Relying on payroll records, the Secretary points out that ***(redacted)*** continued working on the Tarentum Bridge after his blood lead level was measured at 86 μg/dl on October 19, 1993. (Sec. brief, p. 489). He then argues that permitting ***(redacted)*** to work at Tarentum after the October 19, 1993 blood lead level test constituted a violation of the cited standard because "[t]here were no jobs on the Tarentum Bridge below the action level...." (*Id.*). This conclusion of the Secretary has been rejected before and it is again here. Respondent, however, has been shown to have violated the cited standard.

(redacted) was one of the employees who was working inside the containment on the date of the inspection, December 9, 1993. He was found to have been exposed to airborne lead in excess of the action level on that day on the basis of the computer modeling. With two successive blood lead levels above 50 μg/dl and his exposure of December 9, 1993, he was required to be removed at that point. The payroll records show that he worked on the Tarentum Bridge on December 13 through 15, December 17 through 19, 1993 and January 11 and 12, 1994. Even though the airborne lead levels to which ***(redacted)*** would have been exposed on the dates he worked subsequent to December 9, 1993 are unknown, the facts show that Smalis violated the standard.

The Secretary posits the theory that Respondent was in violation because it "transferred

---

[68] It is noted that the employees Smalis claims were removed from high airborne lead level areas were, in fact, identified to the job superintendent by a PENNDOT inspector, based on copies he received of the blood test results sent by Mercy Hospital to Smalis. The PENNDOT inspector was enforcing a provision of its contract with Smalis which provided that employees with a single blood lead level test of over 40 μg/dl (later raised to 50 μg/dl) were to be removed from further airborne lead exposure. (Ex. C-1, Tr. 120-126).

Smalis appears to rely on the actions taken by PENNDOT as compliance with OSHA standards. Such reliance is misplaced. The employer cannot seek to absolve itself of its responsibility for the safety and health of its employees and its compliance with applicable regulations by contracting with or relying on another entity.

[69] ***(redacted)*** had several blood level tests between August 19, 1992 and October 19, 1993. The last two having been administered on July 13, 1992 and October 19, 1993, with results of 76 μg/dl and 86 μg/dl respectively. (Exhibits C-10, 11, 17 and 18).

employees whose blood lead levels were at or above 50 μg/dl to jobs where Smalis did not know whether the exposure level was below the action level." (Sec. brief, p. 483) The Secretary is correct. Removal, to be meaningful, must place an employee with high blood lead levels in a work atmosphere below the action level. Compliance with the cited standard thus requires an employer to place the "removed" employee in a work circumstance known by the employer at that time to be at an airborne lead level below 30 $\mu g/m^3$. Placing a removed employee into an unknown atmosphere does not accomplish the purpose of the standard. The burden of showing that the airborne lead level in the atmosphere into which the employee has been placed is below 30 $\mu g/m^3$ is thus upon the employer. In this case, Smalis, having done no atmospheric testing inside containments or personal sampling at any time had no knowledge of the lead levels into which it placed ***(redacted)*** after his blood lead level test of October 19, 1993. Respondent was thus in violation of the standard cited in item 76 in regard to ***(redacted)***. Accordingly,

Item 76 is AFFIRMED.

Items 74, 75, 77, 78, 79, 80, 81, 82, 83 and 84 are VACATED.

Two other arguments made by the Secretary in regard to several of the items vacated warrant comment.

First, the Secretary argues that the Commission in its decision in *Atlantic Battery Co.,* 16 BNA OSHC 2131 (No. 90-1747, 1994) found that an employer was on notice that its claimed removal of an employee to work exposing him to less than the action level of airborne lead was not successful because subsequent blood lead level testing of the employee showed high results. (Sec. brief, Pp. 488, 492-493) To the degree that the Secretary claims that a "pattern of elevated blood lead levels," by itself is sufficient to show a violation of this standard, it is rejected. Its reliance on *Atlantic Battery* is misplaced. The Secretary's quotations from the Commission decision in Atlantic Battery (Sec. brief, p. 488) are incomplete. The Commission actually stated:

> After reviewing ***(redacted)*** medical removal chart (Exh. C-14), we can only conclude that ***(redacted)*** remained on medical removal status for a far longer period of time than should have been necessary to reduce his blood lead level below 40 ug/100 g--particularly when we consider the 30 ug drop that occurred in a period of just seven months (December 1987-July 1988). Given this chart of *fluctuating, but persistently high, blood lead level readings* **and the ample corroborating evidence in its quarterly progress**

> **reports, which indicated on their face that *(redacted)* exposure to airborne lead was not being kept below the action level,** Atlantic had *more than enough notice that its efforts to comply with the cited standard were inadequate.* Its failure to take more effective measures in the face of that evidence is properly characterized as a willful violation of the Act.

16 BNA OSHC 2131 at 2145 (Italics and boldface added.) The Secretary, by quoting the italicized words above but neglecting to quote the boldfaced language, failed to reveal that the Commission's conclusion that the employer had adequate notice that its "removal" of an employee was unsuccessful was based on considerably more than just the pattern of blood lead levels taken after the removal.

Second, the Secretary claims that another standard, § 62(d)(2);

> requires that until an employee exposure assessment is done, the employer shall treat the employee as if the employee were exposed above the permissible exposure limit of 50 $\mu g/m^3$.

(Sec. brief, p. 487. See also, Sec. brief, p. 488). The Secretary is correct in stating that under § 62(d) certain presumptions of exposure are to be made until initial employee sampling is completed. Section 62(d) contains its own requirements as to the actions required to be taken by an employer who has employees engaged in certain tasks in light of the exposure presumptions created by the standard. Respondent has not been cited under this standard nor has any amendment been sought or tried by the parties. Thus, the presumptions of exposure established by that standard cannot be applied in support of alleged violations here. (See also, note 53.)

Citation 2, Items 85 - 87
29 C.F.R. § 1926.62(k)(2)(i)

Medical protection benefits must be provided to employees "removed from exposure to lead or otherwise limited pursuant to this section" under the cited standard.[70] These three items each

---

[70] The standard provides:

> (2) *Medical removal protection benefits*- (i) *Provision of medical removal protection benefits* The employer shall provide an

(continued...)

allege that Respondent failed to provide medical removal protection benefits to an employee[71] whom it laid off "without pay and fringe benefits."

The standard applies to these three employees who were exposed to airborne lead at or exceeding the action level, had blood level test results over 50 μg/dl and were laid off by Smalis as a result of PENNDOT's enforcement of its agreement. Even though not "removed" at the impetus of Smalis, § 62(k)(2)(vi) provides that employees removed from lead exposure by the employer are entitled to medical removal protection benefits even if the removal was not required by § 62(k). Thus, once Smalis made the decision to remove these workers from the jobsite as a direct result of their previous airborne lead exposure, it was obligated to pay them Medical Removal Protection Benefits

It is undisputed that Smalis did not pay Medical Removal Protection benefits to these three employees whom it laid off from their jobs due to a blood lead level above 50 μg/dl, and whom it did not reassign to other duties.[72] (Tr. 701-706). The violations as alleged are thus established.

The Secretary goes further. He argues that it is appropriate for the Commission to order an employer to pay back wages to "removed" employees. The Secretary relies on the decisions of the Third, Fifth and Ninth circuits.[73] The Secretary's position is consistent with existing Commission precedent regarding the medical removal protection benefits provision of the lead in general industry

---

[70](...continued)

> employee up to eighteen (18) months of medical removal protection benefits on each occasion that an employee is removed from exposure to lead or otherwise limited pursuant to this section.

[71] The affected employees are; ***(redacted)*** (Item 85), ***(redacted)*** (Item 86), and ***(redacted)*** (Item 87).

[72] ***(redacted)***, ***(redacted)*** and ***(redacted)*** were removed pursuant to the PENNDOT contract, which required removal of employees from the containment area when they had a blood lead test result of over 40 μg/dl. (Exhibit C-1, Worker Health Protection, p.36).

[73] *Dole v. East Penn Mfg. Co., Inc*., 894 F.2d 640 (3rd Cir. 1990); *United Steelworkers of America v. St. Joe Resources,* 916 F.2d 294 (5th Cir. 1990); and *ASARCO, Inc*., 841 F.2d 1006 (9th Cir. 1988).

standard (29 C.F.R. § 1910.1025(k)(2))[74] and is the better reasoned one and is persuasive on this issue.[75]

The Commission, after a hearing on the merits, is authorized to "issue an order, based on findings of fact, affirming, modifying, or vacating the Secretary's citation or proposed penalty, or directing other appropriate relief." § 10(c) of the Act, 29 U.S.C. 959(c). A violation of a standard requiring, among other things, the payment of back pay, can only be completely abated by the payment of the back wages due and owing. I further find to be reasonable the Secretary's calculations as to the amount of back pay for each of the three men laid off because it is supported by the evidence of record which is essentially undisputed. (See, Sec. brief, Pp.502-505.) Based on those calculations, I find that back pay is due from Smalis to ***(redacted)*** in the amount of $3,121.00, back pay is due from Smalis to ***(redacted)*** in the amount of $4,428.00, and back pay is due from Smalis to ***(redacted)*** in the amount of $1,558.00. Accordingly,

Items 85, 86 and 87 are AFFIRMED.

IT IS ORDERED that Smalis pay to ***(redacted)*** back wages of $3,121.00.

IT IS FURTHER ORDERED that Smalis pay to ***(redacted)*** back wages of $4,428.00.

IT IS FURTHER ORDERED that Smalis pay to ***(redacted)*** back wages of $1,588.00.

Citation 2, Items 88 - 158
29 C.F.R. § 1926.62(1)(1)(ii)

An employer of employees who are exposed to airborne lead[76] in amounts equal to or in excess of the action level on any day must provide or at least assure that its exposed employees

---

[74] *RSR Corporation*, 11 BNA OSHC 1163, 1172-1174, *aff'd. sub.nom., RSR Corp. v. Brock,* 764 F.2d 355 (5th Cir. 1985).

[75] As an interpretation of a statute, as opposed to one of a regulation promulgated by the Secretary, his opinion on this matter is not entitled to deference. See, *Secretary of Labor v. OSHRC* (C.F. & I. Steel), 499 U.S. 144 (1991).

[76] Exposure to "lead compounds which may cause skin or eye irritation" is also within the requirements of this standard. See, note 77, infra.

participate in a training program which meets specific criteria.[77] The Secretary, in items 88-158 alleges that Smails failed to provide or assure the provision of proper training for the identified employees thus violating the requirements of the cited standard in each and every instance.[78]

Once again, in arguing applicability of the standard, the Secretary takes the position that all employees of Smalis who worked at the Tarentum Bridge site at any time, in any location and for any duration, "were subject to exposure to lead at or above the action level." (Sec. brief, p. 505). This position is again rejected. The cited standard has its own applicability requirement or "trigger," -- exposure of an employee to airborne lead at or above the action level on any day. The cited standard does not apply to employees not shown to have been exposed to at least the trigger amounts of airborne lead. (See also, *Applicability of Medical Surveillance Requirements*.) Of the employees who are the subjects of items 88 through 158, eleven have been shown to have been exposed to airborne lead at or above the action level on any day at the Tarentum Bridge site.[79] (*Exposure Finding.*) The cited standard is applicable to them but not to the other employees identified in items 88 through 158.

Smalis was clearly informed at the August 9, 1993, settlement, that it had an obligation to train employees in the new lead standard. As a result of the settlement Smalis arranged for nineteen of its employees to participate in a lead abatement training program conducted by Painters Union Local 6. There is no indication that Smalis took any action to find out what the training consisted

---

[77] The cited standard provides:

> (ii) For all employees who are subject to exposure to lead at or above the action level on any day or who are subject to exposure to lead compounds which may cause skin or eye irritation (e.g. lead arsenate, lead azide), the employer shall provide a training program in accordance with paragraph (l)(2) of this section and assure employee participation.

[78] The individual employees identified in items 88 - 159 are listed in Appendix C.

[79] Those employees, and the items in which each is identified, are as follows:: 93- ***(redacted)***, 94- ***(redacted)***, 102- ***(redacted)***, 108- ***(redacted)***, 119- ***(redacted)***, 121- ***(redacted)***, 123- ***(redacted)***, 126- ***(redacted)***, 128- ***(redacted)***, 137-***(redacted)*** and 142- ***(redacted)***.

of or to assure that the employees sent there actually attended the training. Thus, even if the training provided by the union was fully satisfactory, Smalis did not meet the requirements of the standard even as to its employees who attended the training. Moreover, over seventy other employees of Smalis for whom it provided no training at all, worked on the bridge. (Tr. 708; Exhibits C-35, C-36)

Industrial Hygienists Morris and Javorsky formed their impressions of the nature of Smalis' commitment and actions to further employee training in the course of their interviews of Smalis employees during the inspection. They also reviewed records supplied by Smalis in response to the subpoena and spoke with Union officials. (Tr. 707) More specifically, some employees covered by the standard (***(redacted)***, ***(redacted)***, ***(redacted)***, ***(redacted)*** and ***(redacted)***) as well as other employees, not covered by the standard (***(redacted)***, ***(redacted)***, ***(redacted)***, ***(redacted)***, ***(redacted)*** and ***(redacted)***), who were witnesses called by both Complainant and Respondent, testified that Smalis did not provide them with any lead training. (Tr. 1243, 1244, 1407, 1436, 1437, 1546, 1557, 1558, 1593, 1594, 1862, 1863, 1868, 2071, 2077, 2078). Respondent points to no contrary evidence.

In sum, the evidence of record shows that whether any particular employee of Smalis received proper training was in no way assured by Smalis. Whether an employee happened to be sent to the painter's local appears to be a matter of happenstance. There is no indication that employees, as they were newly hired, were carefully screened or checked regarding whether and to what degree they might have had previous training. Some employees received training by previous employers. (Tr. 1546, 1557, 1558, 2073, 2077-2078). There is no showing that Smalis sought to make itself aware of the nature, effectiveness or even the existence of claimed prior training. In sum, Smalis took less than minimal steps to assure that its employees on the bridge at Tarentum (including those specifically found to have been exposed to airborne lead at or above the action level for at least one day) were properly trained. Smails thus violated the requirements of the standard in regard to those employees found to be covered by the standard. Accordingly,

Items 93, 94, 102, 108, 119, 121, 123, 126, 128, 137 and 142 are AFFIRMED.

Items 88 - 92, 95-101, 103-107, 109-118, 120, 122, 124, 125, 127, 129-137, 138-141 and 143-158 are VACATED.

Citation 2, Item 159

29 C.F.R. § 1926.62(l)(2)(v)

The Secretary alleges that Smalis violated 29 CFR § 1926.62(l)(2)(v) as cited in item 159 by failing to provide specific training about engineering controls and work practices at the Tarentum Bridge to the Smalis employees who participated in the Lead Abatement Course developed and sponsored by the Painter's Union. The cited standard provides;

> (2) *Training program*. The employer shall assure that each employee is trained in the following:
>
> * * *
>
> (v) The engineering controls and work practices associated with the employee's job assignment including training of employees to follow relevant good work practices described in Appendix B of this section.

The gravamen of this alleged violation is that the Lead Abatement Course developed and taught by the painter's local did not include specific information regarding conditions at Tarentum Bridge. The complaint is thus that the course provided only "generic training in lead hazards." (Sec. brief, p. 509). I conclude that this alleged violation is unnecessarily redundant in that it is a lesser included violation within previously found violations.[80]

By failing to take any steps whatsoever to assure attendance or even review the contents of the union's lead abatement course, Smalis perforce, took no reasonable steps to insure that its exposed employees[81] received training which included any of the eight subject areas required of an acceptable training program.[82] This item is superfluous[83]. Accordingly,

Item 159 is VACATED.

---

[80] Citation 2, items 93, 94, 102, 108, 119, 121, 123, 126, 128, 137 and 142.

[81] The training requirements of § 62(l)(2) apply to those employees exposed to airborne lead at or above the action level on any day.

[82] The eight necessary subjects are found in subsections (i) through (viii) under section 62(l)(2). The entire text of the standard appears in Appendix A.

[83] It is suggested but not necessary to this result that the cited standard's reference to matters "associated with the employee's job assignment" does not, as the Secretary assumes, mean the conditions at the particular site at which the employees in training happen to be working at the time. Rather, it makes more sense that the reference is to the usual and anticipated conditions relative to the employees job classification and duties.

Citation 2, Items 160 through 201
29 CFR § 1904.2(a)

The Secretary alleges that Smalis failed to comply with the cited standard [84] in that it;

> did not complete OSHA Form 200, or its equivalent, in the detail provided in the form and the instructions contained therein with respect to Smalis employees whose blood lead levels exceeded the Permissible Exposure Limit. [Sic.]

(Sec. brief, p. 511).

The determinative facts are undisputed. Smalis received blood lead level test results for its employees who had been tested by Mercy Hospital, including results of 50 µg/dl and higher. (Tr. 142-147, 724; Exhibits C-10, C-11). The test results Mercy Hospital provided to Smalis included the blood level test results of over 50 µg/dl identified in each of the items 160 through 201.[85] In

---

[84] See Appendix B for text of standard.

[85] The results are listed by employee name, blood lead level, date of sampling and Citation item number:
(redacted), 10-19-93, 86 µg/dl [Item 160]; ***(redacted)***, 10-20-93, 67 µg/dl [Item 161];
(redacted), 10-19-93, 69 µg/dl [Item 162]; ***(redacted)***, 08-04-93, 52 µg/dl [Item 163];
(redacted), 08-19-93, 81µg/dl [Item 164]; ***(redacted)***, 08-04-93, 61 µg/dl [Item 165];
(redacted), 10-13-92, 58 µg/dl [Item 166]; ***(redacted)***, 12-09-93, 67 µg/dl [Item 167];
(redacted), 12-09-93, 66 µg/dl [Item 168]; ***(redacted)***, 10-13-92, 99 µg/dl [Item 169];
(redacted), 10-13-92, 69 µg/dl [Item 170]; ***(redacted)***, 12-08-93, 65 µg/dl [Item 171];
(redacted), 09-08-92, 74 µg/dl [Item 172];***(redacted)***, 10-19-93, 76 µg/dl [Item 173];
(redacted), 08-19-92, 55 µg/dl [Item 174];***(redacted)***, 09-08-92, 81 µg/dl [Item 175];
(redacted), 03-31-93, 63 µg/dl [Item 176]; ***(redacted)***, 10-13-92, 60 µg/dl [Item 177];
(redacted), 12-09-93, 68 µg/dl [Item 178]; ***(redacted)***, 10-13-92, 91 µg/dl [Item 179];
(redacted), 10-19-93, 52 µg/dl [Item 180]; ***(redacted)***, 03-31-93, 54 µg/dl [Item 181];
(redacted), 08-04-93, 51 µg/dl [Item 182]; ***(redacted)***, 10-19-93, 55 µg/dl [Item 183];
(redacted), 10-13-92, 71 µg/dl [Item 184]; ***(redacted)***, 07-13-93, 56 µg/dl [Item 185];
(redacted), 10-08-92, 90 µg/dl [Item 186]; ***(redacted)***, 10-13-92, 91 µg/dl [Item 187];
(redacted), 07-23-93, 54 µg/dl [Item 188]; ***(redacted)***, 12-08-93, 62 µg/dl [Item 189];
(redacted), 03-31-93, 64µg/dl [Item 190]; ***(redacted)***, 07-23-93, 54 µg/dl [Item 191];
(redacted), 10-19-93, 59 µg/dl [Item 192]; ***(redacted)***, 06-16-93, 55 µg/dl [Item 193];
(redacted), 10-19-93, 65 µg/dl [Item 194]; ***(redacted)***, 10-19-93, 90 µg/dl [Item 195];
(redacted), 07-13-93, 56 µg/dl [Item 196]; ***(redacted)***, 08-04-93, 65 µg/dl [Item 197];
(redacted), 07-13-93, 57 µg/dl [Item 198]; ***(redacted)***, 10-20-93, 62 µg/dl [Item 199];

(continued...)

response to the subpoena issued by OSHA, which, in part, requested Smalis' OSHA 200 forms or their equivalents, Smalis provided one OSHA form 200 which was blank except for the word "none," handwritten across the form. (Tr. 721, 722; Exhibits C-16, paragraph 6, C-19) In addition, Exhibit C-18 lists employees who worked on the bridge who were transferred to other jobs on the bridge due to having test results showing blood lead levels over 50 µg/dl. The OSHA 200 form supplied by Smalis contains no entries for the restricted work activity of these employees. (Tr. 726; Exhibits C-18, C-19).

Respondent's summary argument merely states that there was no violation. It is rejected. Given the fact that it had in hand the blood lead level test results and the blank OSHA 200 forms, it could hardly be found to lack knowledge of the violations as argued in its post hearing brief. Moreover, Respondent's own expert, Mr. Leighton, was fully aware that OSHA "considers an elevated blood lead level (above 50 µgm^3) to be a recordable illness." (Tr. 2243).

The Commission has held that the term 'illnesses' as used in the instructions to the OSHA 200 form includes blood lead levels at or above 50 µg/100g. In *Johnson Controls, Inc*., 15 BNA OSHC 2132, 2133 (No. 89-2614, 1993), the Commission stated that "for the purposes of the Secretary's record keeping regulations . . . we accept the Secretary's interpretation of 'illnesses' that includes blood lead levels at or above 50 ug/100g." *Id.*, at 2143. Since there are 100g of blood in a decaliter (dl), measurements of micrograms of lead in blood per 100 grams of blood ("µg/100g") is the same as expressing those results as micrograms of lead in blood per decaliter ("µg/dl") of blood.[86] Thus, Respondent's failure to record blood lead level test results showing 50 µg/dl or more constituted a violation of the cited standard.

The Commission has held that "29 CFR § 1904.2(a)'s requirement to 'enter each recordable injury' can reasonably be read to involve as many violations as there were failures to record . . . ." *Caterpillar Inc*., 15 BNA OSHC 2153, 2173 (No. 87-0922, 1993). This principal also applies to each instance in which Smalis failed to record data for an employee who was tested and showed

---

[85](...continued)
(redacted), 11-19-92, 71 µg/dl [Item 200]; and ***(redacted)***, 10-19-93, 60 µg/dl [Item 201].

[86] See, *Morrison-Knudsen Co.\Yonkers Contracting Co., A Joint Venture,* 16 BNA OSHC 1105, 1128 (No. 88-0752, 1993).

elevated blood lead levels on more that one distinct occasion. Accordingly,

Items 160 through and including 201 are AFFIRMED.

Citation 2, Item 202
29 C.F.R. § 1910.20(e)(3)

The standard cited, 29 C.F.R. § 1910.20(e)(3), provides;

> (3) *OSHA access*. (i) Each employer shall, upon request, and without derogation of any rights under the Constitution or the Occupational Safety and Health Act of 1970, 29 U.S.C. 651 *et seq*., that the employer chooses to exercise, assure the prompt access of representatives of the Assistant Secretary of Labor for Occupational Safety and Health to employee exposure and medical records and to analyses using exposure or medical records. Rules of agency practice and procedure governing OSHA access to employee medical records are contained in 29 CFR 1913.10.

The Secretary bases this final alleged violation on what it claims was Smalis' intentionally incomplete response to OSHA's administrative subpoena.

The following facts are undisputed. The subpoena issued by OSHA to Smalis on January 31, 1994 requested, among other things, production of "all records relating to the medical surveillance of employees." (Tr. 728; Exhibit C-16, paragraph 2). Among the records Smalis had previously received from Mercy Hospital along with blood test results were recommendations from the physician at the hospital who reviewed the test results. None of these records, other than a summary of blood test results prepared by Smalis, were supplied in response to the subpoena. (Tr. 142-147, 728, 729; Exhibit C-10) Smalis produced only copies of summary lists of blood lead test results. (Tr. 728; Exhibit C-16, paragraph 2).

Respondent's arguments that its response to the subpoena met the "intent" of the subpoena and that OSHA "never called Smalis to question the sufficiency of the subpoena" (Resp. brief. p. 27) are rejected. A party responding to a subpoena cannot, in all instances, know the "intent" of each document request nor is the intent of the party who served the subpoena even relevant. A party

receiving a subpoena for records is under a duty to either move to quash or revoke the subpoena or to supply all of the materials in his possession which are specified in the request regardless of what he believes was the "intent" of the drafter. Smalis, having supplied only a portion of the records in its possession (which had to be reviewed in order to supply the response given to OSHA) cannot now rely on the claim that OSHA failed to complain as to the sufficiency of its response. OSHA had a right to rely on the duty of Smalis to supply "all records" as requested in the subpoena. OSHA was not put at its peril by having, in effect, to go back to Smalis and inquire whether each of the responses it supplied was complete and accurate. Smalis supplied only a portion of the materials in its possession at its own risk. Here, the Secretary later discovered that Smalis had withheld materials. Smalis was in violation of the standard as alleged. Accordingly,

Item 202 is AFFIRMED.

Classification of Violations Alleged as Willful.

The Secretary alleges that all of the 202 itemized violations (plus sub-parts) contained in citation 2 were willful violations of the Act. The major principles and definitions applicable to determinations as to whether a violation is willful were summarized by the Commission in *Hartford Roofing Co*., 17 BNA OSHC 1361, 1363 (No.92-3855, 1995) ("*Hartford"*). The Commission stated;

> A violation is willful if it is committed with intentional, knowing or voluntary disregard for the requirements of the Occupational Safety and Health Act (the "Act"). (Citations omitted.) A willful violation is differentiated from a nonwillful violation by a heightened awareness, a conscious disregard or plain indifference to employee safety. (Citations omitted.)

The Commission, in *Hartford*, also addressed some situations under which violations would be found not to have been willful. It said;

> It is a well-established principle that actions taken by an employer to enhance safety on its worksite can negate willfulness even if those efforts are not sufficient to fully eliminate the hazardous condition. (Citations omitted.) Thus, the Commission has previously found violations not willful where employers made efforts to establish safety rules and communicate them to employees or instituted other

good faith measures to comply with the standards in question.

Harftord, supra at p. 1363.

Examinations of the prior citations issued to Respondent, its contract with PENNDOT regarding the Tarentum bridge project, its own safety program and correspondence and communications to which Smalis was a party all demonstrate that Smalis was aware of the duties embodied in the Lead in Construction Standards which Smalis failed to fulfill and that Smalis in fact knew or reasonably should have known of the requirements of the cited standards. The impact of the prior citations, Smalis' contract with PENNDOT, Smalis' safety "program" and conversations and correspondence with Smalis each warrant some discussion.

Prior Citations

Evidence regarding prior citations may be considered in determining whether an employer formed the requisite state of mind to warrant the classification of subsequent violations as willful. In *Atlantic Battery Co*., 16 BNA OSHC 2131 (No. 90-1747, 1994), the Commission upheld the classification of a violation as willful based, at least in part, on its holding that the employer reasonably should have known that it was incorrect in adopting a policy deviating from that which OSHA, in a settlement of an earlier citation for the same violation, had announced to be the correct course of action. 16 BNA at 2160-2161.

The Secretary points to numerous portions of two prior citations issued to Respondent[87] and the settlement agreements relating to those citations as evidence of Mr. Smalis' state of mind in violating the requirements cited in this matter. While noting that the prior citations, in most instances, cited standards which preceded the applicability of the Lead In Construction Standards, the Secretary maintains that had Respondent adopted behavior in accord with those standards, it would, in most instances, have been in compliance with the lead in construction standards cited as a result of the December 1993 inspection and at issue in this case. In examining an employer's state of mind, it follows that studied indifference to the mandate of previously cited standards is highly relevant and indicative of an employer's attitude toward employee safety and health in general.

---

[87] The citations referred to are; a December 17, 1992 citation relating to the Tarentum Bridge (hereinafter "1992 Tarentum") and an August 19, 1993 citation relating to the Hart Bridge project in Jacksonville, Florida (hereinafter, "Hart citation").

Moreover, where compliance with an earlier cited standard would have constituted compliance with a later-promulgated standard requiring the same or similar conduct, evidence as to prior violations of the earlier standards is evidence of whether subsequent alleged violations of the same or similar standards are willful.

An examination of the prior citations issued to Respondent demonstrates that Respondent was put on notice that specific abatement actions were required. Such activities include; conducting personal air sampling of employees (1992 Tarentum, Citation 3, Item 2 and Hart Citation 2, Item 3); development and implementation of a comprehensive program for the control and elimination of lead exposure hazards (1992 Tarentum, abatement specified for Citation 1, Item 1); providing appropriate respirators (1992 Tarentum, Citation 1, Item 3); performing respirator fit testing on its employees who wore negative pressure respirators (1992 Tarentum Citation 1, Item 5 and Hart Citation 1, Item 1b); instructing and training employees in the proper use of respirators (1992 Tarentum, Citation 1, Item 4 and Hart , Citation 2, Item 2); maintaining appropriate surveillance of work area conditions. (1992 Tarentum Citation 3, Item 2 and Hart Citation 2, Item 3); frequently testing air compressors for carbon monoxide (1992 Tarentum Citation 1, Item 1a); providing every respirator wearer with demonstrations and practice in how to wear, adjust, and fit a respirator (1992 Tarentum Citation 1, Item 5 and Hart Citation 1, Item 1b); and, making medical consultations available to employees (1992 Tarentum Citation 1, Item 3). Included in yet other prior citations relating to work on the Elizabeth Bridge in Elizabeth, Pennsylvania. Respondent was put on specific notice of the requirement to log entries of occupational injuries and illnesses for its employees. (See, Citation 2, Item 1, Joint Exhibit 1, Exhibit M). Smalis was even cited for its failure to abate the Elizabeth Bridge citation. (Joint Exhibit 1, Exhibit N)

Notwithstanding any of the above, there is specific evidence of record demonstrating that it was made clear to Respondent that it had the responsibility to assure that its employees were properly and adequately trained regarding the hazards of and protections needed when working in the presence of airborne lead. (1992 Tarentum Citation 1, items 6 and 9 and Hart Citation 2, Item 4). At an August 9, 1993, hearing in OSHRC Docket No. 93-0260 in connection with the 1992 Tarentum citations, this Administrative Law Judge emphasized to Mr. Smalis, who appeared before him in person, that the abatement of hazards and the training of employees were of paramount importance and that the dollar amount of penalties in that case were relatively unimportant. Mr.

Smalis agreed, as part of a settlement of the 1992 Tarentum citations, to abide by the OSHA rules and regulations and to be responsible for the proper training of employees and the proper enforcement of his own rules and regulations. (Joint Exhibit 1, Exhibit C, 69-70) In spite of Mr. Smalis's agreement to assure the proper training of its employees and to enforce the applicable regulations undertaken before this Administrative Law Judge, four months later Smalis was found to be neither assuring the proper training of its employees nor abiding by the regulations. Such inaction is found to be in utter disregarded for the protection of its workers and to have directly flaunted an appropriately issued order.

The PENNDOT contract

Smalis entered into a contract with the Pennsylvania Department of Transportation (PENNDOT) to blast clean and re-paint the Tarentum Bridge ("the contract").

Many facets of the contract gave specific notice to Smalis of its lead related safety and health responsibilities on the Tarentum Bridge. To the degree that Smalis failed to read, understand or abide by such provisions, it might have been subject to action by PENNDOT. Whether PENNDOT sought to enforce various provisions of the contract or not, for the purposes of this case, such contract provisions as agreed to by Smalis are evidence that it knew or should have known of its safety and health obligations to its employees at the Tarentum Bridge. The contract, by incorporating the general industry lead standard imposed many duties on Smalis which are also required by the lead in construction standard. Thus, Smalis' failure to perform these duties cannot be attributed to an alleged lack of knowledge as to the specific requirements of the "new" standards. Finally, because the contract imposed many of the same duties as the new lead in construction standards, had Smalis complied with the contract requirements it would have, in many instances, avoided citation under the new standard.

The PENNDOT contract required that Smalis "[p]rovide the services of a reputable, experienced third party, acceptable to the District Engineer, to monitor the quality of the air being breathed by workers within the containment area, in conformance with OSHA requirements." (Exhibit C-1, p. 35). Smalis never did so. Smalis was notified that it was to take compliance costs into consideration when making its bid. (Joint Exhibit 1, Paragraph 1 - Exhibit A). The contract also required that Smalis

> [a]ssure that the rate of air flow past workers in the containment area,

> coupled with the capacity of respiratory protective equipment, [be] adequate to maintain the quality of the air breathed by workers in the containment area at safe levels.

(Joint Exhibit 1, Exhibit A, p. 35, Exhibit C-1).

Item 9000-0007, "Worker Health Protection," Pp.35-36. of the contract, incorporated OSHA's General Industry Lead Standard, 29 C.F.R. § 1910.1025, as well as "all applicable OSHA General and Construction standards" and required Smalis to "implement the more protective where dual standards exist." Had Smalis been in compliance with the contract provisions and 29 CFR § 1910.1025, at the time of the inspection, the compliance officers would have found at least the following would have been accomplished; engineering and work practice controls would have been in place (1025(e)(1)); full shift personal sampling would have been completed (1025(d)(1)(ii)); a written compliance program to reduce employee lead exposure to or below the PEL solely by means of work practice and engineering controls would have been in place (1025(e)(3)(i)); a training program would have been in operation and work rules would have been enforced in accordance with a plan for OSHA compliance submitted at the preconstruction conference; and, initial blood lead level testing would have been performed on employees prior to their first day of work on the project. (Exhibit C-1, p. 36).

In sum, numerous citations arising out of the December 1993 inspection might well have been avoided had Respondent actually performed the contract provisions it agreed to in August of 1992. Moreover, the contract provisions put Smalis on notice as to many specific duties which are also imposed by § 1926.62. Respondent's failure to comply with the contract provisions cannot be laid at the door of its claimed ignorance of the provisions of § 1926.62. Nor can Smalis legitimately claim that it was unaware of duties imposed by § 1926.62 in regard to obligations which also pre-existed by virtue of the PENNDOT contract. Thus, in failing to fulfill those safety and health duties imposed by the PENNDOT contract, Respondent negates any claim that it made a good faith effort to comply with standards requiring the same duties under which it is now cited.

Safety Program

The first painting "season" on the Tarentum Bridge lasted from the start of the work in August, 1992 to December, 1992. Under its contract with PENNDOT painting was to resume on April 15, 1993. On February 8, 1993, prior to the resumption of painting, PENNDOT sent a letter

to Smalis noting that based on the PENNDOT review of bridge painting through the fall of 1992 "improvements must be made in the areas of....Worker Health Protection...in order to meet contract requirements." (Exhibit C-2). Among the items which "must be addressed to our satisfaction prior to the start of physical work," is "[t]he work rules of the Health Program while blasting are not being enforced." Smalis was directed to "submit procedures to be used to enforce these rules." *Id.* Smalis replied in writing by letter dated May 12, 1993, attaching "a copy of our new safety program." About one and one-quarter pages of this typewritten submission is entitled "Health Program While Sandblasting."

While submitted in response to a demand from PENNDOT, the "Health Program" was held out by Mr. Smalis in his May 12, 1993 letter to PENNDOT as work rules which would be in effect and enforced at Tarentum. If the "program" were actually in effect and enforced many of the conditions found by the compliance officers at the December 9, 1993 inspection would not have occurred. Smalis, in preparing and submitting its "health program" demonstrated that it had specific knowledge of the requirements for lead exposure protection then in effect. The "program" refers to and, in some places, parrots provisions of the lead protection standards then in effect. Indeed, the "program" purports to require employees involved in lead operations to "comply with OSHA Lead Standard 29 CFR Section 1910.1025." The "program" however, amounts to a paper tiger. It existed on paper but it has never been shown to have been effectively enforced.

Smalis' 1992 "program" acknowledged the need to choose appropriate respirators; have supervised fit tests; the need to develop and implement a respiratory protection program; the need to provide instruction in respirator use and maintenance and the of necessity monitoring the quality of air supplied to lead removal workers. The Smalis "program" also promised that employees would be given a blood test before starting work on the bridge and every 120 working hours thereafter to determine blood lead levels. If a blood level was found "to be at a level not acceptable," the employee was to be assigned to "duties other than sandblasting." Smalis did none of the above.

The existence of the "program" and its submission to PENNDOT belies any later claims by Smalis that he was unaware of his duty to protect employees exposed to airborne lead at Tarentum. He cannot now claim as a defense to the violations found during the December 1993 inspection that he was unaware how to protect his employees. If he had truly intended to properly protect his employees the provisions of the "program" he submitted to PENNDOT would have been in place

and in operation at the time of the inspection. Holding out to his employees and to PENNDOT a "health program" and then not enforcing it is quite convincing evidence as to Smalis' state of mind. It demonstrates that Smalis had more than plain knowledge or awareness of the hazardous conditions at the site, he actively, knowingly and willingly disregarded what he knew to be requirements for employee protection imposed by OSHA and the Act.

Conversations and Correspondence

Extrinsic evidence on this record as to conversations individuals had with Mr. Smalis as well as to correspondence to Smalis, provides a window opening on to Mr. Smalis' state of mind regarding protecting his employees. Such evidence reveals a willingness and an affirmative decision to forgo employee protection.

The day prior to the issuance of a citation containing several lead-related violations at the Hart Bridge project in Jacksonville, Florida, Mr. Smalis participated in a closing conference by telephone with Joel Broadaway, the Health Supervisor of the OSHA Jacksonville Area Office, to discuss the results of the inspection of that site. During that conversation, Mr. Smalis asked Mr. Broadaway if OSHA would be enforcing the Lead in Construction Standard. Mr. Broadaway replied that OSHA would do so in any future inspection. Mr. Smalis complained to Broadaway that the Florida contract had been bid before the Lead in Construction standard had come into effect. Mr. Broadaway replied that that was a matter for Mr. Smalis to take up with the Florida Department of Transportation. (Tr. 69-71, 74).

Also during the conversation, Mr. Broadaway briefed Mr. Smalis on some of the items included in the new Lead in Construction Standard. They discussed the permissible exposure level, the action level, the engineering controls, the work practice controls, and the medical surveillance program that would be required under the Lead in Construction standard. Mr. Broadaway further advised Mr. Smalis that he would mail him a copy of the standard, which he did. (Tr. 71-72, 85)

In addition to Smalis's stated concerns about the costs of complying with the Lead in Construction standard in Florida, for many months Mr. Smalis carried on a continuing dialogue with John Ekiert about Mr. Smalis's purported need for more money to deal with the requirements of the Lead in Construction standard at the Tarentum Bridge worksite. (Tr. 50, 51)

As previously discussed, to the degree Mr. Smalis denies these conversations, his denials are rejected as lacking credibility.

Writings are also included in this record which repeatedly informed and reminded Mr. Smalis of his obligations under § 1926.62. He was notified that his company was required to conduct initial medical surveillance in the form of blood lead testing by Karen L. Cusick (Rickard), Account Executive for Mercy Hospital. In a letter dated June 22, 1993 to Beth Everett of Smalis, Ms. Rickard stated:

> I have also enclosed some information for your review. Our Occupational physician, Dr. Brian Pierson, has recommended that I share this information with your company. As indicated by the single page enclosure, OSHA has listed under Medical Surveillance, Biological monitoring, the tests of blood lead and ZPP, which is Zinc Protoporphyrin. ZPP is an added test under this standard. The standard was published on May 4, 1993 and lists the start-up dates of these provisions as 60 days from effective date. Dr. Pierson has interpreted this to mean that ZPP tests should also be done in conjunction with the blood lead levels beginning July 4, 1993.

(Joint Exhibit 1, Exhibit H, Exhibit C-8) In addition, Dr. Brian D. Pierson, an occupational physician at Mercy Hospital, explicitly advised Mr. Smalis in detail of the requirement to conduct initial medical surveillance, including blood lead testing, in his letter of July 22, 1993:

> I have recently obtained important OSHA information which impacts on you and the painting industry, and wanted to pass it along to you. I have outlined the most important factors and copies of pages from the CFR are enclosed.
>
> My medical opinion is that the items listed below will be important to be included in your medical monitoring decisions. I will be using the pertinent reference points and regulations as outlined in the attached, and will continue to advise you of care needed by your employees who are tested. I hope you find this helpful.
>
> * * *
>
> B. Medical surveillance program shall include "Initial Medical Surveillance" and a "Medical Surveillance Program."
>
> * "Initial Medical Surveillance" shall be made available to any employees occupationally exposed on any day to lead at or above the action level of $30mg/m^3$.
>
> * "The Medical Surveillance Program" shall be made available to all employees exposed at or above the Action Level for more than 30 days in any consecutive 12 months.

> C. Both the "Initial" and the "Program" require Blood Lead and Zinc Protoporphyrin levels. In addition, the "Program" requires a medical examination. . . .

(Joint Exhibit 1, Exhibit I, Exhibit C-9)

In their letters to Beth Everett and Mr. Smalis, respectively, Karen Rickard and Dr. Pierson both pointed out that ZPP is a required test under the initial medical surveillance program. (Exhibits C-8, C-9).

It is also clear from an April 12, 1993 letter from Ms. Rickard to Despina Smalis that the company was made fully aware of the requirements of §1926.62 regarding follow-up care and giving information to employees. Ms. Rickard stated in pertinent part:

> Due to the fact that 10 out of 14 employees tested had blood lead levels that fell in the "abnormal " range, it is important for us to know that these results were shared with these individuals and that proper follow-up recommendations have been provided and hopefully followed. . . .
>
> * * *
>
> Since we have not been asked to coordinate follow-up care, we are not aware if the results or the recommendations have been provided to the employees. Therefore, could you please indicate by your signature and date below where Xed that the results and medical recommendations have been shared with each of the employees on the attached list.
>
> * * *
>
> I appreciate your attention to this matter. I am confident that you have taken the necessary steps to inform your employees of their blood lead level results, but given the nature of the test, *we need to be sure that your company has indeed forwarded the results and recommendations to each individual.*

(Exhibit C-7; emphasis added) On the bottom of the second page of this letter, below Ms. Rickard's signature, there appears the signature of Despina Smalis and the handwritten date of "4.19.93." Below the signature and date is the following:

> By my signature above and as a representative of Smalis Painting Company, Inc., I acknowledge that the individuals listed on the attached page have been given the results and medical recommendations of the blood lead level tests associated with the blood specimens drawn on the individuals by HealthForce of Mercy Hospital on March 31, 1993.

(Exhibit C-7)

Reports of blood lead level test results signed by Dr. Pierson gave direct notice to Smalis of the requirement that employees whose blood lead level exceeded 40 µg/dl were to be informed

about temporary medical removal and Medical Removal Protection benefits when an employee's blood lead level reaches 50 µg/dl. For blood lead levels of 40 to 49 µg/dl, each of Dr. Pierson's reports states:

> Significant risk of lead toxicity. Monitoring frequency increased to at least every two months. Employer must notify within five working days each employee whose value exceeded 40 µg/dl, that the standard requires temporary medical removal with Medical Removal Protection benefits when an employee's blood lead level exceeds the numerical criterion for medical removal. . . .

(Joint Exhibit 1, Exhibit K; Exhibit C-10)

Smalis received specific notice in Dr. Pierson's July 22, 1993 letter that a proper medical surveillance program required a medical examination "as soon as possible for any [employee exhibiting] signs or symptoms of lead intoxication," and listed numerous symptoms. (Exhibit C-9)

Clear, reliable and convincing testimonial and documentary evidence demonstrates that Mr. Smalis was notified, reminded and even cajoled in conversations and correspondence on several occasions to take specific protective measures for his employees exposed to airborne lead. His failure to do so in light of the evidence demonstrates his state of mind. He willfully refused to do so.

In sum, prior citations issued to Smalis, his contract with PENNDOT, the company's "Health Program" and conversations as well as correspondence to which Smalis was a party all point in the same direction. Smalis willfully and intentionally decided not to afford his employees protections he knew were required under OSHA standards.

Smalis' asserted defenses against willfulness, that it did not know of the requirements of the standards and that it made efforts to comply with them are emphatically rejected. Under no reasonable interpretation could Smalis' lack of effort to obtain the text of the standards or to fulfill the duties imposed by them be objectively considered to be a "good faith" effort to protect employees or comply with the standards The few actions taken by Smalis, most of which were in response to the prior citation at Tarentum were only those most visible and apparent[88] On this record, I find that Smalis did virtually all it could to avoid or delay providing any protective

---

[88] For example, placing a changing/shower facility on the bridge, adding some air ventilation equipment and engaging a uniform company to supply coveralls.

equipment or activities and to spend as little money as possible doing so. Moreover, Smalis did little or nothing to assure the use or efficacy of protective measures. Smalis never reviewed or complied with the safety provisions of the PENNDOT contract, his own safety plan or the standards under which he was previously cited. In addition, given his lack of sincerity and his demeanor on the witness stand and in the hearing room and his repeatedly demonstrated marked antagonism toward OSHA, employees who complained or in any way testified as to anything negative about him and to the entire hearing process, I find his testimony that he never received a copy of the new lead in construction standards and that he unsuccessfully attempted to obtain a copy from the Pittsburgh OSHA office to be totally lacking in credibility. I find that Mr. Smalis had a copy of the new standards sent to him by the Jacksonville, Florida office of OSHA.

Even if Smalis had not received a copy of the standards from the Jacksonville office, I would find that Mr. Smalis knew of their existence and their importance and he either knew or reasonably should have known or inquired into the duties they imposed on employers. Their issuance was a major event in his industry with numerous publications mentioning them. The major trade association in his industry, of which he was a member, distributed many materials surrounding the proposal and adoption of the standards and sponsored meetings and seminars regarding them. The affected unions were aware of them. Many employees in the industry were aware of their issuance. This record specifically shows that Smalis was referred to them and many of their requirements by Mercy Hospital personnel and OSHA personnel. Finally, Mr. Smalis testified that upon greeting the compliance officer at the outset of the December 1993 inspection, his first comment to the officer, made without any prompting, referred to "the new standards." (Tr. 2009). Thus, despite repeated references to the "new" lead standards, even if he did not have a copy, I find that Mr. Smalis never sought to extend himself even the little bit necessary to make sure that he got them. He cannot now hide behind his self-induced ignorance. "We never looked" may be an apocryphal reference by medical students to the abbreviation "WNL" in medical records (generally meaning "within normal limits,") but it cannot be used as a defense where, as here, the employer has employees involved in tasks known to produce high levels of toxic airborne lead, has a duty to protect those employees and even if never handed a copy of the standard, was pointed and directed in that direction numerous times.

On this record, I find that Smalis had a "heightened awareness amounting to conscious

disregard for OSHA's requirements and its employees' health." I also find that Smalis did not make a good faith effort to either comply with OSHA requirements or to protect his employees. I thus conclude that the violations alleged to be willful are properly so classified.

Instance by Instance Citations

The Secretary's authority to issue separate citations (or items in one citation) and separate proposed penalties for each "instance" of a violation committed by an employer has been upheld by the Commission in several recent decisions, beginning with *Caterpillar, Inc.*, 15 BNA OSHC 2153 (No. 87-0922, 1993) and most recently in *Hartford Roofing Co*., 17 BNA OSHC 1361 (No. 92-3855, 1995). Under these decisions the Commission has held that;

> Some standards implicate the protection, etc. of individual employees to such an extent that the failure to have the protection in place for each employee permits the Secretary to cite on a per-instance basis.

Hartford Roofing, Co., supra. 17 BNA at 1365.

In this case the Secretary has, in several groups of items, cited some standards on an instance-by-instance basis.[89] Many such instance-by-instance items have been affirmed. They are now found to be appropriately identified as separate violations of the Act because the clear language of each of the standards on which they rely contemplates protection for each employee covered by the standard.[90]

Items 1a through 20a of Willful Citation No. 2 cites 1926.62(c)(1) states its principal requirement in terms of protecting individual employees from excessive lead exposure:

> [T]he employer shall assure that **no employee** is exposed to lead at concentrations greater than fifty micrograms of cubic meter of air (50 $\mu g/m^3$) averaged over an 8-hour period.

Section 1926.62(e)(1) cited in Items 1b through 20b of Willful Citation No. 2 likewise states

---

[89] Citation 2, Items 1 through 20; 28 & 29; 30 through 50; 51 through 71; 72 & 73; 74 through 84; 85 through 87; 88 through 158 and 160 through 201.

[90] The operative language of each standard is identified by **bold face** type.

its principal requirement in terms of protecting each employee from lead exposure:

> [T]he employer shall implement engineering and work practice controls, including administrative controls, to reduce and maintain **employee exposure** to lead to or below the permissible exposure limit to the extent that such controls are feasible.

Section 1926.62(j)(2)(i)(C) cited in Items 28 and 29 of Willful Citation No. 2 states its principal requirement in terms of protecting "each employee covered" and "each employee who is removed":

> (i) *Blood lead and ZPP level sampling and analysis*. The employer shall make available biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels **to each employee covered** under paragraphs (j)(1)(i) and (ii) of this section on the following schedule:
> (C) For **each employee who is removed** from exposure to lead due to an elevated blood lead level at least monthly during the removal period.

Section 1926.62(j)(2)(iv)(A) cited in Items 30 through 50 of Willful Citation No. 2 states its principal requirement in terms of notifying "each employee":

> Within five working days after the receipt of biological monitoring results, the employer **shall notify each employee** in writing of his or her blood lead level.

Section 1926.62(j)(2)(iv)(B) cited in Items 51 through 71 of Willful Citation No. 2 similarly states its principal requirement in terms of notifying "each employee":

> the employer **shall notify each employee** whose blood level exceeds 40 µg/dl that the standard requires temporary medical removal with Medical Removal Protection benefits when an employee's blood lead level exceeds the numerical criterion for medical removal under paragraph (k)(1)(i) of this section.

Section 1926.62(j)(3)(i)(B) cited in Items 72 and 73 of Willful Citation No. 2 states its principal requirement in terms of providing a service "to each employee covered":[91]

> (i) *Frequency*. The employer shall make available medical

---

[91] Even though both items 72 and 73 are vacated, the cited standard was an appropriate basis for instance-by-instance citations.

> examinations and consultations **to each employee covered** under paragraph (j)(1)(ii) of this section on the following schedule:
> (B) As soon as possible **upon notification by an employee** either that the employee has developed signs or symptoms commonly associated with lead intoxication, that the employee desires medical advice concerning the effects of current or past exposure to lead on the employee's ability to procreate a healthy child, that the employee is pregnant, or that the employee has demonstrated difficulty in breathing during a respirator fitting test or during use....

Section 1926.62(k)(1)(i) cited in Items 74 through 84 of Willful Citation No. 2 states its principal requirement in terms of removing "an employee":[92]

> The employer **shall remove an employee** from work having an exposure to lead at or above the action level on each occasion that a periodic and a follow-up blood sampling test conducted pursuant to this section indicate that the employee's blood lead level is at or above 50 µg/dl...

Section 1926.62(k)(2)(i) cited in Items 85 through 87 of Willful Citation No. 2 states its principal requirement in terms of providing benefits to "an employee":

> The employer **shall provide an employee** up to eighteen (18) months of medical removal protection benefits on each occasion that an employee is removed from exposure to lead or otherwise limited pursuant to this section.

Section 1926.62(l)(1)(ii) cited in Items 88 through 158 of Willful Citation No. 2 states its principal requirement in terms of providing training "for all (every one of the) employees":

> **For all employees** who are subject to exposure to lead at or above the action level on any day or who are subject to exposure to lead compounds which may cause skin or eye irritation (e.g. lead arsenate, lead azide), **the employer shall provide** a lead training program in accordance with paragraph (l)(2) of this section and assure employee participation.

Finally, the appropriateness of instance-by-instance citations under section 1904.2(a) cited in Items 160 through 201 of Willful Citation No. 2 has been discussed.

---

[92] Despite affirming only item 76 and vacating all of the other items in this group (74-54 and 77 through 84), the standard cited provides an appropriate basis for instance-by-instance citations.

Serious Classification of Violations

The Secretary maintains that each alleged violation is serious within the meaning of § 17(k) of the Act, 29 U.S.C. § 666(j). That section provides;

> (k) For purposes of this section, a serious violation shall be deemed to exist in a place of employment if there is a substantial probability that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use, in such place of employment unless the employer did not, and could not with the exercise of reasonable diligence, know of the presence of the violation.

There is virtually no debate as to the statement that lead is highly toxic and that absorption of airborne lead has important medical consequences. A highly qualified expert, Dr. Thomas Martin, testified extensively as to the toxic effects of lead, the importance of blood lead level testing of those exposed to lead, the health risks to families of workers who have been exposed to lead, the dangers of eating, smoking or drinking in the presence of airborne lead, the medical significance of initial blood lead level testing, the health risks in not providing follow-up blood testing on schedule and the danger of failing to provide appropriate medical examinations and consultations. Dr. Thomas' testimony reviewed the OSHA lead standard's major requirements and the portions cited in this case, explaining for each the relationship between a violation of the particular requirement and increasing the likelihood that an employee so affected would be likely to suffer serious injury or death. The doctor's testimony was comprehensive and persuasive (Tr. 423-510). It stands unrebutted. On the basis of his testimony, I find that each of the violations affirmed is serious within the meaning of the Act.

Penalty Assessments

Under section 17(a) of the Act, 29 U.S.C. § 666, each willful violation is subject to a civil

penalty ranging from $5,000 minimum to $70,000 maximum.[93] The Commission has often held that in determining appropriate penalties for violations, including those classified as willful, "due consideration" must be given to the four criteria under section 17(j) of the Act, 29 U.S.C. 666(j). Those factors include; the size of the employer's business, gravity of the violation, good faith and prior history. While the Commission has noted that the gravity of the violation is generally "the primary element in the penalty assessment," it also recognizes that the factors "are not necessarily accorded equal weight." An Administrative Law Judge is required "to state an adequate factual basis for his assessment of a penalty...." *J.A. Jones Construction Co.,* 15 BNA OSHC 2201, 2214 (No. 87-2059, 1993)

In this case, I assess civil penalties on the following bases; first, neither party presented specific argument or evidence regarding appropriate dollar amounts of penalties; second, Respondent's vividly demonstrated lack of good faith as well as its history of prior violations involving overexposure of employees to airborne lead, far outweigh all other factors in this case; and, third, the highly toxic and insidious effects of absorption of airborne lead means that "gravity" is exceptionally high even if the number of employees exposed is relatively low. Considering these factors along with the size of Respondent's business, and mindful that the Act establishes a mandatory minimum penalty for each willful violation, I find no reason to disturb the penalties proposed by the Secretary for each of the alleged violations which are affirmed by this decision and order.[94]

---

[93] Section 17(a) provides;

> Sec. 17. (a) Any employer who willfully or repeatedly violates the requirements of section 5 of this Act, any standard, rule, or order promulgated pursuant to section 6 of this Act, or regulations prescribed pursuant to this Act, may be assessed a civil penalty of not more than $70,000 for each violation, but not less than $5,000 for each willful violation.

[94] Where a single penalty has been proposed for an item containing multiple sub-parts, some of which are affirmed and others vacated, the amount of the penalty assessed will be in proportion to the number of sub-parts affirmed.

Accordingly, I find the following penalties to be appropriate for each of the items affirmed:

Citation No. and Item No(s).	Penalty Assessed in Dollars
1 - 2	7,000
1 - 3	7,000
1 - 4	7,000
2 - 1 through 6	70,000 each (total 420,000)
2 - 8 through 12	70,000 each (total 350,000)
2 - 14 through 19	70,000 each (total 420,000)
2 - 21	7,000
2 - 23	17,500
2 - 24a,b,c,e and f	29,167
2 - 25b	11,667
2 - 28 & 29	70,000 each (total 140,000)
2 - 30, 33, 34, 36, 37, 38, 39, 40, 41, 43, 45 & 49	24,500 each (total 294,000)
2 - 51, 57, 61, 62 & 63	10,500 each (total 52,500)
2 - 76	70,000
2 - 85, 86 & 87	70,000 each (total 210,000)
2 - 93, 94, 102, 108, 119, 121, 123, 126, 128, 137 and 142	17,500 each (total 192,500)
2 - 160 - 201	1,000 each (total 41,000)
202	17,5000

A total civil penalty of $2,293,834.00 is thus assessed.

FINDINGS OF FACT

All findings of fact necessary for a determination of all relevant issues have been made above. Fed. R. Civ. P. 52(a). All proposed findings of fact and conclusions of law inconsistent with this decision are hereby denied.

CONCLUSIONS OF LAW

1. Respondent was, at all times pertinent hereto, an employer within the meaning of section 3(5) of the Occupational Safety and Health Act of 1970, 29 U. S. C. § § 651 - 678 (1970).

2. The Occupational Safety and Health Review Commission has jurisdiction over the parties and the subject matter.

3. Respondent was in violation of section 5(a)(2) of the Act in that it failed to comply with the standards as alleged in Citation 1, Items 2, 3 and 4 and Citation 2, Items 1 through 20, 21, 23, 24a, 24b, 24c, 24e, 24f, 25b, 26, 27, 28, 29, 30, 33, 34, 36, 37, 38, 39, 40, 41, 43, 45, 49,51, 57, 61, 62, 63, 76, 85, 86, 87, 93, 94, 102, 108, 119, 121, 123, 126, 128, 137, 142, 160 through 201 and 202.

4. Each and every one of the violations of the Act found above were willful.

5. Respondent was not in violation of section 5(a)(2) of the Act as alleged in any other items contained in Citation 1 or 2.

6. A total civil penalty of $2,293,834.00 is appropriate for the willful violations of the Act.

ORDER

1. Citation 1, Items 2, 3 and 4 and Citation 2, Items 1 through 20, 21, 23, 24a, 24b, 24c, 24e, 24f, 25b, 26, 27, 28, 29, 30, 33, 34, 36, 37, 38, 39, 40, 41, 43, 45, 49, 51, 57, 61, 62, 63, 76, 85, 86, 87, 93, 94, 102, 108, 119, 121, 123, 126, 128, 137, 142, 160 through 201 and 202 are AFFIRMED.

2. All other items in Citations 1 and 2 are VACATED.

3. A civil penalty of $2,293,834.00 is assessed.

4. Smalis Painting Co., Inc. shall pay to ***(redacted)*** back wages of $3,121.00.

5. Smalis Painting Co., Inc. shall pay to ***(redacted)*** back wages of $4,428.00.

6. Smalis Painting Co., Inc. shall pay to ***(redacted)*** back wages of $1,588.00

Michael H. Schoenfeld
Judge, OSHRC

Dated: March 26, 1996
Washington, D.C.

APPENDIX A

SECRETARY OF LABOR V. E. SMALIS PAINTING COMPANY
DOCKET NO. 94-1979

TEXT OF ENTIRE LEAD IN CONSTRUCTION STANDARD (29 C.F.R. § 1926.62) IDENTIFYING (BY **BOLD FACE TYPE**) SUBSECTIONS CITED BY CITATION AND ITEM NUMBERS

(a) "Scope". This section applies to all construction work where an employee may be occupationally exposed to lead. All construction work excluded from coverage in the general industry standard for lead by 29 CFR 1910.1025(a)(2) is covered by this standard. Construction work is defined as work for construction, alteration and/or repair, including painting and decorating. It includes but is not limited to the following:

(1) Demolition or salvage of structures where lead or materials containing lead are present;

(2) Removal or encapsulation of materials containing lead;

(3) New construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead, or materials containing lead;

(4) Installation of products containing lead;

(5) Lead contamination/emergency cleanup;

(6) Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed, and

(7) Maintenance operations associated with the construction activities described in this paragraph.

(b) "Definitions".

"Action level" means employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air (30 ug/m(3)) calculated as an 8-hour time-weighted average (TWA).

"Assistant Secretary" means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.

"Competent person" means one who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.

"Director" means the Director, National Institute for Occupational

Safety and Health (NIOSH), U.S. Department of Health and Human Services, or designee.

"Lead" means metallic lead, all inorganic lead compounds, and organic lead soaps. Excluded from this definition are all other organic lead compounds.

"This section" means this standard.

(c) "Permissible exposure limit". (1) The employer shall assure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air (50 ug/m(3)) averaged over an 8-hour period.
[1926.62(c)(1) - Citation 2, Items 1a through 20a]

(2) If an employee is exposed to lead for more than 8 hours in any work day the employees' allowable exposure, as a time weighted average (TWA) for that day, shall be reduced according to the following formula:

Allowable employee exposure (in ug/m(3)) = 400 divided by hours worked in the day.

(3) When respirators are used to limit employee exposure as required under paragraph (c) of this section and all the requirements of paragraphs (e)(1) and (f) of this section have been met, employee exposure may be considered to be at the level provided by the protection factor of the respirator for those periods the respirator is worn. Those periods may be averaged with exposure levels during periods when respirators are not worn to determine the employee's daily TWA exposure.

(d) "Exposure assessment" - (1) "General". (i) Each employer who has a workplace or operation covered by this standard shall initially determine if any employee may be exposed to lead at or above the action level.

(ii) For the purposes of paragraph (d) of this section, employee exposure is that exposure which would occur if the employee were not using a respirator.

(iii) With the exception of monitoring under paragraph (d)(3), where monitoring is required under this section, the employer shall collect personal samples representative of a full shift including at least one sample for each job classification in each work area either for each shift or for the shift with the highest exposure level.
[1926.62(d)(1)(iii) - Citation 2, Item 21]

(iv) Full shift personal samples shall be representative of the monitored employee's regular, daily exposure to lead.

(2) "Protection of employees during assessment of exposure".

(i) With respect to the lead related tasks listed in this paragraph (d)(2)(i) of this section, where lead is present, until the employer performs an employee exposure assessment as required in paragraph (d) of this section and documents that the employee performing any of the listed tasks is not exposed above the PEL, the employer shall treat the employee as if the employee were exposed above the PEL, and not in excess of ten (10) times the PEL, and shall implement employee protective measures prescribed in paragraph (d)(2)(v) of this section. The tasks covered by this requirement are:

(A) Where lead containing coatings or paint are present: Manual demolition of structures (e.g, dry wall), manual scraping, manual sanding, heat gun applications, and power tool cleaning with dust collection systems;

(B) Spray painting with lead paint

(ii) In addition, with regard to tasks not listed in paragraph (d)(2)(i), where the employer has any reason to believe that an employee performing the task may be exposed to lead in excess of the PEL, until the employer performs an employee exposure assessment as required by paragraph (d) of this section and documents that the employee's lead exposure is not above the PEL the employer shall treat the employee as if the employee were exposed above the PEL and shall implement employee protective measures as prescribed in paragraph (d)(2)(v) of this section.

(iii) With respect to the tasks listed in this paragraph (d)(2)(iii) of this section, where lead is present, until the employer performs an employee exposure assessment as required in paragraph (d) of this section, and documents that the employee performing any of the listed tasks is not exposed in excess of 500 ug/m(3), the employer shall treat the employee as if the employee were exposed to lead in excess of 500 ug/m(3) and shall implement employee protective measures as prescribed in paragraph (d)(2)(v) of this section. Where the employer does establish that the employee is exposed to levels of lead below 500 ug/m(3), the employer may provide the exposed employee with the appropriate respirator prescribed for such use at such lower exposures, in accordance with Table 1 of this section. The tasks covered by this requirement are:

(A) Using lead containing mortar; lead burning

(B) Where lead containing coatings or paint are present: rivet busting; power tool cleaning without dust collection systems; cleanup activities where dry expendable abrasives are used; and abrasive blasting enclosure movement and removal.

(iv) With respect to the tasks listed in this paragraph (d)(2)(iv) of this section, where lead is present, until the employer performs an employee exposure assessment as required in paragraph (d) of this section and documents that the employee performing any of the listed tasks is not

exposed to lead in excess of 2,500 ug/m(3) (50 x PEL), the employer shall treat the employee as if the employee were exposed to lead in excess of 2,500 ug/m(3) and shall implement employee protective measures as prescribed in paragraph (d)(2)(v) of this section. Where the employer does establish that the employee is exposed to levels of lead below 2,500 ug/m(3), the employer may provide the exposed employee with the appropriate respirator prescribed for use at such lower exposures, in accordance with Table I of this section. Interim protection as described in this paragraph is required where lead containing coatings or paint are present on structures when performing:

(A) Abrasive blasting,

(B) Welding,

(C) Cutting, and

(D) Torch burning.

(v) Until the employer performs an employee exposure assessment as required under paragraph (d) of this section and determines actual employee exposure, the employer shall provide to employees performing the tasks described in paragraphs (d)(2)(i), (d)(2)(ii), (d)(2)(iii) and (d)(2)(iv) of this section with interim protection as follows:

(A) Appropriate respiratory protection in accordance with paragraph (f) of this section.

(B) Appropriate personal protective clothing and equipment in accordance with paragraph (g) of this section.

(C) Change areas in accordance with paragraph (i)(2) of this section.

(D) Hand washing facilities in accordance with paragraph (i)(5) of this section.

(E) Biological monitoring in accordance with paragraph (j)(1)(i) of this section, to consist of blood sampling and analysis for lead and zinc protoporphyrin levels, and

(F) Training as required under paragraph (l)(1)(i) of this section regarding 29 CFR 1926.59, Hazard Communication; training as required under paragraph (l)(2)(ii)(C) of this section, regarding use of respirators; and training in accordance with 29 CFR 1926.21, Safety training and education.

(3) "Basis of initial determination". (i) Except as provided under paragraphs (d)(3)(iii) and (d)(3)(iv) of this section the employer shall monitor employee exposures and shall base initial determinations on the employee exposure monitoring results and any of the following, relevant considerations:

(A) Any information, observations, or calculations which would indicate employee exposure to lead;

(B) Any previous measurements of airborne lead; and

(C) Any employee complaints of symptoms which may be attributable to exposure to lead.

(ii) Monitoring for the initial determination where performed may be

limited to a representative sample of the exposed employees who the employer reasonably believes are exposed to the greatest airborne concentrations of lead in the workplace.

(iii) Where the employer has previously monitored for lead exposures, and the data were obtained within the past 12 months during work operations conducted under workplace conditions closely resembling the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the employer may rely on such earlier monitoring results to satisfy the requirements of paragraphs (d)(3)(i) and (d)(6) of this section if the sampling and analytical methods meet the accuracy and confidence levels of paragraph (d)(10) of this section.

(iv) Where the employer has objective data, demonstrating that a particular product or material containing lead or a specific process, operation or activity involving lead cannot result in employee exposure to lead at or above the action level during processing, use, or handling, the employer may rely upon such data instead of implementing initial monitoring.

(A) The employer shall establish and maintain an accurate record documenting the nature and relevancy of objective data as specified in paragraph (n)(4) of this section, where used in assessing employee exposure in lieu of exposure monitoring.

(B) Objective data, as described in this paragraph (d)(3)(iv) of this section, is not permitted to be used for exposure assessment in connection with paragraph (d)(2) of this section.

(4) "Positive initial determination and initial monitoring".

(i) Where a determination conducted under paragraphs (d)(1), (2) and (3) of this section shows the possibility of any employee exposure at or above the action level the employer shall conduct monitoring which is representative of the exposure for each employee in the workplace who is exposed to lead.

(ii) Where the employer has previously monitored for lead exposure, and the data were obtained within the past 12 months during work operations conducted under workplace conditions closely resembling the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the employer may rely on such earlier monitoring results to satisfy the requirements of paragraph (d)(4)(i) of this section if the sampling and analytical methods meet the accuracy and confidence levels of paragraph (d)(10) of this section.

(5) "Negative initial determination". Where a determination, conducted under paragraphs (d)(1), (2), and (3) of this section is made that no employee is exposed to airborne concentrations of lead at or above the action level the employer shall make a written record of such

determination. The record shall include at least the information specified in paragraph (d)(3)(i) of this section and shall also include the date of determination, location within the worksite, and the name and social security number of each employee monitored.

(6) "Frequency". (i) If the initial determination reveals employee exposure to be below the action level further exposure determination need not be repeated except as otherwise provided in paragraph (d)(7) of this section.

(ii) If the initial determination or subsequent determination reveals employee exposure to be at or above the action level but at or below the PEL the employer shall perform monitoring in accordance with this paragraph at least every 6 months. The employer shall continue monitoring at the required frequency until at least two consecutive measurements, taken at least 7 days apart, are below the action level at which time the employer may discontinue monitoring for that employee except as otherwise provided in paragraph (d)(7) of this section.

(iii) If the initial determination reveals that employee exposure is above the PEL the employer shall perform monitoring quarterly. The employer shall continue monitoring at the required frequency until at least two consecutive measurements, taken at least 7 days apart, are at or below the PEL but at or above the action level at which time the employer shall repeat monitoring for that employee at the frequency specified in paragraph (d)(6)(ii) of this section, except as otherwise provided in paragraph (d)(7) of this section. The employer shall continue monitoring at the required frequency until at least two consecutive measurements, taken at least 7 days apart, are below the action level at which time the employer may discontinue monitoring for that employee except as otherwise provided in paragraph (d)(7) of this section.

(7) "Additional exposure assessments". Whenever there has been a change of equipment, process, control, personnel or a new task has been initiated that may result in additional employees being exposed to lead at or above the action level or may result in employees already exposed at or above the action level being exposed above the PEL, the employer shall conduct additional monitoring in accordance with this paragraph.

(8) "Employee notification". (i) Within 5 working days after completion of the exposure assessment the employer shall notify each employee in writing of the results which represent that employee's exposure.

(ii) Whenever the results indicate that the representative employee exposure, without regard to respirators, is at or above the PEL the employer shall include in the written notice a statement that the employees exposure was at or above that level and a description of the corrective action taken or to be taken to reduce exposure to below that level.

(9) "Accuracy of measurement". The employer shall use a method of

monitoring and analysis which has an accuracy (to a confidence level of 95 percent) of not less than plus or minus 25 percent for airborne concentrations of lead equal to or greater than 30 ug/m(3).

(e) "Methods of compliance" (1) "Engineering and work practice controls." The employer shall implement engineering and work practice controls, including administrative controls, to reduce and maintain employee exposure to lead to or below the permissible exposure limit to the extent that such controls are feasible. Wherever all feasible engineering and work practices controls that can be instituted are not sufficient to reduce employee exposure to or below the permissible exposure limit prescribed in paragraph (c) of this section, the employer shall nonetheless use them to reduce employee exposure to the lowest feasible level and shall supplement them by the use of respiratory protection that complies with the requirements of paragraph (f) of this section.
[1926.62(e)(1) - Citation 2, Items 1b through 20b]

(2) "Compliance program". (i) Prior to commencement of the job each employer shall establish and implement a written compliance program to achieve compliance with paragraph (c) of this section.
[1926.62(e)(2)(i) - Citation 2, item 22]

(ii) Written plans for these compliance programs shall include at least the following:
(A) A description of each activity in which lead is emitted; e.g. equipment used, material involved, controls in place, crew size, employee job responsibilities, operating procedures and maintenance practices;
(B) A description of the specific means that will be employed to achieve compliance and, where engineering controls are required engineering plans and studies used to determine methods selected for controlling exposure to lead;
(C) A report of the technology considered in meeting the PEL;
(D) Air monitoring data which documents the source of lead emissions;
(E) A detailed schedule for implementation of the program, including documentation such as copies of purchase orders for equipment, construction contracts, etc.;
(F) A work practice program which includes items required under paragraphs (g), (h) and (i) of this section and incorporates other relevant work practices such as those specified in paragraph (e)(5) of this section;
(G) An administrative control schedule required by paragraph (e)(4) of this section, if applicable;
(H) A description of arrangements made among contractors on multi-contractor sites with respect to informing affected employees of potential exposure to lead and with respect to responsibility for

compliance with this section as set-forth in 1926.16.
(I) Other relevant information.
(iii) The compliance program shall provide for frequent and regular inspections of job sites, materials, and equipment to be made by a competent person.
(iv) Written programs shall be submitted upon request to any affected employee or authorized employee representatives, to the Assistant Secretary and the Director, and shall be available at the worksite for examination and copying by the Assistant Secretary and the Director.
(v) Written programs shall be revised and updated at least every 6 months to reflect the current status of the program.
(3) "Mechanical ventilation". When ventilation is used to control lead exposure, the employer shall evaluate the mechanical performance of the system in controlling exposure as necessary to maintain its effectiveness.
(4) "Administrative controls". If administrative controls are used as a means of reducing employees TWA exposure to lead, the employer shall establish and implement a job rotation schedule which includes:
(i) Name or identification number of each affected employee;
(ii) Duration and exposure levels at each job or work station where each affected employee is located; and
(iii) Any other information which may be useful in assessing the reliability of administrative controls to reduce exposure to lead.
(5) The employer shall ensure that, to the extent relevant, employees follow good work practices such as described in Appendix B of this section.
(f) "Respiratory protection" - (1) "General". Where the use of respirators is required under this section the employer shall provide, at no cost to the employee, and assure the use of respirators which comply with the requirements of this paragraph. Respirators shall be used in the following circumstances:
(i) Whenever an employee's exposure to lead exceeds the PEL;
(ii) In work situations in which engineering controls and work practices are not sufficient to reduce exposures to or below the PEL;
(iii) Whenever an employee requests a respirator; and
(iv) An interim protection for employees performing tasks as specified in paragraph (d)(2) of this section

.

(2) "Respirator selection". (i) Where respirators are used under this section the employer shall select the appropriate respirator or combination of respirators from Table I below.
[1926.62(f)(2)(i) - Citation 1, Item 1 and Citation 2, Item 23a.]

(ii) The employer shall provide a powered, air-purifying respirator in lieu of the respirator specified in Table I whenever:
(A) An employee chooses to use this type of respirator; and

(B) This respirator will provide adequate protection to the employee.

(iii) The employer shall select respirators from among those approved for protection against lead dust, fume, and mist by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 30 CFR Part 11.

Table 1. - Respiratory Protection for Lead Aerosols

Airborne concentration of lead or condition of use	Required respirator[1]
Not in excess of 500 ug/m^3	• ½ mask air purifying respirator with high efficency filters.[2, 3] • ½ mask supplied air respirator operated in demand (negative pressure) mode.
Not in excess of 1,250 μg/m^3	• Loose fitting hood or helmet powered air purifying respirator with high efficency filters.[3] • Hood or helmet supplied air respirator operated in a continuous-flow mode--e.g., thpe CD abrasive blasting respirators operated in a continuous-flow mode.
Not in excess of 2,500 μgm^3	• Full facepiece air purifying respirator with high efficency filters.[3] • Tight fitting powered air purifying respirator with high efficency filters.[3] • Full facepiece supplied air respirator operated in demand mode. • ½ mask or full facepiece supplied air respirator operated in a continuous-flow mode. • Full facepiece self-contained breathing apparatus (SCBA) operated in demand mode.
Not in excess of 50,000 μgm^3	• ½ mask supplied air respirator operated in pressure demand or other positive-pressure mode.

Airborne concentration of lead or condition of use	Required respirator[1]
Not in excess of 100,000 μgm^3	• Full facepiece supplied air respirator operated in pressure demand or other positive-pressure mode - e.g., type CD abrasive blasting respirators operated in a positive pressure mode.
Greater than 100,000 μgm^3 unknown concentration, or fire fighting.	• Full facepiece SCBA operated in pressure demand or other positive-pressure mode.

Footnote (1) Respirators specified for higher concentrations can be used at lower concentrations of lead.
Footnote (2) Full facepiece is required if the lead aerosols cause eye or skin irritation at the use concentrations.
Footnote (3) A high efficiency particulate filter (HEPA) means a filter that is a 99.97 percent efficient against particles of 0.3 micron size or larger.

(3) "Respirator usage". (i) The employer shall assure that the respirator issued to the employee exhibits minimum facepiece leakage and that the respirator is fitted properly.

(ii) Employers shall perform either quantitative or qualitative face fit tests at the time of initial fitting and at least every six months thereafter for each employee wearing negative pressure respirators. The qualitative fit tests may be used only for testing the fit of half-mask respirators where they are permitted to be worn, and shall be conducted in accordance with appendix D. The tests shall be used to select facepieces that provide the required protection as prescribed in Table I. [1926.62(f)(3)(ii) - Citation 2 - Item 23b]

(iii) If an employee exhibits difficulty in breathing during the fitting test or during use, the employer shall make available to the employee an examination in accordance with paragraph (j)(3)(i)(B) of this section to determine whether the employee can wear a respirator while performing the required duty.

(4) "Respirator program". (i) The employer shall institute a respiratory protection program in accordance with 29 CFR 1910.134 (b), (d), (e) and (f). [1926.62(f)(4)(i) - Citation 2, Item 24a]

(ii) The employer shall permit each employee who uses a filter

respirator to change the filter elements whenever an increase in breathing resistance is detected and shall maintain an adequate supply of filter elements for this purpose.

(iii) Employees who wear respirators shall be permitted to leave work areas to wash their face and respirator facepiece whenever necessary to prevent skin irritation associated with respirator use.

(g) "Protective work clothing and equipment" - (1) "Provision and use". Where an employee is exposed to lead above the PEL without regard to the use of respirators, where employees are exposed to lead compounds which may cause skin or eye irritation (e.g. lead arsenate, lead azide), and as interim protection for employees performing tasks as specified in paragraph (d)(2) of this section, the employer shall provide at no cost to the employee and assure that the employee uses appropriate protective work clothing and equipment that prevents contamination of the employee and the employee's garments such as, but not limited to:

(i) Coveralls or similar full-body work clothing;

(ii) Gloves, hats, and shoes or disposable shoe coverlets; and

(iii) Face shields, vented goggles, or other appropriate protective equipment which complies with 1910.133 of this chapter.

(2) "Cleaning and replacement". (i) The employer shall provide the protective clothing required in paragraph (g)(1) of this section in a clean and dry condition at least weekly, and daily to employees whose exposure levels without regard to a respirator are over 200 ug/m(3) of lead as an 8-hour TWA.

(ii) The employer shall provide for the cleaning, laundering, and disposal of protective clothing and equipment required by paragraph (g)(1) of this section.

(iii) The employer shall repair or replace required protective clothing and equipment as needed to maintain their effectiveness.

(iv) The employer shall assure that all protective clothing is removed at the completion of a work shift only in change areas provided for that purpose as prescribed in paragraph (i)(2) of this section.

(v) The employer shall assure that contaminated protective clothing which is to be cleaned, laundered, or disposed of, is placed in a closed container in the change area which prevents dispersion of lead outside the container.

(vi) The employer shall inform in writing any person who cleans or launders protective clothing or equipment of the potentially harmful effects of exposure to lead.

(vii) The employer shall assure that the containers of contaminated protective clothing and equipment required by paragraph (g)(2)(v) of this section are labelled as follows:

Caution: Clothing contaminated with lead. Do not remove dust by blowing

or shaking. Dispose of lead contaminated wash water in accordance with applicable local, state, or federal regulations.

(viii) The employer shall prohibit the removal of lead from protective clothing or equipment by blowing, shaking, or any other means which disperses lead into the air.

(h) "Housekeeping" - (1) "All surfaces shall be maintained as free as practicable of accumulations of lead".

(2) Clean-up of floors and other surfaces where lead accumulates shall wherever possible, be cleaned by vacuuming or other methods that minimize the likelihood of lead becoming airborne.

(3) Shoveling, dry or wet sweeping, and brushing may be used only where vacuuming or other equally effective methods have been tried and found not to be effective.

(4) Where vacuuming methods are selected, the vacuums shall be equipped with HEPA filters and used and emptied in a manner which minimizes the reentry of lead into the workplace.

(5) Compressed air shall not be used to remove lead from any surface unless the compressed air is used in conjunction with a ventilation system designed to capture the airborne dust created by the compressed air.

(i) "Hygiene facilities and practices." (1) The employer shall assure that in areas where employees are exposed to lead above the PEL without regard to the use of respirators, food or beverage is not present or consumed, tobacco products are not present or used, and cosmetics are not applied.

(2) "Change areas". (i) The employer shall provide clean change areas for employees whose airborne exposure to lead is above the PEL, and as interim protection for employees performing tasks as specified in paragraph (d)(2) of this section, without regard to the use of respirators.

(ii) The employer shall assure that change areas are equipped with separate storage facilities for protective work clothing and equipment and for street clothes which prevent cross - contamination.

(iii) The employer shall assure that employees do not leave the workplace wearing any protective clothing or equipment that is required to be worn during the work shift.

(3) "Showers". (i) The employer shall provide shower facilities, where feasible, for use by employees whose airborne exposure to lead is above the PEL.
[1926.62(i)(3)(ii) - Citation 1, Item 2].

(ii) The employer shall assure, where shower facilities are available, that employees shower at the end of the work shift and shall provide an adequate supply of cleansing agents and towels for use by affected

employees.

(4) "Eating facilities". (i) The employer shall provide lunchroom facilities or eating areas for employees whose airborne exposure to lead is above the PEL, without regard to the use of respirators. [1926.62(i)(4)(i) - Citation 1, Item 3].

(ii) The employer shall assure that lunchroom facilities or eating areas are as free as practicable from lead contamination and are readily accessible to employees.
(iii) The employer shall assure that employees whose airborne exposure to lead is above the PEL, without regard to the use of a respirator, wash their hands and face prior to eating, drinking, smoking or applying cosmetics.
(iv) The employer shall assure that employees do not enter lunchroom facilities or eating areas with protective work clothing or equipment unless surface lead dust has been removed by vacuuming, downdraft booth, or other cleaning method that limits dispersion of lead dust.
(5) "Hand Washing facilities". (i) The employer shall provide adequate handwashing facilities for use by employees exposed to lead in accordance with 29 CFR 1926.51(f).
(ii) Where showers are not provided the employer shall assure that employees wash their hands and face at the end of the work - shift.

(j) "Medical surveillance" - (1) "General". (i) The employer shall make available initial medical surveillance to employees occupationally exposed on any day to lead at or above the action level. Initial medical surveillance consists of biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels. [1926.62(j)(1)(i) - Citation 2 - Items 25a & 25b]

(ii) The employer shall institute a medical surveillance program in accordance with paragraphs (j)(2) and (j)(3) of this section for all employees who are or may be exposed by the employer at or above the action level for more than 30 days in any consecutive 12 months; [1926.62(j)(1)(ii) - Citation 2 - Items 25c & 26]

(iii) The employer shall assure that all medical examinations and procedures are performed by or under the supervision of a licensed physician.
(iv) The employer shall make available the required medical surveillance including multiple physician review under paragraph (j)(3)(iii) without cost to employees and at a reasonable time and place.
(2) "Biological monitoring" - (i) "Blood lead and ZPP level sampling

and analysis". The employer shall make available biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels to each employee covered under paragraphs (j)(1)(i) and (ii) of this section on the following schedule:

(A) For each employee covered under paragraph (j)(1)(ii) of this section, at least every 2 months for the first 6 months and every 6 months thereafter;
[1926.62(j)(2)(i)(A) - Citation 2, Item 27].

(B) For each employee covered under paragraphs (j)(1)(i) or (ii) of this section whose last blood sampling and analysis indicated a blood lead level at or above 40 ug/dl, at least every two months. This frequency shall continue until two consecutive blood samples and analyses indicate a blood lead level below 40 ug/dl; and

(C) For each employee who is removed from exposure to lead due to an elevated blood lead level at least monthly during the removal period.
[1926.62(j)(2)(i)(C) - Citation 2, Items 28 & 29]

(ii) "Follow-up blood sampling tests". Whenever the results of a blood lead level test indicate that an employee's blood lead level exceeds the numerical criterion for medical removal under paragraph (k)(1)(i) of this section, the employer shall provide a second (follow-up) blood sampling test within two weeks after the employer receives the results of the first blood sampling test.
(iii) "Accuracy of blood lead level sampling and analysis". Blood lead level sampling and analysis provided pursuant to this section shall have an accuracy (to a confidence level of 95 percent) within plus or minus 15 percent or 6 ug/dl, whichever is greater, and shall be conducted by a laboratory approved by OSHA.

(iv) "Employee notification". (A) Within five working days after the receipt of biological monitoring results, the employer shall notify each employee in writing of his or her blood lead level; and
[1926.62(j)(2)(iv)(A) - Citation 2, Items 30 - 50]

(B) the employer shall notify each employee whose blood lead level exceeds 40 ug/dl that the standard requires temporary medical removal with Medical Removal Protection benefits when an employee's blood lead level exceeds the numerical criterion for medical removal under paragraph (k)(1)(i) of this section.
[1926.62(j)(2)(iv)(B) - Citation 2, Items 51-71]

(3) "Medical examinations and consultations" - (i) "Frequency". The employer shall make available medical examinations and consultations to each employee covered under paragraph (j)(1)(ii) of this section on the following schedule:

(A) At least annually for each employee for whom a blood sampling test conducted at any time during the preceding 12 months indicated a blood lead level at or above 40 ug/dl;

(B) As soon as possible, upon notification by an employee either that the employee has developed signs or symptoms commonly associated with lead intoxication, that the employee desires medical advice concerning the effects of current or past exposure to lead on the employee's ability to procreate a healthy child, that the employee is pregnant, or that the employee has demonstrated difficulty in breathing during a respirator fitting test or during use; and
[1926.62(j)(3)(i)(B) - Citation 2, Items 73 & 73]

(C) As medically appropriate for each employee either removed from exposure to lead due to a risk of sustaining material impairment to health, or otherwise limited pursuant to a final medical determination.

(ii) "Content". The content of medical examinations made available pursuant to paragraph (j)(3)(i)(B) - (C) of this section shall be determined by an examining physician and, if requested by an employee, shall include pregnancy testing or laboratory evaluation of male fertility. Medical examinations made available pursuant to paragraph (j)(3)(i)(A) of this section shall include the following elements:

(A) A detailed work history and a medical history, with particular attention to past lead exposure (occupational and non-occupational), personal habits (smoking, hygiene), and past gastrointestinal, hematologic, renal, cardiovascular, reproductive and neurological problems;

(B) A thorough physical examination, with particular attention to teeth, gums, hematologic, gastrointestinal, renal, cardiovascular, and neurological systems. Pulmonary status should be evaluated if respiratory protection will be used;

(C) A blood pressure measurement;

(D) A blood sample and analysis which determines:

{1} Blood lead level;

{2} Hemoglobin and hematocrit determinations, red cell indices, and examination of peripheral smear morphology;

{3} Zinc protoporphyrin;

{4} Blood urea nitrogen; and,

{5} Serum creatinine;

(E) A routine urinalysis with microscopic examination; and

(F) Any laboratory or other test relevant to lead exposure which the examining physician deems necessary by sound medical practice.

(iii) "Multiple physician review mechanism." (A) If the employer selects the initial physician who conducts any medical examination or consultation provided to an employee under this section, the employee may designate a second physician:

{1} To review any findings, determinations or recommendations of the initial physician; and

{2} To conduct such examinations, consultations, and laboratory tests as the second physician deems necessary to facilitate this review.

(B) The employer shall promptly notify an employee of the right to seek a second medical opinion after each occasion that an initial physician conducts a medical examination or consultation pursuant to this section. The employer may condition its participation in, and payment for, the multiple physician review mechanism upon the employee doing the following within fifteen (15) days after receipt of the foregoing notification, or receipt of the initial physician's written opinion, whichever is later:

{1} The employee informing the employer that he or she intends to seek a second medical opinion, and

{2} The employee initiating steps to make an appointment with a second physician.

(C) If the findings, determinations or recommendations of the second physician differ from those of the initial physician, then the employer and the employee shall assure that efforts are made for the two physicians to resolve any disagreement.

(D) If the two physicians have been unable to quickly resolve their disagreement, then the employer and the employee through their respective physicians shall designate a third physician:

{1} To review any findings, determinations or recommendations of the prior physicians; and

{2} To conduct such examinations, consultations, laboratory tests and discussions with the prior physicians as the third physician deems necessary to resolve the disagreement of the prior physicians.

(E) The employer shall act consistent with the findings, determinations and recommendations of the third physician, unless the employer and the employee reach an agreement which is otherwise consistent with the recommendations of at least one of the three physicians.

(iv) "Information provided to examining and consulting physicians".

(A) The employer shall provide an initial physician conducting a medical examination or consultation under this section with the following information:

{1} A copy of this regulation for lead including all Appendices;

{2} A description of the affected employee's duties as they relate to the employee's exposure;

{3} The employee's exposure level or anticipated exposure level to lead and to any other toxic substance (if applicable);

{4} A description of any personal protective equipment used or to be used;

{5} Prior blood lead determinations; and

{6} All prior written medical opinions concerning the employee in the employer's possession or control.

(B) The employer shall provide the foregoing information to a second or third physician conducting a medical examination or consultation under this section upon request either by the second or third physician, or by the employee.

(v) "Written medical opinions". (A) The employer shall obtain and furnish the employee with a copy of a written medical opinion from each examining or consulting physician which contains only the following information:

{1} The physician's opinion as to whether the employee has any detected medical condition which would place the employee at increased risk of material impairment of the employee's health from exposure to lead;

{2} Any recommended special protective measures to be provided to the employee, or limitations to be placed upon the employee's exposure to lead;

{3} Any recommended limitation upon the employee's use of respirators, including a determination of whether the employee can wear a powered air purifying respirator if a physician determines that the employee cannot wear a negative pressure respirator; and

{4} The results of the blood lead determinations.

(B) The employer shall instruct each examining and consulting physician to:

{1} Not reveal either in the written opinion or orally, or in any other means of communication with the employer, findings, including laboratory results, or diagnoses unrelated to an employee's occupational exposure to lead; and

{2} Advise the employee of any medical condition, occupational or nonoccupational, which dictates further medical examination or treatment.

(vi) "Alternate physician determination mechanisms". The employer and an employee or authorized employee representative may agree upon the use of any alternate physician determination mechanism in lieu of the multiple physician review mechanism provided by paragraph (j)(3)(iii) of this section so long as the alternate mechanism is as expeditious and protective as the requirements contained in this paragraph.

(4) "Chelation". (i) The employer shall assure that any person whom he retains, employs, supervises or controls does not engage in prophylactic chelation of any employee at any time.

(ii) If therapeutic or diagnostic chelation is to be performed by any person in paragraph (j)(4)(i) of this section, the employer shall assure

that it be done under the supervision of a licensed physician in a clinical setting with thorough and appropriate medical monitoring and that the employee is notified in writing prior to its occurrence.

(k) "Medical removal protection" - (1) "Temporary medical removal and return of an employee" - (i) "Temporary removal due to elevated blood lead level". The employer shall remove an employee from work having an exposure to lead at or above the action level on each occasion that a periodic and a follow-up blood sampling test conducted pursuant to this section indicate that the employee's blood lead level is at or above 50 ug/dl; and, [1926.62(k)(1)(i) - Citation 2, Items 74-84].

(ii) "Temporary removal due to a final medical determination". (A) The employer shall remove an employee from work having an exposure to lead at or above the action level on each occasion that a final medical determination results in a medical finding, determination, or opinion that the employee has a detected medical condition which places the employee at increased risk of material impairment to health from exposure to lead

(B) For the purposes of this section, the phrase "final medical determination" means the written medical opinion on the employees' health status by the examining physician or, where relevant, the outcome of the multiple physician review mechanism or alternate medical determination mechanism used pursuant to the medical surveillance provisions of this section.

(C) Where a final medical determination results in any recommended special protective measures for an employee, or limitations on an employee's exposure to lead, the employer shall implement and act consistent with the recommendation.

(iii) "Return of the employee to former job status". (A) The employer shall return an employee to his or her former job status:

{1} For an employee removed due to a blood lead level at or above 50 ug/dl when two consecutive blood sampling tests indicate that the employee's blood lead level is at or below 40 ug/dl;

{2} For an employee removed due to a final medical determination, when a subsequent final medical determination results in a medical finding, determination, or opinion that the employee no longer has a detected medical condition which places the employee at increased risk of material impairment to health from exposure to lead.

(B) For the purposes of this section, the requirement that an employer return an employee to his or her former job status is not intended to expand upon or restrict any rights an employee has or would have had, absent temporary medical removal, to a specific job classification or position under the terms of a collective bargaining agreement.

(iv) "Removal of other employee special protective measure or

limitations". The employer shall remove any limitations placed on an employee or end any special protective measures provided to an employee pursuant to a final medical determination when a subsequent final medical determination indicates that the limitations or special protective measures are no longer necessary.

(v) "Employer options pending a final medical determination". Where the multiple physician review mechanism, or alternate medical determination mechanism used pursuant to the medical surveillance provisions of this section, has not yet resulted in a final medical determination with respect to an employee, the employer shall act as follows:

(A) "Removal". The employer may remove the employee from exposure to lead, provide special protective measures to the employee, or place limitations upon the employee, consistent with the medical findings, determinations, or recommendations of any of the physicians who have reviewed the employee's health status.

(B) "Return". The employer may return the employee to his or her former job status, end any special protective measures provided to the employee, and remove any limitations placed upon the employee, consistent with the medical findings, determinations, or recommendations of any of the physicians who have reviewed the employee's health status, with two exceptions.

{1} If the initial removal, special protection, or limitation of the employee resulted from a final medical determination which differed from the findings, determinations, or recommendations of the initial physician or;

{2} If the employee has been on removal status for the preceding eighteen months due to an elevated blood lead level, then the employer shall await a final medical determination.

(2) "Medical removal protection benefits" - (i) "Provision of medical removal protection benefits". The employer shall provide an employee up to eighteen (18) months of medical removal protection benefits on each occasion that an employee is removed from exposure to lead or otherwise limited pursuant to this section.
[1926.62(k)(2)(i) - Citation 2, Items 85 - 87].

(ii) "Definition of medical removal protection benefits". For the purposes of this section, the requirement that an employer provide medical removal protection benefits means that, as long as the job the employee was removed from continues, the employer shall maintain the total normal earnings, seniority and other employment rights and benefits of an employee, including the employee's right to his or her former job status as though the employee had not been medically removed from the employee's job or otherwise medically limited.

(iii) "Follow-up medical surveillance during the period of employee removal or limitation." During the period of time that an employee is medically removed from his or her job or otherwise medically limited, the employer may condition the provision of medical removal protection benefits upon the employee's participation in follow-up medical surveillance made available pursuant to this section.

(iv) "Workers' compensation claims". If a removed employee files a claim for workers' compensation payments for a lead - related disability, then the employer shall continue to provide medical removal protection benefits pending disposition of the claim. To the extent that an award is made to the employee for earnings lost during the period of removal, the employer's medical removal protection obligation shall be reduced by such amount. The employer shall receive no credit for workers' compensation payments received by the employee for treatment - related expenses.

(v) "Other credits". The employer's obligation to provide medical removal protection benefits to a removed employee shall be reduced to the extent that the employee receives compensation for earnings lost during the period of removal either from a publicly or employer - funded compensation program, or receives income from employment with another employer made possible by virtue of the employee's removal.

(vi) "Voluntary removal or restriction of an employee". Where an employer, although not required by this section to do so, removes an employee from exposure to lead or otherwise places limitations on an employee due to the effects of lead exposure on the employee's medical condition, the employer shall provide medical removal protection benefits to the employee equal to that required by paragraph (k)(2)(i) and (ii) of this section.

(l) "Employee information and training" - (1) "General" (i) The employer shall communicate information concerning lead hazards according to the requirements of OSHA's Hazard Communication Standard for the construction industry, 29 CFR 1926.59, including but not limited to the requirements concerning warning signs and labels, material safety data sheets (MSDS), and employee information and training. In addition, employers shall comply with the following requirements:

(ii) For all employees who are subject to exposure to lead at or above the action level on any day or who are subject to exposure to lead compounds which may cause skin or eye irritation (e.g. lead arsenate, lead azide), the employer shall provide a training program in accordance with paragraph (l)(2) of this section and assure employee participation. [1926.62(l)(1)(ii) - Citation 2, Items 88 through 158].

(iii) The employer shall provide the training program as initial training prior to the time of job assignment or prior to the start up date

for this requirement, whichever comes last.

(iv) The employer shall also provide the training program at least annually for each employee who is subject to lead exposure at or above the action level on any day.

(2) "Training program". The employer shall assure that each employee is trained in the following:

(i) The content of this standard and its appendices;

(ii) The specific nature of the operations which could result in exposure to lead above the action level;

(iii) The purpose, proper selection, fitting, use, and limitations of respirators;

(iv) The purpose and a description of the medical surveillance program, and the medical removal protection program including information concerning the adverse health effects associated with excessive exposure to lead (with particular attention to the adverse reproductive effects on both males and females and hazards to the fetus and additional precautions for employees who are pregnant);

(v) The engineering controls and work practices associated with the employee's job assignment including training of employees to follow relevant good work practices described in Appendix B of this section; [1926.62(l)(2)(v) - Citation 2, Item 159].

(vi) The contents of any compliance plan in effect;

(vii) Instructions to employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician; and

(viii) The employee's right of access to records under 29 CFR 1910.20.

(3) "Access to information and training materials." (i) The employer shall make readily available to all affected employees a copy of this standard and its appendices.

(ii) The employer shall provide, upon request, all materials relating to the employee information and training program to affected employees and their designated representatives, and to the Assistant Secretary and the Director.

(m) "Signs" - (1) "General". (i) The employer may use signs required by other statutes, regulations or ordinances in addition to, or in combination with, signs required by this paragraph.

(ii) The employer shall assure that no statement appears on or near any sign required by this paragraph which contradicts or detracts from the meaning of the required sign.

(2) "Signs". (i) The employer shall post the following warning signs in each work area where an employees exposure to lead is above the PEL.

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

(ii) The employer shall assure that signs required by this paragraph are illuminated and cleaned as necessary so that the legend is readily visible.

(n) "Recordkeeping" - (1) "Exposure assessment". (i) The employer shall establish and maintain an accurate record of all monitoring and other data used in conducting employee exposure assessments as required in paragraph (d) of this section.

(ii) Exposure monitoring records shall include:

(A) The date(s), number, duration, location and results of each of the samples taken if any, including a description of the sampling procedure used to determine representative employee exposure where applicable;

(B) A description of the sampling and analytical methods used and evidence of their accuracy;

(C) The type of respiratory protective devices worn, if any;

(D) Name, social security number, and job classification of the employee monitored and of all other employees whose exposure the measurement is intended to represent; and

(E) The environmental variables that could affect the measurement of employee exposure.

(iii) The employer shall maintain monitoring and other exposure assessment records in accordance with the provisions of 29 CFR 1910.20.

(2) "Medical surveillance". (i) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance as required by paragraph (j) of this section.

(ii) This record shall include:

(A) The name, social security number, and description of the duties of the employee;

(B) A copy of the physician's written opinions;

(C) Results of any airborne exposure monitoring done on or for that employee and provided to the physician; and

(D) Any employee medical complaints related to exposure to lead.

(iii) The employer shall keep, or assure that the examining physician keeps, the following medical records:

(A) A copy of the medical examination results including medical and work history required under paragraph (j) of this section;

(B) A description of the laboratory procedures and a copy of any standards or guidelines used to interpret the test results or references to that information;

(C) A copy of the results of biological monitoring.

(iv) The employer shall maintain or assure that the physician maintains

medical records in accordance with the provisions of 29 CFR 1910.20.

(3) "Medical removals". (i) The employer shall establish and maintain an accurate record for each employee removed from current exposure to lead pursuant to paragraph (k) of this section.
[1926.62(n)(3)(i) - Citation 1, Item 4].

(ii) Each record shall include:
(A) The name and social security number of the employee;
(B) The date of each occasion that the employee was removed from current exposure to lead as well as the corresponding date on which the employee was returned to his or her former job status;
(C) A brief explanation of how each removal was or is being accomplished; and
(D) A statement with respect to each removal indicating whether or not the reason for the removal was an elevated blood lead level.
(iii) The employer shall maintain each medical removal record for at least the duration of an employee's employment.
(4) "Objective data for exemption from requirement for initial monitoring".
(i) For purposes of this section, objective data are information demonstrating that a particular product or material containing lead or a specific process, operation, or activity involving lead cannot release dust or fumes in concentrations at or above the action level under any expected conditions of use. Objective data can be obtained from an industry - wide study or from laboratory product test results from manufacturers of lead containing products or materials. The data the employer uses from an industry - wide survey must be obtained under workplace conditions closely resembling the processes, types of material, control methods, work practices and environmental conditions in the employer's current operations.
(ii) The employer shall maintain the record of the objective data relied upon for at least 30 years.
(5) "Availability". The employer shall make available upon request all records required to be maintained by paragraph (n) of this section to affected employees, former employees, and their designated representatives, and to the Assistant Secretary and the Director for examination and copying.
(6) "Transfer of records". (i) Whenever the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by paragraph (n) of this section.
(ii) Whenever the employer ceases to do business and there is no successor employer to receive and retain the records required to be maintained by this section for the prescribed period, these records shall

be transmitted to the Director.

(iii) At the expiration of the retention period for the records required to be maintained by this section, the employer shall notify the Director at least 3 months prior to the disposal of such records and shall transmit those records to the Director if requested within the period.

(iv) The employer shall also comply with any additional requirements involving transfer of records set forth in 29 CFR 1910.20(h).

(o) "Observation of monitoring". (1) Employee observation. The employer shall provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to lead conducted pursuant to paragraph (d) of this section.

(2) "Observation procedures". (i) Whenever observation of the monitoring of employee exposure to lead requires entry into an area where the use of respirators, protective clothing or equipment is required, the employer shall provide the observer with and assure the use of such respirators, clothing and equipment, and shall require the observer to comply with all other applicable safety and health procedures.

(ii) Without interfering with the monitoring, observers shall be entitled to:

(A) Receive an explanation of the measurement procedures;

(B) Observe all steps related to the monitoring of lead performed at the place of exposure; and

(C) Record the results obtained or receive copies of the results when returned by the laboratory.

(p) "Effective date". This standard (1926.62) shall become effective June 3, 1993.

(q) "Appendices". The information contained in the appendices to this section is not intended by itself, to create any additional obligations not otherwise imposed by this standard nor detract from any existing obligation.

(r) "Startup dates". (1) The requirements of paragraphs (c) through (o) of this section, including administrative controls and feasible work practice controls, but not including engineering controls specified in paragraph (e)(1) of this section, shall be complied with as soon as possible, but no later than 60 days from the effective date of this section.

(2) Feasible engineering controls specified by paragraph (e)(1) of this section shall be implemented as soon as possible, but no later than 120 days from the effective date of this section.

[57 FR 26627, May 4, 1993, as amended at 58 FR 34218, June 24, 1993]

APPENDIX B

SECRETARY OF LABOR V. E. SMALIS PAINTING COMPANY
DOCKET NO. 94-1979

TEXT OF STANDARDS CITED OTHER THAN LEAD IN CONSTRUCTION STANDARD

Citation 1, Item 24b - 29 C.F.R. § 1910.134(b)(3)

> (b) Requirements for a minimal acceptable program.
> (3) The user shall be instructed and trained in the proper use of respirators and their limitations.

Citation 1, Item 24c - 29 C.F.R. § 1910.134(b)(8)

> (8) Appropriate surveillance of work area conditions and degree of employee exposure or stress shall be maintained.

Citation 1, Item 24d - 29 C.F.R. § 1910.134(d)(2)(ii)

> (ii) The compressor for supplying air shall be equipped with necessary safety and standby devices. A breathing air-type compressor shall be used. Compressors shall be constructed and situated so as to avoid entry of contaminated air into the system and suitable in-line air purifying sorbent beds and filters installed to further assure breathing air quality. A receiver of sufficient capacity to enable the respirator wearer to escape from a contaminated atmosphere in event of compressor failure, and alarms to indicate compressor failure and overheating shall be installed in the system. If an oil-lubricated compressor is used, it shall have a high-temperature or carbon monoxide alarm, or both. If only a high-temperature alarm is used, the air from the compressor shall be frequently tested for carbon monoxide to insure that it meets the specifications in paragraph (d)(1) of this section.

Citation 1, Item 24e - 29 C.F.R. § 1910.134(e)(5)(i)

(i) Every respirator wearer shall receive fitting instructions including demonstrations and practice in how the respirator should be worn, how to adjust it, and how to determine if it fits properly. Respirators shall not be worn when conditions prevent a good face seal. Such conditions may be a growth of beard, sideburns, a skull cap that projects under the facepiece, or temple pieces on glasses. Also, the absence of one or both dentures can seriously affect the fit of a facepiece. The worker's diligence in observing these factors shall be evaluated by periodic check. To assure proper protection, the facepiece fit shall be checked by the wearer each time he puts on the respirator. This may be done by following the manufacturer's facepiece fitting instructions.

Citation 1, Item 24f - 29 C.F.R. § 1910.134(f)(1)

(f) Maintenance and care of respirators. (1) A program for maintenance and care of respirators shall be adjusted to the type of plant, working conditions, and hazards involved, and shall include the following basic services:

(i) Inspection for defects (including a leak check),
(ii) Cleaning and disinfecting.
(iii) Repair,
(iv) Storage

Equipment shall be properly maintained to retain its original effectiveness.

Citation 1, Items 160 through 201 - 29 C.F.R. § 1904.2(a)

Log and summary of occupational injuries and illnesses.

(a) Each employer shall, except as provided in paragraph (b) of this section, (1) maintain in each establishment a log and summary of all recordable occupational injuries and illnesses for that establishment; and (2) enter each recordable injury and illness on the log and summary as early as practicable but no later than 6 working days after receiving information that a recordable injury or illness has occurred. For this purpose form OSHA No. 200 or an equivalent which is as readable and comprehensible to a person not familiar with it shall be used. The log and summary shall be completed in the detail provided in the form and instructions on form OSHA No. 200.

Citation 1, Item 202 - 29 C.F.R. § 1910.20(e)(3)

(3) *OSHA access*. (i) Each employer shall, upon request, and without derogation of any rights under the Constitution or the Occupational Safety and Health Act of 1970, 29 U.S.C. 651 *et seq.,* that the employer chooses to exercise, assure the prompt access of representatives of the Assistant Secretary of Labor for Occupational Safety and Health to employee exposure and medical records and to analyses using exposure or medical records. Rules of agency practice and procedure governing OSHA access to employee medical records are contained in 29 CFR 1913.10.

APPENDIX C

SECRETARY OF LABOR v. E. SMALIS PAINTING COMPANY, INC.
DOCKET NO. 94-1979

LIST OF EMPLOYEES IDENTIFIED IN CITATION 2, ITEMS 88 THROUGH 158 INCLUSIVE

Items 88 through 159, inclusive each identify one Smalis employee as listed below.

88	***(redacted)***	106	***(redacted)***	124	***(redacted)***	142	***(redacted)***
89	***(redacted)***	107	***(redacted)***	125	***(redacted)***	143	***(redacted)***
90	***(redacted)***	108	***(redacted)***	126	***(redacted)***	144	***(redacted)***
91	***(redacted)***	109	***(redacted)***	127	***(redacted)***	145	***(redacted)***
92	***(redacted)***	110	***(redacted)***	128	***(redacted)***	146	***(redacted)***
93	***(redacted)***	111	***(redacted)***	129	***(redacted)***	147	***(redacted)***
94	***(redacted)***	112	***(redacted)***	130	***(redacted)***	148	***(redacted)***
95	***(redacted)***	113	***(redacted)***	131	***(redacted)***	149	***(redacted)***
96	***(redacted)***	114	***(redacted)***	132	***(redacted)***	150	***(redacted)***
97	***(redacted)***	115	***(redacted)***	133	***(redacted)***	151	***(redacted)***
98	***(redacted)***	116	***(redacted)***	134	***(redacted)***	152	***(redacted)***
99	***(redacted)***	117	***(redacted)***	135	***(redacted)***	153	***(redacted)***
100	***(redacted)***	118	***(redacted)***	136	***(redacted)***	154	***(redacted)***
101	***(redacted)***	119	***(redacted)***	137	***(redacted)***	155	***(redacted)***
102	***(redacted)***	120	***(redacted)***	138	***(redacted)***	156	***(redacted)***
103	***(redacted)***	121	***(redacted)***	139	***(redacted)***	157	***(redacted)***
104	***(redacted)***	122	***(redacted)***	140	***(redacted)***	158	***(redacted)***
105	***(redacted)***	123	***(redacted)***	141	***(redacted)***		