



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.

SEWARD SHIP'S DRYDOCK, INC.,

Respondent.

OSHRC Docket No. 09-1901

ON BRIEFS:

Edmund C. Baird, Attorney; Steven W. Gardiner, Attorney; Charles F. James, Counsel for Appellate Litigation; Joseph M. Woodward, Associate Solicitor of Labor for Occupational Safety and Health; M. Patricia Smith, Solicitor of Labor; U.S. Department of Labor, Washington, DC
For the Complainant

William F. Mede, Esq.; Turner & Mede, P.C., Anchorage, AK
For the Respondent

DECISION

Before: MACDOUGALL, Chairman; ATTWOOD and SULLIVAN, Commissioners.

BY THE COMMISSION:

This case arises from an inspection conducted by the Occupational Safety and Health Administration of the *Paula Lee*, a 270-foot long, 76-foot wide deck barge that Seward Ship's Drydock, Inc. was repairing at its facility in Seward, Alaska. OSHA issued Seward three citations alleging numerous serious, willful, and repeat violations of the Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651-678, with a total proposed penalty of \$87,300. The only citation item at issue before the Commission is Serious Citation 1, Item 3, alleging a violation of a provision of the OSHA respiratory protection standard, 29 C.F.R. § 1910.134(d)(1)(iii),¹ which

¹ The cited provision specifically states that "[t]he employer shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of

addresses the selection of respirators, the factors upon which to base respirator selection, and requires an employer to “identify and evaluate the respiratory hazard(s) in the workplace”²

Id. Administrative Law Judge Patrick B. Augustine vacated this citation item, finding Seward complied with the cited provision. For reasons different than those found by the judge, we vacate the item.

BACKGROUND

Two OSHA compliance officers conducted a two-day inspection at Seward’s facility. While on board the *Paula Lee*, they observed multiple empty interior tanks, or “voids,” which were located underneath the main deck. Seward’s employees entered the voids through 19-inch wide manholes to perform welding repairs. It is undisputed that the employees used two types of welding rods, each of which contained materials that when burned could result, according to their material safety data sheets (MSDSs), in the release of fumes consisting of, among other substances, carbon monoxide and/or iron oxide.

One of the compliance officers asked Larry Williams, Seward’s shipyard superintendent, for documentation of Seward’s respiratory hazard evaluations for the voids. According to the compliance officer, Williams responded that Seward did not have any because the company relied on a marine chemist certificate it obtained prior to starting work on the barge and on daily atmospheric tests Williams conducted each morning before welding began.³ The marine chemist

employee exposures to respiratory hazard(s) and an identification of the contaminant’s chemical state and physical form. Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be IDLH [immediately dangerous to life or health].” 29 C.F.R. § 1910.134(d)(1)(iii).

² Two citation items were settled prior to the hearing, and as to the remaining items, the judge vacated two, and he affirmed seven as serious and three as repeat, assessing a total penalty of \$34,000.

³ Pursuant to OSHA’s shipyard regulations, certain kinds of hot work (i.e., welding), conducted in a confined space requires initial testing by a marine chemist, who must certify the space as “safe for hot work.” 29 C.F.R. § 1915.14(a). Once the marine chemist certificate has been issued, further testing is conducted at the shipyard by a “competent person.” 29 C.F.R. § 1915.14(b). Marine chemists are certified by the National Fire Protection Association. 29 C.F.R. § 1915.11(b).

In addition to serving as Seward’s shipyard superintendent, Williams was also designated as its shipyard competent person. A “competent person” for purposes of the shipyard standards is “a person who is capable of recognizing and evaluating employee exposures to hazardous substances or to other unsafe conditions and is capable of specifying the necessary protection and precautions to be taken to ensure the safety of employees” 29 C.F.R. § 1915.4(o). One of a competent

who prepared the certificate had evaluated the voids for, among other substances, carbon monoxide, which he found was not present. The judge found that Seward complied with the cited provision because “the Marine [chemist] Certificate on its face indicate[s] an evaluation of respiratory hazards.”

DISCUSSION

In the citation item on review, the Secretary alleges that Seward failed to conduct a respiratory hazard assessment pursuant to 29 C.F.R. § 1910.134(d)(1)(iii). As a threshold matter, on review before the Commission is whether the cited respiratory protection standard provision, § 1910.134(d)(1)(iii), is applicable to the conditions at Seward’s worksite. The Secretary argues that this provision requires an employer to assess its workplace for respiratory hazards in order to determine *whether* respirators are “necessary,” in addition to setting forth requirements for selecting an appropriate respirator. In contrast, Seward responds that the cited provision applies only *if* respirators are “necessary” pursuant to 29 C.F.R. § 1910.134(a)(2);⁴ only then must the assessment mandated by paragraph (d)(1)(iii)—which the company claims applies solely to the selection of an appropriate type of respirator—be conducted.

1. Plain Meaning of § 1910.134(d)(1)(iii)

To determine a standard’s meaning, the Commission must first look to its text and structure. *Superior Masonry Builders Inc.*, 20 BNA OSHC 1182, 1184 (No. 96-1043, 2003) (citing *Unarco Commercial Prods.*, 16 BNA OSHC 1499, 1502-03 (No. 89-1555, 1993); *Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842-43 (1984)). If the wording is unambiguous, the plain language of the standard will govern, even if the Secretary posits a different interpretation. *Id.*; *Blount Int’l Ltd.*, 15 BNA OSHC 1897, 1902 (No. 89-1394, 1992). Both the courts and the Commission have rejected the Secretary’s interpretation of a standard when it strains the plain meaning of the regulatory text. *Worcester Steel Erectors, Inc.*, 16 BNA OSHC 1409, 1418-19 (No. 89-1206, 1993).

person’s duties is to “visually inspect and test each space certified as ‘Safe for Hot Work’ as often as necessary to ensure that atmospheric conditions within that space are maintained within the conditions established by the [marine chemist] certificate after the certificate has been issued.” 29 C.F.R. § 1915.15(c).

⁴ Section 1910.134(a) states, in relevant part: “A respirator shall be provided to each employee when such equipment is necessary to protect the health of such employee.” 29 C.F.R. § 1910.134(a).

In view of both the text and structure of the respiratory protection standard, we find that paragraph (d)(1)(iii) plainly applies only to the selection of respirators. The provision states that “[t]he employer shall identify and evaluate *the* respiratory hazards in the workplace.” 29 C.F.R. § 1910.134(d)(1)(iii) (emphasis added). This plainly presumes that such hazards are present and directs the employer to assess them; the provision does not state that the employer must evaluate the workplace *for* such hazards. See *Murphy Exploration & Prod. Co. v. U.S. Dep’t of the Interior*, 252 F.3d 473, 481 (D.C. Cir. 2001) (noting rule of statutory construction that, if possible, every word be given effect (citing *Reiter v. Sonotone Corp.*, 442 U.S. 330, 339 (1979))). Compare 29 C.F.R. § 1910.132(d)(1) (assessment requirement in OSHA’s general personal protective equipment standard, which provides that “[t]he employer shall *assess the workplace* to determine *if* hazards are present” (emphasis added)).⁵

In addition, the cited provision is in paragraph (d), alongside provisions that deal exclusively with either respirator selection factors or respirator specifications, not in paragraph (a), which contains the “necessary” requirement.⁶ 29 C.F.R. §§ 1910.134(a) (*Permissible practice*),

⁵ The text of paragraph (d), which summarizes the paragraph’s subsidiary provisions, uses a more summary version of the (d)(1)(iii) language, stating that the provisions require the employer “*to evaluate respiratory hazard(s) in the workplace*, identify relevant workplace and user factors, and base respirator selection on [this evaluation].” 29 C.F.R. § 1910.134(d) (emphasis added). Even this formulation indicates that the employer is to evaluate respiratory hazards that are present, rather than evaluate the workplace for their presence. In any event, in light of the greater specificity of paragraph (d)(1)(iii), even if “evaluate respiratory hazards” may be read more broadly than “evaluate *the* respiratory hazards,” we conclude that paragraph (d)’s language is simply a reflection of the summary nature of the paragraph. See, e.g., *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132 (2000) (“[A] reviewing court should not confine itself to examining a particular statutory provision in isolation. The meaning—or ambiguity—of certain words or phrases may only become evident when placed in context.”); *Nuprecon LP DBA Nuprecon Acquisition LP*, 22 BNA OSHC 1937, 1940 (No. 08-1037, 2009) (generally “[i]f a particular standard is specifically applicable to a condition, practice, means, method, operation, or process, it shall prevail over any different general standard which might otherwise be applicable” (citing 29 C.F.R. § 1910.5(c)(1))).

⁶ Paragraphs (d)(1)(i), (d)(1)(ii), and (d)(1)(iv) direct employers to “select” respirators, and paragraphs (d)(2) and (d)(3), titled “*Respirators for IDLH atmospheres*,” and “*Respirators for atmospheres that are not IDLH*,” respectively, address considerations that all relate to respirator selection. 29 C.F.R. §§ 1910.134(d)(1)(i), (d)(1)(ii), (d)(1)(iv), (d)(2), and (d)(3).

The Secretary would have us find significance in the absence of the word “select” from (d)(1)(iii), but “select” is not used in paragraphs (d)(2) or (d)(3), even though each of those provisions clearly deal with respirator selection—paragraph (d)(2) lists specific types of respirators from which

(d) (*Selection of respirators*). See *Davey Tree Expert Co.*, 25 BNA OSHC 1933, 1934 (No. 11-2556, 2016) (citing *Am. Fed'n of Gov't Emps., Local 2782 v. Fed. Labor Relations Auth.*, 803 F.2d 737, 740 (D.C. Cir. 1986) (“[R]egulations are to be read as a whole, with ‘each part or section . . . construed in connection with every other part or section.’ ” (citation omitted)); *Bates v. United States*, 522 U.S. 23, 29-30 (1997) (“ ‘[W]here Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.’ ” (quoting *Russello v. United States*, 464 U.S. 16, 23 (1983)); *Sec. Indus. Ass’n v. Fed. Reserve Sys.*, 847 F.2d 890, 895 (D.C. Cir. 1988) (noting Court’s reliance on the structure of a statute in *Bd. of Governors v. Agnew*, 329 U.S. 441, 447-48 (1947))). Thus, we find unavailing the Secretary’s argument that while § 1910.134(a)(2) “establishes a basic requirement to provide respirators . . . [,] other provisions must be consulted to determine the standard’s full reach.” Rather, we find that § 1910.134(a), the respiratory protection standard’s coverage provision, limits applicability to where respirators are “necessary.”

The Secretary claims that because paragraph (d)(1)(iii) requires an employer, in a situation in which exposure cannot be identified or reasonably estimated, to consider the atmosphere immediately dangerous to life or health (“IDLH”), the provision implicitly addresses an aspect of whether a respirator is “necessary,” and thus it demonstrates that the provision is *not* limited to respirator selection. See 29 C.F.R. § 1910.134(d)(1)(iii) (“Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be IDLH.”). However, the IDLH language in paragraph (d)(1)(iii) addresses what type of respirator to select when a successful hazard assessment is not possible; in such circumstances, the most protective type of respirator must be selected pursuant to the specifications set forth in paragraph (d)(2).⁷ See 29 C.F.R. § 1910.134(d)(2). As such, the IDLH language *presumes* that a determination of whether respirators are necessary is in fact required under § 1910.134(a)(2). For

employers must choose for use by employees in IDLH atmospheres, and paragraph (d)(3) provides that in atmospheres that are not IDLH, “the employer shall provide a respirator that is adequate to protect the health of the employee” 29 C.F.R. §§ 1910.134(d)(2)-(3).

⁷ We note that this is also reflected in the final rule preamble. See *Respiratory Protection*, Final Rule, 63 Fed. Reg. 1152, 1200 (Jan. 8, 1998) (“[T]he Agency intends employers to use [the most protective respirator] when they do not have confidence that a less protective respirator is *sufficient*.” (emphasis added)).

all of these reasons, we find that the assessment specified by § 1910.134(d)(1)(iii) is required only for the selection of respirators—not for the determination of whether respirators are necessary under § 1910.134(a)(2).

2. *Reasonableness of Secretary's Interpretation of § 1910.134(d)(1)(iii)*

Even if we were to consider the cited provision to be ambiguous, we find that the Secretary's interpretation is not entitled to deference. The Commission will normally defer to the Secretary's reasonable interpretation of an ambiguous standard if it “‘sensibly conforms to the purpose and wording of the regulation,’ taking into account ‘whether the Secretary has consistently applied the interpretation embodied in the citation,’ ‘the adequacy of notice to regulated parties,’ and ‘the quality of the Secretary’s elaboration of pertinent policy considerations.’” *U.S. Postal Serv.*, 21 BNA OSHC 1767, 1770 (No. 04-0316, 2006) (citing *Union Tank Car Co.*, 18 BNA OSHC 1067, 1069 (No. 96-0563, 1997); *Martin v. OSHRC (CF&I)*, 499 U.S. 144, 150, 157-58 (1991)); see also *Chao v. Symms Fruit Ranch, Inc.*, 242 F.3d 894, 897 (9th Cir. 2001) (“Generally . . . [a] court must give effect to the unambiguously expressed intent of Congress [But where] Congress has not directly addressed the precise question at issue, the court should defer to [an] agency’s interpretation as long as it is reasonable.” (citing *Chevron*, 467 U.S. at 842-44)).

In arguing that he is entitled to deference here, the Secretary asserts that when OSHA promulgated paragraph (d)(1)(iii) as part of the agency’s 1998 revision of its previous respiratory protection standard, OSHA made clear in the final rule preamble that the provision also applies in determining whether airborne hazards are present in concentrations that make respirators necessary. See *Safeway Store No. 914*, 16 BNA OSHC 1504, 1511 (No. 91-373, 1993) (if “a standard is susceptible to different interpretations, the Commission will consider statements made in the preamble to the standard as the most authoritative guide to the standard’s meaning.” (citing *Am. Sterilizer Co.*, 15 BNA OSHC 1476, 1478 (No. 86-1179, 1992))). Specifically, the Secretary cites to OSHA’s explanation in the final rule’s preamble that the assessment required in (d)(1)(iii) would not have to be based on personal exposure monitoring, and instead it could be based on reasonable estimation techniques, because employers may have sufficient information or data indicating “that . . . a product or material cannot, under worst-case conditions, release concentrations . . . that would trigger the need for respirator use or require use of a more protective respirator.” Respiratory Protection, Final Rule, 63 Fed. Reg. 1152, 1199 (Jan. 8, 1998) (emphasis

added). This argument is contradicted, though, by OSHA’s initial preamble description of paragraph (d)(1)(iii) as addressing hazards that have already been determined to exist in the workplace:

Paragraph (d)(1)(iii) of the final rule requires the employer to identify and evaluate *the* respiratory hazard(s) in the workplace. To perform this evaluation, the employer must make a “reasonable estimate” of the employee exposures anticipated to occur *as a result of those hazards*

Respiratory Protection, Final Rule, 63 Fed. Reg. at 1198 (emphasis added).

In addition, the Secretary fails to account for the fact that OSHA expressly stated that the part of the predecessor respiratory protection standard containing the “necessary” requirement—paragraph (a)—would not be revised in the rulemaking; as the Secretary himself admits on review, paragraph (a) was carried over from the prior standard without change. *See* Respiratory Protection, Notice of Proposed Rulemaking, 59 Fed. Reg. 58,884, 58,895 (Nov. 15, 1994) (“OSHA is . . . proposing to retain the wording in paragraph (a)(2) of the current standard which requires that respirators be provided when such equipment is necessary to protect the health of the employee.”); Respiratory Protection, Final Rule, 63 Fed. Reg. at 1179 (“[I]n the proposal OSHA explained that this rulemaking was not intended to address the substantive portion of paragraph [(a)(1) or (2)].”). Indeed, in the proposed rule’s preamble, OSHA referenced the utility of personal exposure monitoring to respirator selection but made no mention of its use for the initial determination of a need for respirators:

The proposal does not now require monitoring, but it does require that where monitoring results exist, the employer evaluate them *in selecting the proper respirator*. OSHA requests comments and suggestions on whether monitoring should be made mandatory *for making respirator selections*, and what monitoring procedures should be used.

Respiratory Protection, Notice of Proposed Rulemaking, 59 Fed. Reg. at 58,933 (emphasis added).⁸ Similarly, the final rule preamble’s discussion of paragraph (a) makes no mention of paragraph (d)(1)(iii). *See* Respiratory Protection, Final Rule, 63 Fed. Reg. at 1179-81.

⁸ The regulatory history of this standard is replete with references to the need to use the assessment for respirator selection. *See* Respiratory Protection, Notice of Proposed Rulemaking, 59 Fed. Reg. at 58,933 (“In paragraph (d)(3) . . . , the employer is required to evaluate certain information when *selecting* respirators.” (emphasis added)); *id.* at 58,896 (“In order to *select* a respirator which provides the proper degree of protection, it is necessary to know both the anticipated ambient airborne exposure level and the exposure that is acceptable in the breathing zone.” (emphasis added)); *id.* at 58,900 (“The first step in *selecting* respirators for a particular workplace is to

Finally, absent from both the proposed and final rule preambles is any explicit statement of an intent to create a new obligation to use specific assessment procedures for determining *if* respirators are “necessary.” Nor is any such new obligation reflected in OSHA’s economic analysis of the revised respirator standard, which considered only those employers and employees who were *already* using respirators—its estimates are based on the estimated “number of respirator wearers” and “number of establishments with respirator wearers.” *See* Respiratory Protection, Final Rule, 63 Fed. Reg. at 1172 (Table VI-1, “Number of Respirator Users and Their Employers by Industry”); and at 1171-72 (“In all, about 5 million employees are estimated to use respirators The Agency estimates that approximately five percent of workers wear respirators at some time, and that . . . about 20 percent of all establishments[] have employees who use respirators.”).⁹

consider available information concerning workplace conditions and characteristics of the hazardous chemical.” (emphasis added)); *see also* Respiratory Protection, Final Rule, 63 Fed. Reg. at 1195 (“OSHA’s long enforcement experience has shown that employers often lack the information necessary to make informed choices about respirator *selection*.” (emphasis added)); *id.* at 1198 (“Identifying and evaluating the hazards a respirator is to provide protection against clearly play[s] a pivotal role in respirator *selection*.” (emphasis added)); *id.* (“Once an employer identifies the nature of the respiratory hazard or hazards present, the employer must evaluate the magnitude of the hazard to determine the potential exposure of each employee and the extent to which *respirators of various types* can reduce the harm caused by that exposure.” (emphasis added)); *id.* at 1199 (“OSHA finds that it is essential for employers to characterize the nature and magnitude of employee exposures to respiratory hazards before *selecting* respiratory protection equipment.” (emphasis added)).

⁹ Neither the summary of the economic analysis in the final rule preamble nor the economic analysis itself makes any mention or estimates of an anticipated increase in the number of employees using respirators, or the costs or benefits attributable to such an increase. *See* Respiratory Protection, Final Rule, 63 Fed. Reg. at 1172-78; *see also* Final Economic Analysis of OSHA’s Final Respiratory Protection Standard, Exhibit 196 to Respiratory Protection, Final Rule, at I-1 (“[R]espirator technology has changed . . . and OSHA has become increasingly aware of the health risks posed to *employees who use respirators* that have been improperly selected or fitted.” (emphasis added)); *id.* at III-3-4 (“Paragraph (a)(2) of the final rule is . . . unchanged from the corresponding paragraph of the previous § 1910.134. It requires employers to provide respirators when ‘necessary to protect the health of the employee’ ”); *id.* at IV-11 (“The Agency believes that the *respirator-wearing* population is particularly vulnerable to occupationally-related illness as a result of the high exposures this population is known to experience” (emphasis added)); *id.* at IV-25 (“[T]he Agency believes that the final Respiratory Protection standard will lead to an exposure reduction . . . among the *respirator-wearing* population.” (emphasis added)).

In sum, we find that the Secretary's interpretation of paragraph (d)(1)(iii) is contrary to the plain meaning of the standard; even if we were to consider the provision ambiguous, the Secretary's interpretation is not reasonable and would not be entitled to deference.

3. *Whether respirators were "necessary"*

"Respiratory protection is a backup method which is used to protect employees from toxic materials in the workplace in those situations where feasible engineering controls and work practices are not available, have not yet been implemented, are not in themselves sufficient to protect employee health, or in emergencies." Respiratory Protection Final Rule, 63 Fed. Reg. at 1156. Paragraph (d) of § 1910.134 addresses the selection of respirators. 29 C.F.R. § 1910.134(d). As the cited provision in (d)(1)(iii) applies only when, pursuant to (a)(2), respirators are "necessary," the Secretary must show that respirators were "necessary to protect the health" of Seward's employees in order to establish applicability. 29 C.F.R. § 1910.134(a)(2). *See Astra Pharm. Prods., Inc.*, 9 BNA OSHC 2126, 2129 (No. 78-6247, 1981), *aff'd in relevant part*, 681 F.2d 69, 74 (1st Cir. 1982) (elements of Secretary's burden of proving violation include applicability of cited standard). This requires the Secretary to show there was a significant risk of harm necessitating the use of respirators. *Weirton Steel Corp.*, 20 BNA OSHC 1255, 1259 (No. 98-0701, 2003). Whether a significant risk of harm exists depends on both the severity of the potential harm and the likelihood of its occurrence. *Id.* (noting inverse relationship between these two elements). In addition, respiratory protection is "necessary" only when the Secretary shows that a reasonable person familiar with the circumstances surrounding an allegedly hazardous condition, including any facts unique to a particular industry, would recognize a hazard warranting the use of protective equipment. *Owens-Corning Fiberglass Corp.*, 7 BNA OSHC 1291, 1295 (No. 76-4990, 1979), *aff'd on other grounds*, 659 F.2d 1285 (5th Cir. 1981).

Although the Secretary admits that "[t]he record in this case does not contain proof that [Seward's] employees were exposed to a concentration of an airborne substance in excess of the PEL," he maintains that a significant risk of harm existed because there was a "reasonable possibility of overexposure," that is, of exceeding the PEL for carbon monoxide and iron oxide.¹⁰

¹⁰ Despite being asked to brief the specific issue of whether respirators were necessary, nearly all of the Secretary's argument on review is devoted to his position that the cited provision requires an employer to *assess its workplace* for respiratory hazards. Indeed, even the compliance officer's testimony suggests that the Secretary does not fully believe his own contention that overexposure was possible here:

The PELs for both contaminants are calculated as an eight-hour time weighted average, which for carbon monoxide is 50 ppm and for iron oxide is 10 milligrams per cubic meter. 29 C.F.R. § 1910.1000, Table Z-1. We find that the Secretary has not proven that the risk of encountering either carbon monoxide or iron oxide at levels above the PEL made respirators “necessary.”

The Secretary relies largely on what he describes as “OSHA’s own testing [having] showed the presence of carbon monoxide and iron oxide at levels approaching the permissible exposure limit [PEL]”¹¹ 29 C.F.R. § 1910.1000, Table Z-1. However, not only were none of the carbon monoxide samples taken by OSHA above the PEL, none of those samples were measured as an eight-hour time weighted average. On the contrary, a compliance officer obtained a “grab” sample (an instantaneous reading) of 40 ppm of carbon monoxide, well below the PEL, in a void with no forced ventilation in place. Later, when Seward’s employees were on break, a compliance officer tested a different void that did have ventilation in place, and this time obtained even lower grab sample readings of 35-36 ppm of carbon monoxide. As Seward’s expert witness, Philip Dovich, testified, grab samples cannot be used to infer an eight-hour time weighted average. In fact, Dovich noted that he has taken grab samples for carbon monoxide as high as 2,500 to 5,000 ppm near cigarette smoke, without the smokers getting sick or requiring hospitalization.

As for iron oxide, an employee wore a personal sampling monitor for approximately 6.5 hours as he moved between five to eight different voids where welding was taking place.¹² This result—not from a grab sample but measured over a considerable amount of time and under varying conditions—still showed an exposure level below the PEL, 9.1 milligrams per cubic

Q: They could lawfully be working in that area at that time without respirators, right?

A: Yes, they could.

¹¹ On review, the Secretary makes only an abbreviated argument that respirators were also necessary to protect employees against iron oxide exposure. He made no such argument before the judge, though, focusing exclusively on carbon monoxide exposure.

¹² Another welder was also sampled at this time, but the results for his monitoring are not in evidence.

meter.¹³ Thus, for both carbon monoxide and iron oxide, we find that the Secretary has not proven a reasonable possibility of exceeding the PEL for an eight-hour time weighted average.

In addition, the evidence fails to establish that it was reasonably foreseeable that a sudden spike of contaminant levels would be so quick as to preclude Seward from timely protecting its employees—in other words, the Secretary failed to offer sufficient proof, which must establish more than a vague risk, that employees would be exposed to contaminant levels that could abruptly present potential harm, such as exposure above the ceiling limit.¹⁴ Never before has the Commission held that respirators are required with no evidence that there was a significant risk of an exposure above the PEL, and we decline to do so here. *See Snyder Well Serv., Inc.*, 10 BNA OSHC 1371, 1375-76 (No. 77-1334, 1982) (finding significant risk of harm due to distinct possibility of a “sudden excursion” of hydrogen sulfide in concentrations capable of quickly killing unprotected employees); *Gulf Oil Corp.*, 11 BNA OSHC 1476, 1480-81 (No. 76-5014, 1983) (Secretary’s samples of catalyst dust showed concentrations in the area where employees worked were within the prescribed limits and there was no evidence that dust at those levels was hazardous to employees or of a “possible emergency situation occurring as a result of a sudden excursion above a [threshold limit value]”). The need for such protection must be more than a mere “speculative possibility.” *See Weirton Steel Corp.*, 20 BNA OSHC at 1260.

Here, the Secretary’s claim, and our colleague’s agreement with it, that overexposure was reasonably foreseeable is indeed speculative. The grab samples for carbon monoxide were 20-28 percent below the eight-hour time weighted average OSHA set for its PEL. Although the Secretary claims that overexposure was reasonably predictable due to evidence of insufficient and inconsistent ventilation being used in the voids,¹⁵ these grab sample results were well below 50

¹³ The compliance officer inexplicably claimed at the hearing that this result was “just at the PEL” and “almost” an overexposure even though the measured level is clearly below 10 milligrams per cubic meter.

¹⁴ According to NIOSH, carbon monoxide has a 200 ppm ceiling concentration and is considered immediately dangerous to life and health (IDLH) at 1200 ppm. Nat. Institute for Occupational Safety and Health, U.S. Dep’t of Health and Human Services, Pub. No. 2005-149, *Pocket Guide to Chemical Hazards* 54 (2007).

¹⁵ Welders who worked aboard the barge testified that the ventilation was off the majority of the time due to electrical problems and consisted only of a fan at the top of the void without ducts to remove welding fumes from deeper in the void where employees’ breathing zones were located.

ppm in both the void with forced ventilation and the one without it, and no additional evidence was introduced to show that the conditions could suddenly change as to a create an ascent above the PEL or toward the ceiling limit.¹⁶

For iron oxide, the one welder sampled was exposed at a level approximately 10 percent below the eight-hour time weighted average OSHA set for its PEL. Even if this level could be considered to be “approaching” the PEL, the result was a time weighted average over a 6.5 hour period during work in five to eight different voids where welding was taking place; still, there was no overexposure despite whatever ventilation problems had occurred. *See Gulf Oil Corp.*, 11 BNA OSHC at 1480-81 (finding that Secretary failed to establish significant risk of harm where level of quartz dust was within the PEL and there was “no evidence of a possible emergency situation occurring as a result of a sudden excursion above a [threshold limit value].”) Thus, for both carbon monoxide and iron oxide, the Secretary’s evidence regarding exposure is not even consistent with eight-hour time weighted levels exceeding the PEL, let alone the more substantial standard of proof that there was a reasonable possibility of suddenly exceeding their ceiling concentration limits permissible for a specified shorter period of time during an employee’s workday.

While we agree these problems are troubling, there is simply no evidence that such inconsistencies caused conditions necessitating the use of respirators.

¹⁶ Dovich, on the other hand, stated that there was no reasonable possibility of a hazard necessitating the use of respirators:

Q: [W]ould you certify a space for entry that had 40 [ppm] of carbon monoxide when you tested it?

A: Yes. It is perfectly safe to go in at 40 [ppm]. The . . . regulation as you know is 50 [ppm]. So anything below that is safe . . . and that happens all the time. Happens all the time.

Q: If ventilation is turned off does that mean instantaneously that there’s an unacceptable carbon monoxide level?

A: No . . . I don’t think so . . . [V]entilation gets shut off—off and on very often. But shutting the ventilation off doesn’t mean that you will have a high concentration of carbon monoxide right away

Our colleague’s focus on the lack of consistent ventilation is a red herring and results in the hasty generalization that any level of carbon monoxide or iron oxide is bad, so respirators should be required. There is simply no record evidence that under those conditions, or even with a complete lack of ventilation, there was a reasonable possibility that the exposure levels would rise above the PEL or ceiling limit.

Finally, the Secretary’s argument that respirators were necessary here—before there is a reasonable possibility of exposure above the PEL—is contrary to the respiratory protection standard’s preamble, its regulatory history, and the Secretary’s own enforcement guidance.¹⁷ According to the final rule’s preamble, “OSHA considers respirators to be necessary to protect the health of the employee whenever feasible engineering and work practice controls are not available, are not sufficient to protect employee health, have not yet been instituted, in emergencies, and where the health of the employee is at risk (e.g., whenever employee exposure *exceeds an OSHA [PEL]*.” Respiratory Protection Final Rule, 63 Fed. Reg. at 1181 (emphasis added). This shows, in unmistakable terms, that the Secretary recognizes that respirators are not “necessary” where employee exposure has not exceeded the PEL. Thus, our colleague’s and the Secretary’s interpretation to the contrary is at odds with OSHA’s intent as expressed in the preamble.

Further, when OSHA promulgated revisions to the standard, the agency specifically rejected a suggestion that it institute an “action level” at one-half the PEL (or TLV) for triggering the requirement to provide respirators “and that employees be required to wear them *before the PEL is exceeded*.” Respiratory Protection Final Rule. 63 Fed. Reg. at 1160 (emphasis added). Consistent with that decision, OSHA issued guidance stating that protective measures must be instituted, and where there is a failure to do so a citation may be considered, “whenever exposures *exceed* permitted levels.” OSHA Directive CPL 02-00-120, Inspection Procedures for the

¹⁷ While considerable weight is given to the agency’s representation as to its authority to regulate cited working conditions, the Commission “independently reviews the statutory and regulatory provisions at issue, as well as the evidence, to determine whether that view is reasonably supported by the record.” *JTM Indus.*, 19 BNA OSHC 1697, 1699 (No. 98-0030, 2001). *See also Superior Rigging & Erecting Co.*, 18 BNA OSHC 2089, 2091 (No. 96-0126, 2000) (citing *Nooter Constr. Co.*, 16 BNA OSHC 1572, 1574 (No. 91-0237, 1994) (where the language of a standard is not explicit, the Commission looks to extrinsic evidence of the standard’s scope and meaning; legislative history and preamble of the standard are considered the most authoritative evidence)); *Gen. Motors Corp.*, 22 BNA OSHC 1019, 1028 (No. 91-2834E, 2007) (consolidated) (preamble is best and most authoritative statement of the Secretary’s intent for standard susceptible to different interpretations); *Perez v. Loren Cook Co.*, 803 F.3d 935, 939 (8th Cir. 2015) (agency’s interpretation not entitled to deference “when the interpretation is plainly erroneous or inconsistent . . . [or] when there is reason to suspect that the agency’s interpretation does not reflect the agency’s fair and considered judgment on the matter in question This may be evidenced by an agency’s current position conflicting with prior interpretations, by an agency’s use of the position as nothing more than a litigating position, or by the use of the interpretation as a post hoc rationalization for prior action.”).

Respiratory Protection Standard (September 25, 1998) (emphasis added).¹⁸ Thus, it is clear that the Secretary did not intend to require respirators when exposure is below the PEL. Any inconsistent position is not entitled to deference.

In sum, the evidence of record falls well short of establishing that respirators were “necessary.” Accordingly, we find that (d)(1)(iii) is not applicable to Seward’s welding operations and vacate Citation 1, Item 3.

SO ORDERED.

/s/

Heather L. MacDougall
Chairman

/s/

James J. Sullivan, Jr.
Commissioner

Dated: February 28, 2018

¹⁸ OSHA’s current instruction similarly states that “[r]espirators must be used in conjunction with feasible controls whenever exposures cannot be controlled at or below permissible limits.” OSHA Directive CPL 02-00-158, Inspection Procedures for the Respiratory Protection Standard (June 26, 2014).

ATTWOOD, Commissioner, concurring and dissenting:

I concur only with my colleagues' conclusions in Parts 1 and 2 of the majority opinion, in which they find that § 1910.134(d)(1)(iii) applies only if the Secretary establishes that respirator use is "necessary" under 29 C.F.R. § 1910.134(a)(2). I dissent, however, from their conclusion in Part 3 because I find that the Secretary established both the applicability of the cited provision (i.e., that respirators were "necessary" under § 1910.134(a)(2)) and Seward's noncompliance.

1. Applicability of § 1910.134(d)(1)(iii)

As we have held, to prove applicability here the Secretary must show that respirators were "necessary to protect the health" of Seward's employees. 29 C.F.R. § 1910.134(a)(2). Respirator use is "necessary" whenever a respiratory hazard is shown to exist, and such a hazard exists when there is a significant risk of respiratory harm. *See Weirton Steel Corp.*, 20 BNA OSHC 1255, 1259 (No. 98-0701, 2003) (citing *Anoplate Corp.*, 12 BNA OSHC 1678, 1681-82 (No. 80-4109, 1986)). Whether such a risk exists depends on the severity of the potential harm and the likelihood of its occurrence, which are inversely related. *Id.* (citing *Pratt & Whitney Aircraft v. Donovan*, 715 F.2d 57, 64 (2d Cir. 1983)).

I find that the facts in this case establish that there was a significant risk of harm to exposed employees at Seward's workplace. Regarding the severity of the potential harm, Material Safety Data Sheets (MSDSs) for the welding rods Seward used show that they can produce hazardous fumes containing, among other substances, iron oxide and carbon monoxide. The MSDSs, coupled with the compliance officers' testimony, establish that (1) short-term overexposure to welding fumes can aggravate pre-existing respiratory problems, such as asthma and emphysema; and (2) long-term overexposure can affect pulmonary function by decreasing both respiratory efficiency and lung capacity and, in the case of iron oxide, can cause siderosis (iron deposits in the lung). Furthermore, as one of the compliance officers testified, carbon monoxide is a chemical asphyxiate which, at excess levels, can result in unconsciousness and death.

As to the likelihood of occurrence, I find the evidence shows that overexposure to airborne hazards was a reasonable possibility for Seward's employees. Throughout these proceedings, Seward has repeatedly emphasized its reliance on ventilation rather than monitoring to maintain safe conditions inside the voids.¹ It is entirely possible that effective ventilation would have

¹ The only regular monitoring that Seward performed was at the beginning of each shift, *before* any welding took place.

maintained exposures to iron oxide and carbon monoxide below their respective PELs. As my colleagues point out, however, two of Seward's welders testified that prior to OSHA's arrival, ventilation had been used intermittently at best and even when used, it was ineffective. Specifically, one welder testified that ventilation was not working a majority of the time due to electrical problems on the ship. And another testified that even when ventilation was used in the starboard ballast tank, it consisted of a single fan at the top and there were no ducts to remove welding fumes from deeper in the void where the employees' breathing zones were located. Indeed, the compliance officers both observed smoky conditions in the voids and, prior to the inspection, both welders had complained to their supervisor about poor ventilation in the starboard ballast tank. When ship superintendent Larry Williams eventually tested the space with a gas meter, it began to audibly alarm.

OSHA's test results showed time weighted average iron oxide levels for one Seward welder at just below the PEL, and carbon monoxide grab samples at elevated levels but below the PEL (if they persisted unchanged) in two separate voids. Specifically, the compliance officers' testing revealed carbon monoxide at 40 ppm in the crane turnstile void, which had no ventilation in place. Testing in the starboard ballast tank, in which ventilation was being used, showed a level that "rose to" 35 ppm. One of the compliance officers testified that he was concerned about both readings, but especially the starboard ballast tank's reading because it was taken during the employees' break in the absence of any welding. According to the compliance officer, a carbon monoxide reading at this level—in the absence of active welding—means the space was not being adequately ventilated. *See, e.g., Elliot Constr. Corp.*, 23 BNA OSHC 2110, 2116 n.9 (No. 07-1578, 2012) (finding judge properly rejected as illogical the claim that carbon monoxide levels "would peak *after* the gas-powered equipment [generating those levels] had been turned off" (emphasis in original)). Furthermore, after the compliance officers had begun testing in the crane turnstile void, Seward's attempt to ventilate the space proved so difficult that it ultimately elected to simply remove its employees from the void altogether. Given Seward's stated reliance on ventilation to maintain a safe atmosphere, this evidence establishes a reasonable possibility of overexposure to both iron oxide and carbon monoxide.

Contrary to Seward's and my colleagues' contention, the absence of any readings exceeding the OSHA PELs does not preclude a finding that respiratory protection was necessary. Here, Seward chose to place sole reliance on ventilation to prevent the contaminants produced

during welding from exceeding the PEL—it did no atmospheric monitoring while the welders worked in these confined spaces. It therefore depended on the ventilation equipment being present, operating, *and effective* to remain in compliance with the standard.

Ventilation, however, was absent entirely from one void in which welders worked, and known electrical failures and visible smoke signaled that there were problems with the ventilation in another void. In these circumstances Seward could no longer assume that the PELs would not be exceeded. The elevated iron oxide level and elevated carbon monoxide grab sample levels taken by the compliance officers corroborate that, without the benefit of consistent and effective ventilation or monitoring, there was a significant risk the PELs would be exceeded as the welders continued to work, triggering the need for respirators.

Given these conditions, evidence of actual overexposure is not a prerequisite to finding that a “significant risk of harm” is present here because the intent of the Act and cited respiratory protection standard is to *prevent* harm. This principle was recognized in *Snyder Well Servicing, Inc.*, in which the Commission found a significant risk of harm from exposure to hydrogen sulfide gas because a “sudden excursion” of the gas in concentrations capable of quickly killing unprotected employees was possible even though OSHA’s testing had revealed only trace amounts of the gas. 10 BNA OSHC 1371, 1375-76 (No. 77-1334, 1982). In the instant case, a slow increase of carbon monoxide levels could be equally dangerous—carbon monoxide is odorless and colorless, so without monitoring its accumulation during welding in the confines of the voids could have been just as unexpected and deadly.

Based upon this evidence, particularly Seward’s demonstrated inability to provide consistent and effective ventilation in the voids, I find there was a reasonable likelihood that the welders’ exposure to iron oxide and carbon monoxide would exceed their respective PELs. Thus, Seward’s welding operations subjected employees to a significant risk of respiratory harm, and respirators were therefore “necessary” under § 1910.134(a)(2). Accordingly, I would find that § 1910.134(d)(1)(iii) was applicable to the conditions at Seward’s worksite.

2. *Noncompliance*

The cited provision requires that an employer “identify and evaluate the respiratory hazard(s) in the workplace . . . , [including] a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant’s chemical state and physical form.” 29 C.F.R. § 1910.134(d)(1)(iii). When asked for documentation of Seward’s evaluation of

respiratory hazards, superintendent Williams responded that the company “did not have any of that information,” because it “relied on the marine chemist to provide that information for them.” The judge found that obtaining the marine chemist certificate constituted an evaluation under § 1910.134(d)(1)(iii). On review, the Secretary argues that the assessment conducted to obtain a marine chemist certificate fails to account for the respiratory hazards that may be generated once welding activities have begun and is therefore inadequate to comply with the standard.

I agree with the Secretary that the judge erred in accepting the marine chemist certificate as an evaluation that complied with the cited provision. The requirement to obtain a marine chemist certification arises under OSHA’s shipyard standards and addresses safety hazards—the prevention of fire and/or explosion from a combustible atmosphere—not the atmospheric health hazards addressed by the respiratory protection standard. In short, establishing that a space is “Safe for Hot Work” is not the same as “estimat[ing] . . . employee exposures to respiratory hazards.”

Furthermore, none of the other measures Seward claims it took constitute compliance with the cited standard. Seward points to Williams’s testimony that he evaluated respiratory hazards every morning before welding began, and that testing beyond these morning checks was performed when circumstances dictated, including when employees made complaints. However, because Williams’s morning tests were conducted before welding work even started, they could not possibly evaluate the respiratory hazards associated with the use of the welding rods. And by Williams’s own admission, his morning tests were conducted to ensure that atmospheric conditions stayed within the parameters of the marine chemist certificate, not to assess potential respiratory hazards. Thus, this testing could not have constituted “a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant’s chemical state and physical form.” 29 C.F.R. § 1910.134(d)(1)(iii).

Waiting to conduct an evaluation until an employee complains also runs counter to the respiratory protection standard’s prophylactic purpose—“the employer must make a ‘reasonable estimate’ of the employee exposures *anticipated to occur* as a result of . . . hazards”²

² Similarly unavailing is Seward’s reliance on Williams’s testimony that on April 15, 2009, when Seward’s project manager smelled acetylene emanating from a void welders were preparing to enter, the manager instructed Williams to test the void with a gas meter to determine whether the atmosphere was safe. Williams testified that he tested the void, the welders were assigned to work

Respiratory Protection, Final Rule, 63 Fed. Reg. at 1198 (emphasis added); *see also Arcadian Corp.*, 20 BNA OSHC 2001, 2008 (No. 93-0628, 2004) (“ ‘[t]he goal of the Act is to prevent the first accident, not to serve as a source of consolation for the first victim or his survivors.’ ” (quoting *Mineral Indus. & Heavy Constr. Grp. v. OSHRC*, 639 F.2d 1289, 1294 (5th Cir. 1981))). Under well-settled precedent, the evaluation contemplated by the standard is plainly prospective in nature, intended to take place *before* actual exposures occur.

Finally, Seward asserts that it was in compliance with the assessment requirement because, based on its prior experience, it reasonably believed that its use of ventilation would prevent unsafe exposures to respiratory hazards. However, Seward never actually estimated the types and levels of contaminants that could result from its welding work, or the rate and volume of ventilation necessary to control any such contaminants at safe levels. In addition, Seward’s purported “experience” was based on its practice of relying on the absence of employee complaints or other overt signs of any problems as verification that its ventilation was adequate—it performed no actual testing. But with a hazardous substance that is odorless and/or colorless, such as carbon monoxide, Seward’s practice could never reliably show that its ventilation practices were adequate. As OSHA has made clear, estimates under § 1910.134(d)(1)(iii) must be based on data, and such data must have a sufficient connection to the worksite:

For example, employers may rely on information *and data* that indicate that use or handling of a product or material cannot, under worst-case conditions, release concentrations of a respiratory hazard above a level that would trigger the need for respirator use or require use of a more protective respirator. This approach is similar to that used in several OSHA substance-specific health standards, which permit employers to use objective data in lieu of exposure monitoring to demonstrate that their employees cannot be exposed above an action level. Objective data can be obtained from an industry study or from laboratory test results conducted by manufacturers of products or materials being used in the workplace. To generalize from data in an industry-wide survey to conditions *in a specific workplace*, the survey must have obtained data under conditions closely resembling the processes, types of materials, control methods, work practices, and environmental conditions in the workplace to which it will be generalized, i.e., the employer’s operation.

...

Another approach that can be used by employers to estimate employee exposures involves using mathematical approaches and obtainable information. Employers

in another space, and the void was ventilated, re-tested, and ultimately found to be safe. But this approach is wholly ineffective for odorless respiratory hazards such as carbon monoxide.

can use data on the physical and chemical properties of air contaminants, *combined with information on room dimensions, air exchange rates, contaminant release rates, and other pertinent data*, including exposure patterns and work practices, to estimate the maximum exposure that could be anticipated in the workplace.

Respiratory Protection, Final Rule, 63 Fed. Reg. at 1199 (emphasis added).

Here, Seward failed to account for project-specific variables on the *Paula Lee*, opting instead to simply rely on its prior experience of using ventilation. Not only did production manager Kenneth Willis testify that he had been “doing this all his life,” using the “same type [of] rods, same wire, [and] same type [of] steel,” and that in his experience, as long as ventilation is utilized there is no need for employees to use respirators, he also asserted: “I don’t know why [the hazard assessment] process would have to be duplicated every time we do a barge or a ship.” But the key presumption upon which Seward based its belief that the atmosphere would be safe—the use of ventilation—was unfounded in this case given the unrebutted testimony that ventilation on the *Paula Lee* was interrupted by power failures, and in some cases failed to reach the part of the voids where the employees were actually performing the welding work.

Accordingly, because I find that Seward was required but failed to conduct the assessment required by § 1910.134(d)(1)(iii), I dissent.³

Dated: February 28, 2018

/s/ _____
Cynthia L. Attwood
Commissioner

³ Seward also argues that the § 1910.134(d)(1)(iii) citation is duplicative of the citation it received for violating § 1915.15(c), which was affirmed by the judge, and which Seward does not challenge on review. Applying the analysis set forth in my dissenting opinion in *North Eastern Precast, LLC*, OSHRC Docket Nos. 13-1169 and 13-1170 (2018), I would find the citations are not duplicative.

**UNITED STATES OF AMERICA
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION**

Secretary of Labor,

Complainant,

v.

Seward Ship's Drydock, Inc.,

Respondent.

OSHRC DOCKET NO. 09-1901

Appearances:

Evan Nordby, Esq., Office of the Solicitor, U.S. Department of Labor, Seattle, Washington
For Complainant

William Mede, Esq., Turner & Mede, PC, Anchorage, Alaska
For Respondent

Before: Administrative Law Judge Patrick B. Augustine

DECISION AND ORDER

Procedural History

This proceeding is before the Occupational Safety and Health Review Commission ("the Commission") pursuant to Section 10(c) of the Occupational Safety and Health Act of 1970, 29 U.S.C. §651 *et seq.* ("the Act"). The Occupational Safety and Health Administration ("OSHA") conducted an investigation of a Seward Ship's Drydock, Inc. ("Respondent") worksite in Seward, Alaska between April 14, 2009 and September 29, 2009. As a result of that investigation, OSHA issued a *Citation and Notification of Penalty* ("Citation") to Respondent alleging fourteen violations of the Act. Respondent timely contested the Citation. During the trial in Anchorage, Alaska on March 23-25, 2011, the parties submitted two *Partial Settlement Agreements* which fully resolved Citation 1, Items 2 and 5.¹ (Tr. 10, 606, 705). Therefore, only Citation 1, Items 1, 3, 4a, 4b, 6, 7, 8, 9; Citation 2, Item 1; and Citation 3, Items 1, 2, and 3 remained in dispute at the conclusion of the trial. Each party filed timely post-trial

¹ The *Partial Settlement Agreements* were formally approved on August 23, 2011.

briefs.

Jurisdiction

Jurisdiction of this action is conferred upon the Commission pursuant to Section 10(c) of the Act. At all times relevant to this action, Respondent was an employer engaged in a business affecting interstate commerce within the meaning of Section 3(5) of the Act, 29 U.S.C. §652(5). (Tr. 341; Ex. C-34); *Complaint and Answer*; *Slingluff v. OSHRC*, 425 F.3d 861 (10th Cir. 2005).

Applicable Law

To establish a *prima facie* violation of a specific regulation promulgated under Section 5(a)(2) of the Act, Complainant must prove by a preponderance of the evidence that: (1) the standard applied to the cited condition; (2) the terms of the standard were violated; (3) one or more of the employer's employees had access to the cited conditions; and (4) the employer knew, or with the exercise of reasonable diligence could have known, of the violative conditions. *Ormet Corporation*, 14 BNA OSHC 2134, 1991 CCH OSHD ¶29,254 (No. 85-0531, 1991).

Section 5(a)(1) of the Act (a/k/a the "General Duty Clause") states that "each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." 29 U.S.C. §654(a)(1). To establish a *prima facie* violation of Section 5(a)(1), Complainant must prove by a preponderance of the evidence that: (1) a condition or activity in the workplace presented a hazard to employees, (2) the employer or its industry recognized the hazard, (3) the hazard was likely to cause death or serious physical harm, and (4) a feasible and effective means existed to eliminate or materially reduce the hazard. *Kokosing Constr. Co.*, 17 BNA OSHC 1869, 1995-96 CCH OSHD ¶31,207 (No. 92-2596, 1996). In addition, the evidence must show that the employer knew, or with the exercise of reasonable diligence, could have known of the hazardous condition. *Otis Elevator Company*, 21 BNA OSHC 2204, 2007 CCH OSHD ¶32,920 (No. 03-1344,

2007).

A violation was serious if there was a substantial probability that death or serious physical harm could have resulted from the condition. 29 U.S.C. 666(k). Complainant need not show that there was a substantial probability that an accident would actually occur; she need only show that if an accident had occurred, serious physical harm or death could have resulted. *Whiting Turner Contracting Co.*, 13 BNA OSHC 2155, 1989 CCH OSHD ¶28,501 (No. 87-1238, 1989). If the possible injury addressed by the cited regulation is death or serious physical harm, a violation of that regulation is serious. *Phelps Dodge Corp. v. OSHRC*, 725 F.2d 1237, 1240 (9th Cir. 1984); *Dec-Tam Corp.*, 15 BNA OSHC 2072, 1993 CCH OSHD ¶29,942 (No. 88-0523, 1993).

When Complainant alleges a repeat violation, it has the burden of establishing that the past and present violations were substantially similar. *Potlatch Corp.*, 7 BNA OSHC 1061, 1063 (No. 16183, 1979). Complainant makes a *prima facie* showing of substantial similarity by establishing that the both violations were for failure to comply with the same regulatory standard, or that the employer failed to protect employees from similar hazards. The burden then shifts to Respondent to rebut that showing. *Monitor Construction Co.*, 16 BNA OSHC 1589, 1594 (No. 91-1807, 1994).

A violation is “willful” if it is “committed ‘with intentional, knowing or voluntary disregard for the requirements of the Act, or with plain indifference to employee safety.’” *Kaspar Wireworks, Inc.*, 18 BNA OSHC 2178, 2000 CCH OSHD ¶32,134 (No. 90-2775, 2000); *Ensign-Bickford Co. v. OSHRC*, 717 F.2d 1419, 1422-23 (D.C. Cir. 1983). The employer’s state of mind is the key issue. *AJP Construction, Inc.*, 357 F.3d 70 (D.C. Cir. 2004). Complainant must show that Respondent had a “heightened awareness” of the illegality of its conduct. *Id.* Heightened awareness is more than simple awareness of the conditions constituting the alleged violation; such evidence is already necessary to establish the basic violation. *Id.* Instead, Complainant must show that Respondent was actually aware

of the unlawfulness of its action or that it “possessed a state of mind such that if it were informed of the standards, it would not care.” *Id.*

In calculating the appropriate penalty for affirmed violations, Section 17(j) of the Act requires the Commission to give “due consideration” to four criteria: (1) the size of the employer's business, (2) the gravity of the violation, (3) the good faith of the employer, and (4) the employer's prior history of violations. 29 U.S.C. §666(j). Gravity is the primary consideration and is determined by the number of employees exposed, the duration of the exposure, the precautions taken against injury, and the likelihood of an actual injury. *J.A. Jones Construction Co.*, 15 BNA OSHC 2201, 1993 CCH OSHD ¶29,964 (No. 87-2059, 1993). It is well established that the Commission and its judges conduct *de novo* penalty determinations and have full discretion to assess penalties based on the facts of each case and the applicable statutory criteria. *Allied Structural Steel*, 2 BNA OSHC 1457 (No. 1681, 1975); *Valdak Corp.*, 17 BNA OSHC 1135 (No. 93-0239, 1995).

Discussion

Respondent performs repair work on ships, both in drydock and while floating, at its facility in Seward, Alaska. (Tr. 13). On April 14, 2009, OSHA received an employee complaint by telephone concerning welding and confined space safety issues for repairs being performed on the *Paula Lee*, a 270-foot-long, 76-foot-wide, deck barge. (Tr. 13, 61, 311, 489-490, 575; Ex. C-1). OSHA Compliance Officers Matt Pauli and John Casper were dispatched to Seward, Alaska the same day to begin an investigation. (Tr. 57-58, 382). They physically inspected the working conditions on and around the *Paula Lee* for two days: April 14-15, 2009. (Tr. 57-58, 103). Their investigatory findings serve as the basis for the citations proposed in this case.

Several witnesses testified at trial: (1) Matt Pauli, an OSHA Compliance Safety and Health Officer (“CSHO”); (2) Henry Hogge, a welder employed by Respondent on the *Paula Lee* project; (3) John Casper, an OSHA Compliance Safety and Health Officer ; (4) Joseph Graham, a Certified Marine

Chemist; (5) Scott Ketcham, the OSHA Anchorage Area Director; (6) Kenneth Willis, Respondent's Production Manager; (7) Larry Williams, Respondent's Ship Superintendent and Shipyard Competent Person; (8) Bruce Whitmore, a welder employed by Respondent on the *Paula Lee* project; (9) Bernie Lewis, Respondent's Welding Supervisor; (10) John Moreno, Respondent's Paint Crew Foreman; and (11) Philip Dovich, a Senior Marine Chemist and testifying expert on shipyard work and shipyard safety. (Tr. 54, 279, 340, 378, 445, 485, 505, 584, 608, 706, 726, 733).

Citation 1 Item 1

Complainant alleged a serious violation of Section 5(a)(1) of the Act in Citation 1, Item 1 as follows:

Section 5(a)(1) of the Occupational Safety and Health Act of 1970: The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to struck-by hazards:

(a) Paula Lee Barge, Weather Deck, Port-Stern: On or about April 15, 2009 and at times prior thereto, whip protection was not provided at one (1) header on the compressed air hose manifold operating at 108 p.s.i.g. This condition exposed employees to struck-by hazards in the event the hose released from the connection point.

(b) Paula Lee Barge, Weather Deck: On or about April 15, 2009 and at times prior thereto, whip protection was not provided at a ventilation (Copus) blower operating with an entry pressure of 108 p.s.i.g. pressure. This condition exposed employees to struck-by hazards in the event the hoses released from the termination point at the blower.

(c) Paula Lee Barge, Port-Stern Mooring Bit: On or about April 15, 2009 and at times prior thereto, whip protection was not provided at a compressed air line segment operating at 108 p.s.i.g. adjacent to the port-stern mooring bit. This condition exposed employees to struck-by hazards in the event the hoses released from the connection point.

(d) Paula Lee Barge, Weather Deck, Midship: On or about April 15, 2009 and at times prior thereto, whip protection was not provided at compressed air line segments operating at 108 p.s.i.g. This condition exposed employees to struck-by hazards in the event the hoses released from the connection point.

During the inspection, CSHO Pauli observed numerous compressed air lines on the deck of the *Paula Lee* which were powering various tools used by Respondent's employees. (Tr. 152-161; Ex. C-15). The lines were an inch thick, had metal fittings on each end, and were charged with 108 pounds of pressure. (Tr. 162, 536; Ex. C-15). Most of the air lines were equipped with keeper clips, which served as a secondary means of keeping the air hoses connected, to protect employees in the area from loose lines "whipping" around. (Tr. 274-278).

CSHO Pauli observed four charged air lines on the *Paula Lee* deck which lacked keeper clip protection. (Tr. 152-161, 274; Ex. C-15). The condition of the four lines was in plain view to anyone who walked by. (Tr. 164). This posed a hazard to Respondent's employees and supervisors, who walked and worked all over the deck, in that energized air lines which accidentally became disconnected could strike them. (Tr. 163, 694). The whipping lines could have caused contusions, broken bones, or even loss of consciousness. (Tr. 163).

Respondent recognized the hazard associated with loose, charged, air lines as Respondent's Production Manager, Kenneth Willis, testified that Respondent buys approximately 1,500 keeper clips each year, that he had personally observed an energized air hose while disconnected, and conceded that they can "wave a little." (Tr. 537-538, 556). Even if additional clips were unavailable, safety wire could have been used to secure the hoses in the event they unexpectedly became disconnected. (Tr. 164). Therefore, multiple feasible means of abatement existed.

Respondent argued that Citation 1 Item 1 is preempted because a specific regulation addresses the condition which was cited. Specific regulations promulgated under Section 5(a)(2) of the Act can preempt the General Duty Clause, but only with respect to hazards, conditions, or practices expressly covered by the specific standards. *Con Agra, Inc.*, 11 BNA OSHC 1141, 1983 CCH OSHD ¶26,420 (No. 79-1146, 1983). When the abatement required by specific standards does not eliminate the hazard addressed by a general duty clause citation, no preemption will be found. *Coleco Industries*,

Inc., 14 BNA OSHC 1961, 1991 CCH OSHD ¶29,200 (No. 84-546, 1991). The court rejects Respondent's argument that this violation is preempted by 29 C.F.R. §1915.131(h) because that standard only addresses the requirement to visually inspect air hoses, not the recognized practice of attaching keeper clips to the hoses in the event they accidentally become disconnected. (Tr. 165).

Complainant established the elements required to prove Citation 1, Item 1. Therefore, it will be AFFIRMED. However, based on the fact that Respondent had keeper clips on all but four lines, and the court's acceptance of its argument that the clips frequently came off despite their best efforts to maintain them, the proposed penalty for Citation 1, Item 1 will be reduced to \$500.00.

Citation 1 Item 3

Complainant alleged a serious violation of the Act in Citation 1, Item 3 as follows:

29 C.F.R. §1910.134(d)(1)(iii): The employer did not identify and evaluate the respiratory hazard(s) in the workplace to include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form (applicable to shipyard employment by 29 CFR 1915.154): Paula Lee Barge: On or about April 14, 2009 and at times prior thereto, respiratory hazards for welders and helpers working in confined spaced had not been evaluated. This condition exposed employees to inhalation hazards.

The cited standard provides:

29 C.F.R. §1910.134(d)(1)(iii): The employer shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be IDLH.

The *Paula Lee* contained multiple, empty, interior tanks, or "voids", which were underneath the main deck and accessible only through manholes approximately 19 inches wide. (Tr. 516, 519; Ex. C-4). Respondent's employees entered the voids through the manholes and performed welding repairs. (Tr. 126, 213, 592, 649-650). During the inspection, CSHO Pauli asked Respondent's

Shipyard Superintendent, Larry Williams, for a copy of Respondent's respiratory hazard evaluations for the voids and was told that Respondent had none, and instead relied on the Marine Chemist Certificate and his own daily atmospheric tests. (Tr. 175-176). Joseph Graham, the Marine Chemist hired by Respondent to assess the safety of performing hot work inside the *Paula Lee* voids, confirmed that as part of his ship inspection and issuance of the Marine Chemist Certificate, he evaluated the respiratory hazards posed to Respondent's employees. (Tr. 463; Ex. C-3). His evaluation and inspection revealed normal oxygen levels, no carbon monoxide, and no explosivity, and thus the Marine Certificate on its face indicated an evaluation of respiratory hazards with no conditions which required correction. (Tr. 454; Ex. C-3). He further testified that the entire barge was covered by his inspection and subsequently issued Marine Chemist Certificate. (Tr. 472). Therefore, the court concludes that Respondent did evaluate the respiratory hazards on the *Paula Lee*. Accordingly, Complainant failed to establish that Respondent violated the requirements of the cited standard. Citation 1, Item 3 will be VACATED.

Citation 1 Item 4a

Complainant alleged a serious violation of the Act in Citation 1, Item 4a as follows:

29 C.F.R. §1910.334(a)(2)(i): Portable cord and plug-connected electrical equipment and flexible cord sets (extension cords) were not visually inspected before use on any shift for external defects (such as loose parts, deformed and missing pins, or damage to outer jacket or insulation) and for evidence of possible internal damage (such as pinched or crushed outer jacket):

(a) Paula Lee Barge, Crane Turnstile: On or about April 15, 2009 and at times prior thereto, the employer had not performed a visual inspection of an Americ #100 ventilation fan which was observed to have defective strain relief. This condition exposed employees to electrical shock hazards from the 120 volt circuit;

(b) Paula Lee Barge, Crane Turnstile: On or about April 15, 2009 and at times prior thereto, the employer had not performed a visual inspection of a flexible cord used to power an Americ #100 ventilation fan. The flexible cord was observed to have defective strain relief at the plug device. This condition exposed employees to electrical shock

hazards from the 120 volt circuit.

The cited standard provides:

29 C.F.R. §1910.334(a)(2)(i): Portable cord- and plug-connected equipment and flexible cord sets (extension cords) shall be visually inspected before use on any shift for external defects (such as loose parts, deformed and missing pins, or damage to outer jacket or insulation) and for evidence of possible internal damage (such as pinched or crushed outer jacket). Cord- and plug-connected equipment and flexible cord sets (extension cords) which remain connected once they are put in place and are not exposed to damage need not be visually inspected until they are relocated.

CSHO Casper conceded during his testimony at trial that Citation 1, Item 4a was based solely on the fact that the two cords identified in the citation item were damaged. (Tr. 434-435). OSHA presented no evidence to affirmatively establish that Respondent had failed to conduct a visual inspection of the cords. (Tr. 434-435). Furthermore, CSHO Casper acknowledged that Respondent's Tool Room Operator told him that he conducted visual inspections of tools and equipment as they were returned. (Tr. 435). The mere existence of defective electrical cords on a jobsite is insufficient to affirmatively establish that the employer failed to visually inspect electrical equipment. Accordingly, Citation 1, Item 4a will be VACATED.

Citation 1 Item 4b

Complainant alleged a serious violation of the Act in Citation 1, Item 4b as follows:

29 C.F.R. §1910.334(a)(2)(ii): When there was a defect or evidence of damage that could expose an employee to injury, the defective or damaged item was not removed from service until the repairs and tests necessary to render the electrical equipment safe had been made:

(a) Paula Lee Barge, Crane Turnstile Void: On or about April 15, 2009 and at times prior thereto, an Americ #100 ventilation blower with damaged strain relief, was not removed from service. This condition exposed employees to electrical shock hazards from the 120 volt service;

(b) Paula Lee Barge, Crane Turnstile Void: On or about April 15, 2009 and at times prior thereto, a flexible extension cord for the Americ #100 blower had damaged strain relief. This equipment was not removed from service. This condition exposed employees to electrical shock hazards from the 120 volt service.

The cited standard provides:

29 C.F.R. §1910.334(a)(2)(ii): If there is a defect or evidence of damage that might expose an employee to injury, the defective or damaged item shall be removed from service, and no employee may use it until repairs and tests necessary to render the equipment safe have been made.

CSHO Casper observed and photographed cords on a ventilation fan and a blower with damaged strain relief, which were being used by Respondent's employees on the *Paula Lee*, as the outer sheathing had pulled away, exposing interior conductor wires. (Tr. 399, 405; Ex. C-22). Employees were observed walking by the fans frequently during the inspection, and both cords were in plain view. (Tr. 404, 408). Employees who contacted the exposed interior wiring could have received an electrical shock. (Tr. 402, 407). Wet conditions onboard the *Paula Lee* increased the likelihood of shock from contact with the exposed conductor wires. (Tr. 404). It was unclear how long the condition had existed, but Respondent had an electrician onboard who was actively addressing electrical deficiencies. (Tr. 430, 436, 443, 615-616).

The court finds that the standard applied to the cited condition, the terms of the standard were violated, employees working and walking in the area of the cords were exposed, constructive knowledge was established in that Respondent could have known of the condition with the exercise of reasonable diligence, and a serious injury which could have resulted if an employee had been shocked. Accordingly, Citation 1, Item 4b will be AFFIRMED. Based on the totality of the circumstances, including the fact that Respondent had an electrician onsite actively addressing electrical problems and deficiencies at the time, the penalty for Citation 1, Item 4b will be reduced to \$1,000.00.

Citation 1 Item 6

Complainant alleged a serious violation of the Act in Citation 1, Item 6 as follows:

29 C.F.R. §1915.73(e): When employees are working near the unguarded edges of decks of vessels afloat the employer did not provide them with personal flotation devices. Paula Lee Barge: On or about April 15, 2009 and times prior thereto, employees were working next to the unguarded edges of the weather deck while the vessel was afloat. This condition exposed employees to drowning and hypothermia hazards.

The cited standard provides:

29 C.F.R. §1915.73(e): When employees are working near the unguarded edges of decks of vessels afloat, they shall be protected by personal flotation devices, meeting the requirements of §1915.158(a).

Some of Respondent's employees and supervisors were observed during OSHA's inspection working near cluttered, unguarded edges of the deck of the *Paula Lee* without wearing personal flotation devices (PFDs). (Tr. 186-190, 348; Ex. C-26). There were gaps of several feet between the *Paula Lee* and the pier, as well as on the other side of the ship between the *Paula Lee* and another barge tied to the *Paula Lee*. (Tr. 191-192, 315; Ex. C-26). Production Manager Kenneth Willis acknowledged that Respondent did have employees on the deck of the *Paula Lee* who were not wearing PFDs, and that there was no guarding around most of the outer edges of the deck. (Tr. 561-562). Ship Superintendent, Larry Williams, testified that there were no PFDs on the deck, but that they were "available" on the pier. (Tr. 698). The standard clearly applied and was violated.

Each of Respondent's employees photographed and observed working without PFDs near the outer edges of the deck of the *Paula Lee* were exposed to this condition, which was open, obvious, and in plain view of the three supervisors working on the ship. An employee who fell into the water, especially during the wet and snowy conditions at the time, would have been subject to hypothermia and drowning. (Tr. 194, 416). The court finds that employees were exposed to the risk of serious

injury, and knowledge by the Respondent of the hazardous condition was established. Accordingly, Citation 1, Item 6 will be AFFIRMED. The snowy and wet conditions observed in the investigative photographs, combined with the clutter virtually everywhere on deck, increased the likelihood that one of the employees would have actually fallen overboard. Accordingly, the proposed penalty of \$1,500.00 for Citation 1, Item 6 will remain unchanged.

Citation 1 Item 7

Complainant alleged a serious violation of the Act in Citation 1, Item 7 as follows:

29 C.F.R. §1915.91(a): Good housekeeping conditions were not maintained at all times. Hose and electric conductor were not elevated over or placed under walkways or working surfaces or covered by adequate crossover planks:

(a) Paula Lee Barge: On or about April 15, 2009 and times prior thereto, equipment including air hoses, electric cables, and welding leads were cluttered on the weather deck. This condition exposed employees to tripping and fall hazards.

(b) Paula Lee Barge: On or about April 15, 2009 and at times prior thereto, electrical cords and cables and welding leads (including connection points) were not elevated to keep the equipment out of the standing water that had accumulated on the weather deck. This condition exposed employees to electrical shock hazards.

The cited standard provides:

29 C.F.R. §1915.91(a): Good housekeeping conditions shall be maintained at all times. Adequate aisles and passageways shall be maintained in all work areas. All staging platforms, ramps, stairways, walkways, aisles, and passageways on vessels or drydocks shall be kept clear of all tools, materials, and equipment except that which is in use, and all debris such as welding rod tips, bolts, nuts, and similar material. Hose and electric conductors shall be elevated over or placed under the walkway or working surfaces of covered by adequate cross-over planks.

The conditions on the deck of the *Paula Lee* were extremely cluttered, with multiple air hoses, tires, electrical cords, work materials, and equipment scattered all over the walking and working surface. (Tr. 328, 405, 408; Ex. C-28). Respondent's Production Manager, Kenneth Willis, testified

that housekeeping on the *Paula Lee* was “terrible” and acknowledged that significant portions of the clutter were Respondent’s own materials and equipment. (Tr. 546, 577). One of Respondent’s welders described the *Paula Lee* deck as “a mess.” (Tr. 635). The court’s own review of photographs of the deck confirmed the witness descriptions in that virtually every part of the deck was covered with hoses, material, tools, equipment, and other clutter. (Ex. C-1, C-10, C-28). The cited standard applied and was violated.

Respondent had fifteen employees walking and working on the *Paula Lee* deck during the course of the inspection, who were exposed to serious slip, trip, and fall hazards. (Tr. 415, 614). Ship Superintendent, Larry Williams, testified that he personally traveled all over the ship. (Tr. 660). Therefore, Complainant established employee exposure, employer knowledge, and the seriousness of the violation. Accordingly, Citation 1, Item 7 will be AFFIRMED. However, based on the totality of the circumstances, including the fact that Respondent had employees working on cleaning up the deck, the penalty will be reduced to \$2,500.00.

Citation 1 Item 8

Complainant alleged a serious violation of the Act in Citation 1, Item 8 as follows:

29 C.F.R. §1915.111(a): Defective gear for rigging and materials handling was not removed and repaired or replaced before further use: Paula Lee Barge: On or about April 14, 2009 and times prior thereto, a hook latch (mouse) on one end of the four-way, wire rope, lifting bridle sling was broken and still in use. This condition exposed employees to struck-by hazards from lifting loads using defective lifting equipment.

The cited standard provides:

29 C.F.R. §1915.111(a): All gear and equipment provided by the employer for rigging and materials handling shall be inspected before each shift and when necessary, at intervals during its use to ensure that it is safe. Defective gear shall be removed and repaired or replaced before further use.

Respondent was using a pier crane and attached metal container to move work equipment,

tools, and materials on and off the *Paula Lee*. (Tr. 358, 699; Ex. C-30). The container was secured to the crane using a sling with four hooks, one of which was defective in that the hook safety latch was rusted and had been bent back. (Tr. 416-418; Ex. C-30). It was unclear how long the safety latch on the sling hook had been damaged. (Tr. 438). The defective hook latch increased the likelihood that one of the containers full of materials could have fallen while being moved between the *Paula Lee* and the pier. If the container had accidentally slipped off the hook, or more likely some of the materials and equipment fell out because the defective hook disconnected, it could have seriously injured or killed one or more of the employees walking and working in the area. (Tr. 420, 546-547; Ex. C-30). The standard applied, was violated, and created a serious hazard.

The condition was open and obvious and could have been easily discovered, with the exercise of due diligence, by simply examining the hooks each time the container was loaded and unloaded. As there was no way to predict when or where the container or its contents would fall, all of Respondent's employees traveling back and forth between the deck and pier (the same relative path over which the container was moved) were exposed to the hazard. Accordingly, Citation 1, Item 8 will be AFFIRMED. However, the court finds that the likelihood of an actual accident occurring as a result of one broken safety latch to be low. (Tr. 546-547). Therefore, the penalty for Citation 1 Item 8 will be reduced to \$500.00.

Citation 1 Item 9

Complainant alleged a serious violation of the Act in Citation 1, Item 9 as follows:

29 C.F.R. §1915.504(b)(8): The employer did not post a fire watch when a Marine Chemist, a Coast Guard authorized person, or a shipyard Competent Person as defined in 29 CFR 1915 subpart B requires that a fire watch be posted: Paula Lee Barge, Turnstile Void: On or about April 14, 2009 and times prior thereto, no dedicated fire watch was posted during hot work (welding) operations. This condition exposed employees to burn hazards in the event materials or clothing caught fire while performing hot work.

The cited standard provides:

29 C.F.R. §1915.504(b)(8): The employer must post a fire watch if during hot work any of the following conditions are present...(8) A Marine Chemist, a Coast Guard authorized person, or a shipyard Competent Person, as defined in 29 C.F.R. Part 1915, Subpart B, requires that a fire watch be posted.

One of the things that the Marine Chemist Certificate required for Respondent's welding activities, or "hot work," on the *Paula Lee* was to "maintain dedicated fire watch with extinguisher." (Tr. 90, 253-254; Ex. C-3). The Marine Chemist Certificate did not specify where or how many dedicated fire watchers or extinguishers were required, so OSHA conceded that those details were left to the discretion of the Shipyard Competent Person, Larry Williams. (Tr. 254, 256). CSHO Pauli maintained, however, that there should have been enough fire watchers to observe each area in which hot work was being performed, and that the water hose located on the pier was not adequate fire extinguishing equipment. (Tr. 196-197, 255). OSHA maintained initially that each void should have had a dedicated fire watch, but later agreed that a fire watch who roamed from opening to opening with quick access to firefighting equipment would have been acceptable. (Tr. 255, 259-260).

Joseph Graham, the Marine Chemist who issued the Certificate, explained that the fire watch he required for this job did not necessarily have to be immediately observing each welder at all times, but they should have been "dedicated" in that they had no other duties to distract them from fire watch obligations. (Tr. 455-456). CSHO Pauli and Mr. Graham's testimony were consistent with the language of 29 C.F.R. §1915.504(c) in that "the employer must not assign other duties to a fire watch while the hot work is in progress." Even Respondent's Production Manager Kenneth Willis ultimately acknowledged that he understood the term "dedicated fire watch" on a Marine Chemist Certificate to mean an employee was required to do nothing else but perform fire watch duties. (Tr. 549). Marine Chemist Graham also clarified that "...with extinguisher" meant quick access to a fire extinguisher or fire hose, and that having a garden-type water hose located on the adjacent pier was not sufficient. (Tr. 456-457).

On April 15, 2009, CSHO Pauli observed welding activities being performed in several voids,

with no observable employee dedicated to fire watch and no fire extinguishers or fire hoses anywhere in the area. (Tr. 351). Respondent argued that John Moreno, Respondent's Paint Foreman, and the welders' helpers inside each void were performing fire watch duties. (Tr. 255-256, 352, 699-700, 729-730). Respondent also argued that in the event of a fire, Mr. Moreno and/or a welder's helper could have exited the void, traveled across the deck of the *Paula Lee*, crossed over the gap onto the pier, obtained the water hose from the pier, dragged the water hose back across the gap onto the ship, traveled back to the void, and then addressed the fire. (Tr. 352-353).

The court rejects Respondent's argument as not compliant with the cited standard or the regulatory description of "fire watch duty" in 29 C.F.R. §1915.504(c). The record clearly established that none of the individuals identified by Respondent were "dedicated" to fire watch, as they were performing numerous other duties, and did not have any type of fire extinguishing equipment near them. (Tr. 352, 699-700, 729-730). The cited standard applied and was violated. In addition, Respondent possessed direct knowledge of its failure to assign employees to dedicated fire watch duty.

Ten to fifteen welders and welder's helpers were exposed to the lack of a dedicated fire watch, which could have caused an unnecessary delay in responding to a fire, resulting in serious burns or death. (Tr. 198). Citation 1, Item 9 will be AFFIRMED. The multiple locations on the *Paula Lee* where hot work was being performed, combined with no apparent effort to watch for fires or ensure the proximity of firefighting equipment, increased the likelihood of a fire not being promptly extinguished. Accordingly, the proposed penalty of \$1,200.00 for Citation 1, Item 9 will remain unchanged.

Citation 2 Item 1

Complainant alleged a willful violation of the Act in Citation 2, Item 1 as follows:

29 C.F.R. §1915.15(c): A competent person did not visually inspect and test each space certified as "Safe for Workers" or "Safe for Hot

Work” as often as necessary to ensure that atmospheric conditions within that space were maintained within the conditions established by the certificate:

(a) Paula Lee Barge, Crane Turnstile Void: On or about April 14, 2009 and at times prior thereto, the competent person did not test each space as often as necessary to maintain safe conditions. This condition exposed employees within the space to Carbon Monoxide levels equaling and exceeding 40 parts per million (ppm);

(b) Paula Lee Barge, Starboard Ballast Tank: On or about April 14, 2009 and at times prior thereto, the competent person did not test each space as often as necessary to maintain safe conditions. This condition exposed employees within the space to Carbon Monoxide levels equaling and exceeding 35 ppm.

The cited standard provides:

29 C.F.R. §1915.15(c): Tests to maintain the conditions of a Marine Chemist’s or Coast Guard authorized person’s certificate. A competent person shall visually inspect and test each space certified as “Safe for Workers” or “Safe for Hot Work,” as often as necessary to ensure that atmospheric conditions within that space are maintained within the conditions established by the certificate after the certificate has been issued.

Respondent’s employees were performing welding repairs inside several voids on the *Paula Lee* which were accessible only by 19-inch manhole openings. (Tr. 233, 513, 519-520, 566; Ex. C-4). For this project, Respondent elected to obtain and operate under a Marine Chemist Certificate for the hot work it needed to perform inside the confined spaces. (Tr. 95, 449-450; Ex. C-3). Once a shipyard employer elects to obtain and operate under a Marine Chemist Certificate, compliance with the terms of the Certificate is mandatory. (Tr. 776-777). *See also* 29 C.F.R. §1915.14. Joseph Graham, the Marine Chemist who inspected the *Paula Lee*, commonly evaluates various safety issues, including confined space entry, respiratory hazards, fire safety, and toxicity issues. (Tr. 447, 463). He and other Marine Chemists document their findings on a Marine Chemist Certificate, which is left at the vessel for the Shipyard Competent Person to follow and enforce. (Tr. 82, 95, 448, 646-647; Ex. C-3). The *Paula Lee* voids had previously either been empty or contained only water, and therefore were not as

hazardous as the voids Mr. Graham inspects on other types of ships. (Tr. 238). For example, tank barges often carry combustible and flammable liquids in their voids.² (Tr. 475-476, 748-749). The court finds that the cited standard applied to the conditions in that it implemented certain requirements for shipyard hot work in confined spaces where Respondent elected to operate under a Marine Chemist Certificate.³

The manholes for each void were left open during welding to help dissipate welding fumes and for running hoses, electrical cords, and air duct sometimes used for ventilation. (Tr. 236-237; Ex. C-4). On April 14, 2009, CSHO Pauli observed welding smoke rising from the crane turnstile void manhole. (Tr. 68, 76, 112; Ex. C-4, C-26). Upon closer examination, he saw that the interior area of the crane turnstile void was very smoky, with very low visibility, while employees were inside performing welding repairs with no ventilation.⁴ (Tr. 73; Ex. C-4). CSHO Pauli used his Industrial/Scientific ITX4 Gas Meter to check the oxygen level, hydrogen sulfide level, carbon monoxide level, and explosivity inside the crane turnstile void. (Tr. 71-72, 77, 208; Ex. C-4). The hose attached to his meter was lowered approximately 10 feet down into the 15-foot void, and indicated the presence of carbon monoxide. (Tr. 77, 79; Ex. C-4, pp. 3, 4, 5). Although the detected level was below the permissible exposure limit (“PEL”), CSHO Pauli was concerned about the presence of carbon monoxide inside the void. (Tr. 96-97, 125). He then asked Respondent to remove the welders from

2 Also referred to by witnesses as “tanks” because the term “void” in the industry means an empty tank. (Tr. 516).

3 Respondent raised an argument at trial, for the first time in this proceeding, that the *Paula Lee* Marine Chemist Certificate was void by the time of OSHA’s inspection because the ship had been moved from drydock to water (and secured to the pier) three days earlier. Complainant objected to the untimeliness of this new assertion and argued that if Respondent was allowed to raise new defenses at trial, Complainant would be prejudiced and therefore should be allowed to amend certain citations to allege violations of alternative regulations. Respondent then objected to Complainant’s attempts to amend its complaint and citations at the last minute as untimely. The court rejected both parties’ last minute assertions on this issue as untimely, not previously disclosed in response to related discovery requests, and in violation of the court’s Scheduling Order. The court also notes that the record clearly established that: (1) Respondent posted the Marine Chemist Certificate at the entrance point to the ship from the pier *after* the *Paula Lee* was refloated, (2) Respondent’s Shipyard Superintendent and Shipyard Competent Person, Larry Williams, continued to reference the Marine Chemist Certificate terms on his own Daily Inspection Log *after* the *Paula Lee* was refloated, and (3) Respondent continued to operate under the stated terms of the Marine Chemist Certificate *after* it was refloated. (Tr. 27-48, 574).

4 Other than natural air flow in and out of the 19-inch manhole.

the void. (Tr. 80, 528).

Over the next two days, OSHA conducted fifteen additional direct read air sample tests⁵ in several of the voids on the ship where hot work was being performed. (Tr. 80, 208-210, 220). None of OSHA's monitoring results indicated the presence of any hazardous substances, including carbon monoxide, above OSHA's permissible exposure limits. (Tr. 225, 375). Despite this fact, any detectible amounts of carbon monoxide inside the voids concerned OSHA because it is a colorless, odorless, tasteless, and toxic gas which asphyxiates people by displacing oxygen in the human bloodstream. (Tr. 96-97, 125, 242, 453, 575, 648, 779). It can only be detected through the use of air testing equipment. (Tr. 779). OSHA's concern with regard to Citation 2, Item 1 was that the actual presence of carbon monoxide inside some of the voids should have alerted Respondent's Shipyard Superintendent and Competent Person, Larry Williams, to conduct periodic testing throughout each shift, rather than just once each morning. (Tr. 124-125, 205, 208, 241).

The cited regulation at issue here is a performance standard, which differs from a specific standard in that employers are afforded broader discretion by OSHA to identify hazards which are peculiar to their own workplace, and to determine the steps necessary to abate them. *OSHRC v. Thomas Industrial Coatings, Inc.*, 21 BNA OSHC 2283, 2008 CCH OSHD ¶32,937 (No. 97-1073, 2007). Since performance standards do not identify specific obligations, compliance is evaluated by courts on the basis of reasonableness. *Id.* Broadly worded standards, such as the one here requiring inspecting and testing "as often as necessary," typically require a showing that a reasonable person familiar with the situation would recognize a hazardous condition which should have been addressed. *Farrens Tree Surgeons, Inc.*, 15 BNA OSHC 1793, 1992 CCH OSHD ¶29,770 (No. 90-998, 1992). "If the language of the regulation is not specific enough, however, other sources may provide constructive notice: industry custom and practice; the injury rate for that particular type of [] work;

⁵ As opposed to 8-hour time-weighted averages. (Tr. 99, 766).

the obviousness of the hazard; and the interpretations of the regulation by the Commission.” *Corbesco, Inc.*, 926 F.2d 422 (5th Cir. 1991).⁶

The record clearly established that Mr. Williams conducted air monitoring in each void every morning, before welders entered the voids to begin work, to ensure that conditions were safe for them to enter. (Tr. 104, 119, 228, 346, 385-386, 653-655). He also maintained a daily log of his Shipyard Competent Person inspections, which referenced the requirements of the Marine Chemist Certificate. (Tr. 688; Ex. C-24). Furthermore, he implemented mechanical ventilation through the use of fans and blowers in each void to introduce fresh outside air, and to push out any air contaminants. (Tr. 232-233, 650). In sixteen years of working in the ship repair industry, a single pre-shift air test combined with the use of mechanical ventilation had always been sufficient to remove any hazardous substances from the confined space areas in which employees performed this type of work. (Tr. 585, 664-665). He never suspected that the employees performing hot work inside the voids on the *Paula Lee* were working in unsafe environments. (Tr. 588-589; Ex. R-30).

Marine Chemist Graham testified that, to comply with the terms of his Certificate, any hazardous substances detected during hot work on the *Paula Lee* did not have to be completely eliminated. They just needed to be maintained below PELs, which was normally achieved through mechanical ventilation for this type of work. (Tr. 481-483). Only if levels could not be maintained below PELs would it have been necessary to contact the Marine Chemist. (Tr. 481-482). The court also notes that Marine Chemist Graham had worked with Larry Williams for more than five years and had always found him to be a competent Shipyard Competent Person. (Tr. 474, 478).

Respondent’s expert witness, Senior Marine Chemist Philip Dovich,⁷ explained that because the Marine Chemist Certificate did not specify any requirement to test for carbon monoxide, Larry

⁶ As there were no published Commission cases interpreting this standard, and no evidence concerning injury rates, the court focused on the obviousness of the hazard and industry custom and practice.

⁷ Complainant stipulated to Mr. Dovich’s status as a qualified expert witness in the field of shipyard work and shipyard safety. (Tr. 738).

Williams technically was not required to do so, even though he did perform such a test each morning with his air monitor. (Tr. 206-207, 751; Ex. C-3). He and Marine Chemist Graham both testified that Shipyard Competent Persons are afforded broad discretion under the plain language of OSHA Part 1915 regarding any need to periodically re-test atmospheric conditions and regarding which type of ventilation to use. (Tr. 232, 458-459, 478, 663, 752-753, 756). Mr. Dovich pointed to the “as often as necessary” language in the cited standard to support his opinion. (Tr. 756, 762). He testified that the standard practice in the ship repair industry is to do exactly what Mr. Williams did: conduct air monitoring each morning before welders entered the voids. (Tr. 758). He further testified that, in his opinion, even the extreme smokiness of the crane turnstile void did not warrant re-testing because there is absolutely no correlation between smokiness and carbon monoxide levels. (Tr. 760, 780).

It is clear to the court that OSHA’s initial concern over this issue arose when CSHO Pauli observed the smoke-filled crane turnstile void on the first day of the inspection. When OSHA subsequently discovered that two employees were working inside the crane turnstile void without active mechanical ventilation, and that carbon monoxide was present (although below permissible exposure limits), OSHA concluded that Mr. Williams was not re-testing the voids “as often as necessary.”

The court credits Respondent’s undisputed explanation that the majority of the repair work in the crane turnstile void had been completed earlier with active ventilation. Then, just before OSHA arrived, the *Paula Lee* owner’s representative had found a few more spots that needed touch-up work and had directed Respondent’s welders to go back into the crane turnstile void to address those issues even though the ventilation had been turned off. (Tr. 81, 217, 526-528, 532, 592). Larry Williams did not know that the *Paula Lee* owner’s representative had sent the employees back into the void. (Tr. 526-528, 532, 592).

Although afforded broad discretion under the cited standard, the court concludes that there

were several factors present at this jobsite which should have alerted a reasonable Shipyard Competent Person of the need to re-test the atmospheric conditions of the voids during the shift, and not just once each morning before work began,⁸ to maintain the Marine Chemist Certificate conditions: (1) it was undisputed that welding activity changes the atmospheric conditions in the voids from those tested by the Marine Chemist when he issued the Certificate (Tr. 117-119, 654); (2) the welding rods being used by Respondent's welders on the *Paula Lee* were known to generate a small amount of carbon monoxide (Tr. 754; Ex. C-33); (3) carbon monoxide levels inside some of the voids were approaching the permissible exposure limits (Tr. 71-79; Ex. C-4); (4) the crane turnstile void was obviously and openly filled with smoke, and although smokiness may not have directly correlated to carbon monoxide levels, it certainly could indicate the presence of other harmful toxics at least justifying mid-shift air testing (Tr. 68-76; Ex. C-4); (5) Larry Williams and other supervisors had direct knowledge that the ship owner's representative was actively inspecting Respondent's work on the vessel and pointing out areas which needed further attention. A reasonable and diligent Shipyard Competent Person would have either prohibited employees from taking immediate direction from that person (especially when employees were directed to re-enter confined spaces to perform welding repairs without ventilation), or ensured that safety procedures were followed when employees addressed areas needing more work (Tr. 212-213, 526-528, 532, 592); (6) Welders had been complaining to Respondent's supervisors about inadequate ventilation, smoky conditions, and unusual smells inside the voids⁹ (Tr. 299, 301-311, 338, 617); and (7) Respondent was experiencing electrical problems in various work areas due to the wet conditions which resulted in, among other things, problems keeping

⁸ The court notes the testimony of Mr. Dovich indicating that the standard practice in the ship repair industry was to test once each morning before welders enter voids, but even he acknowledged a duty by the competent person to determine whether additional tests during the shift should occur. (Tr. 758). The presence of hazardous and changing conditions in the voids created an obligation to go beyond the minimum industry standard. *Corbesco*, supra.

⁹ Mr. Williams did re-test two voids on April 14 and 15, 2009, but only after specific requests by two of Respondent's supervisors. Welding Supervisor Bernie Lewis asked him to re-test a void after employees complained about air quality, and on another occasion Respondent's Production Manager, Kenneth Willis, directed him to re-test because employees thought they smelled acetylene. (Tr. 313-315, 329, 339, 521).

the ventilation fans and blowers operational. As a result, Respondent had an electrician onboard attempting to fix electrical problems as they were identified. (Tr. 436, 443, 615-616).

Even Mr. Williams acknowledged that his own Shipyard Competent Person training provided that a “re-inspection frequency must be established and periodic survey of the work must be done to be sure that all requirements are being met.” (Tr. 666-667, 670; Ex. R-28, p. DOL 998). He ultimately conceded that his standard practice of never re-testing the air inside voids during a shift was not an option identified in his Shipyard Competent Person training materials. (Tr. 670). The court finds that Mr. Williams’ standard practice of never re-testing atmospheric conditions after welding began inside the voids, given the circumstances and conditions described above, was unreasonable and an abuse of the discretion afforded him under the standard. Accordingly, the court finds that Respondent violated the terms of the cited standard.

Two welders, Dan Ursery and Carlos Rodriguez, who were performing hot work inside the crane turnstile void on April 14, 2009 without mechanical ventilation, were exposed to this violative condition. (Tr. 126, 213, 532, 592). The testimony was unclear as to Instance (b), with regard to which employees, on which dates, and under what conditions, were performing hot work inside the starboard ballast tank. Therefore, Complainant failed to establish specific employee exposure for that void as alleged in Instance (b).

Respondent had direct knowledge, through its delegation of authority over the *Paula Lee* project to Larry Williams, of the practice of not re-testing atmospheric conditions inside the voids on the *Paula Lee* after employees entered and welding began. *A.P. O’Horo Co.*, 14 BNA OSHC 2004, 1991 CCH OSHD ¶129,223 (No. 85-0369, 1991). Respondent’s failure to re-test atmospheric conditions during shifts, when conditions had obviously changed from those identified in the Marine Chemist Certificate, especially considering the presence of carbon monoxide, exposed employees to serious, and possibly fatal, injuries.

Complainant alleged that Respondent's conduct in not re-testing the voids where carbon monoxide was present (although below permissible exposure limits) constituted willful conduct. To establish a willful violation, Complainant must prove heightened awareness of the violative condition which rose to the level of conscious disregard for the requirements of the Act, or plain indifference to employee safety. *General Motors Corp.*, 14 BNA OSHC 2064, 1991 CCH OSHD ¶41,251 (No. 82-630 *et al.*, 1991). An employer cannot be found to have willfully violated a standard where it believed in good faith that the standard did not apply, or made good faith efforts to comply with the standard to eliminate a hazard. *Id.* The court finds that Respondent had implemented several measures to ensure the safety of the employees performing hot work inside the *Paula Lee* voids, and therefore, demonstrated a good faith, reasonable belief that its conduct conformed to the requirements of the cited regulation. *Aviation Constructors, Inc.*, 18 BNA OSHC 1917, 1999 CCH OSHD ¶31,933 (No. 96-0593, 1999). Respondent, through Mr. Williams, performed daily air testing before each shift, re-tested on at least two occasions when specifically requested to do so by other supervisors, and worked diligently to ensure that mechanical ventilation was working in each void (although the record revealed at least one failure in that task on April 14, 2009 in the crane turnstile void for about forty-five minutes). (Tr. 212-213). These facts, combined with the extremely broad discretion afforded Shipyard Competent Persons under the cited regulation, convince the court that Complainant failed to establish the willfulness of this violation. The record, considered in its totality, does not establish that Respondent committed this violation with either an intentional disregard for the requirements of the Act, or with plain indifference toward employee safety. *Kaspar Wireworks, Inc.*, 18 BNA OSHC 2178, 2000 CCH OSHD ¶32,134 (No. 90-2775, 2000); *Ensign-Bickford Co. v. OSHRC*, 717 F.2d 1419, 1422-23 (D.C. Cir. 1983). Accordingly, Citation 2, Item 1 will be AMENDED from a willful violation to a serious violation, Instance (b) will be VACATED, Instance (a) will be AFFIRMED as amended, and a \$7,000.00 penalty will be ASSESSED.

Citation 3 Item 1

Complainant alleged a repeat violation of the Act in Citation 3, Item 1 as follows:

29 C.F.R. §1915.56(b)(2): Cables that were used were not free from repair or splices for a minimum distance of 10 feet from the cable end to which the electrode holder was connected: Paula Lee Barge, Port Crane Void: On or about April 14, 2009 and times prior thereto, the electrode holder (welding stinger) connected to a Miller XMT 304 series welder operating at 28.0 volts and 124 was repaired with black vinyl tape at five (5) feet from the electrode holder (welding stinger). This condition exposed employees to shock hazards from using defective cables repaired within 10 feet of the working lead. Seward Ship's Drydock, Inc. was previously cited for a violation of this occupational safety and health standard 29 CFR 1915.56(b)(2) which was contained in OSHA inspection number 307503631, Citation 03, Item 02, issued on September 18, 2008, with regard to a workplace located at Seward Ship's Drydock, Inc., Seward, Alaska.

The cited standard provides:

29 C.F.R. §1915.56(b)(2): Only cable free from repair or splices for a minimum distance of ten (10) feet from the cable end to which the electrode holder is connected shall be used, except that cables with standard insulated connectors or with splices whose insulating quality is equal to that of the cable are permitted.

On April 14, 2009, during OSHA's inspection, CSHO Casper observed one of Respondent's welders using a "stinger" cable with black electrical tape wrapped around a cable repair approximately five feet from the electrode holder. (Tr. 390, 394). A "stinger" cable is the electrical cable that runs between the welding machine and the welding tip where actual welding is performed. (Tr. 392). When CSHO Casper closely examined the cable underneath the tape, he observed a cut in the cable which exposed the metal conductor wires. (Tr. 392). The welder was using the repaired cable at a setting of 124 amps, which could have resulted in electrical shock. (Tr. 391, 396). The repaired stinger cable was in plain view to anyone walking by or working near that welder. (Tr. 395).

Henry Hogge, another of Respondent's welders testified that he observed other employees on the *Paula Lee* project using welding stinger cables which had been repaired and wrapped with

electrical tape and duct tape while working on the *Paula Lee*. (Tr. 325). On one occasion, Mr. Hogge witnessed Welding Supervisor Bernie Lewis ask a welder who was using a repaired stinger cable, if it was “Time for a new stinger?” The welder replied to Mr. Lewis that he “can’t afford it.” (Tr. 326-327). Welder Bruce Whitmore testified that he also observed some of Respondent’s welders using repaired and taped over stinger cables, that Respondent’s own tool shop was issuing welding stingers with frayed cables, and that he was personally shocked several times because of the wet conditions in his work area and contact with the welding stinger. (Tr. 629, 633). It was unclear whether the other cable repairs observed by Respondent’s welders were within ten feet of the cable end.

Respondent’s Production Manager, Kenneth Willis, testified that he was not aware that welders were specifically experiencing shocks while working on the *Paula Lee*, but acknowledged that it was not uncommon and was “just part of the game,” especially when welding in wet conditions. (Tr. 523-524). Respondent provided rubber gloves to address the issue. (Tr. 524, 555). Although the reports of shocks by welders were never directly attributed to repaired stinger cables, and were apparently more related to the wet conditions and incidental contact with the stinger end of the cable, the presence of repaired and taped-over welding cables increased the likelihood of a serious injury resulting from continued use of damaged welding cables. The court finds that the cited standard applied,¹⁰ was violated, that the specific instance described in Citation 3, Item 1 was open, obvious, and could have resulted in serious injury or death through electric shock.

On September 18, 2008, Respondent was cited for an other-than-serious violation of the exact same standard as a result of OSHA Inspection No. 307503631. (Ex. C-13). On October 10, 2008, that item was accepted through Respondent’s execution of an *Informal Settlement Agreement* with the local OSHA Area Office. (Ex. C-13). Therefore, the violation became a *Final Order* of the Commission pursuant to Section 10(b) of the Act prior to the current inspection. Complainant made a *prima facie*

¹⁰ There was no testimony indicating any purported application of the exception contained within the language of the standard.

showing of “substantial similarity” by establishing that the previous and present violations are for failure to comply with the same regulatory standard. Respondent failed to rebut that showing. *Potlatch Corp.*, 7 BNA OSHC 1061 (No. 16183, 1979); *Monitor Construction Co.*, 16 BNA OSHC 1589 (No. 91-1807, 1994). Accordingly, Citation 3, Item 1 will be AFFIRMED as a repeat violation. Considering the totality of the circumstances, including the fact that only one instance of a cable repair within ten feet of the cable end was actually documented, as well as Respondent’s recent history of committing the same violation less than a year earlier, the court will reduce the penalty to \$3,000.00.

Citation 3 Item 2

Complainant alleged a repeat violation of the Act in Citation 3, Item 2 as follows:

29 C.F.R. §1915.72(a)(1): The use of defective ladders was not prohibited: Paula Lee Barge: On or about April 14, 2009 and times prior thereto, a defective ladder with a broken rung and footpad was used to access the vessel after the vessel was put back in the water. This condition exposed employees to fall hazards to the steel deck of the barge or into the water. Seward Ship’s Drydock was previously cited for a violation of this occupational safety and health standard 29 CFR 1915.72(a)(1) which was contained in OSHA inspection number 307503631, Citation 01, Item 4(a), issued on September 18, 2008, with regard to a workplace located at Seward Ship’s Drydock, Inc., Seward, Alaska.

The cited standard provides:

29 C.F.R. §1915.72(a)(1): The use of ladders with broken or missing rungs or steps, broken or split side rails, or other faulty or defective construction is prohibited. When ladders with such defects are discovered, they shall be immediately withdrawn from service. Inspection of metal ladders shall include checking for corrosion of interiors of open end, hollow rungs.

After the *Paula Lee* was refloated and secured to the pier on April 11, 2009, an extension ladder was stretched across the gap between the pier and the ship. (Tr. 134-135, 315). Walking back and forth on the ladder rungs was the only means of access for employees on and off the boat for two days, until it was replaced with a gangway plank. (Tr. 315-316, 708-710). The angle of the ladder also fluctuated with the tide, becoming nearly horizontal at times. (Tr. 315, 625-626, 713). The ladder was

defective in that it had a broken lower rung, and one of the bases, or feet, was missing. (Tr. 132-134, 317, 693-694; Ex. C-10). Although the precise number was unclear, at least four of Respondent's employees, and possibly as many as fifteen, used the ladder to access the *Paula Lee* on April 11-12, 2009. (Tr. 137, 298, 318, 627-629).

Bernie Lewis, Respondent's Welding Supervisor, had instructed the employees to use the ladder to access the *Paula Lee*. (Tr. 317). Both he and Production Supervisor Kenneth Willis knew that employees had been using the ladder to access the barge and that some had been complaining about it. (Tr. 563-564, 579, 627, 710). By the time CSHO Pauli observed the ladder, it had already been replaced by a gangway plank and was lying on a pile of tires on the deck of the *Paula Lee*. It still had not been tagged or otherwise labeled as defective and unusable. (Tr. 367; Ex. C-1, pp. 2, 4; C-10).

The cited standard applied, was violated, and at least four of Respondent's employees were exposed to the violative condition. Complainant established knowledge of the condition by at least two of Respondent's supervisors, which is imputed to Respondent. The court also finds that falling from the defective ladder, which in this instance would have occurred through the gap over the water between the ship and the pier, could have resulted in serious injury or death.

On September 18, 2008, Respondent was cited for a serious violation of the exact same standard as a result of OSHA Inspection No. 307503631. (Ex. C-13). On October 10, 2008, that item was accepted through Respondent's execution of an *Informal Settlement Agreement* with the local OSHA Area Office. (Ex. C-13). Therefore, the violation became a *Final Order* of the Commission pursuant to Section 10(b) of the Act prior to the current inspection. Complainant made a *prima facie* showing of "substantial similarity" by establishing that the past and present violations are for failure to comply with the same regulatory standard. Respondent failed to rebut that showing. *Potlatch Corp.*, supra; *Monitor Construction Co.*, supra. Accordingly, Citation 3, Item 2 will be AFFIRMED as a repeat violation. Considering the totality of the circumstances, including the fact that Respondent

violated this same standard less than a year earlier, and that there was a high likelihood of an actual accident due to employees having to walk across a defective, horizontal, extension ladder stretched between a barge and a pier, in icy, wet, springtime Alaska conditions, the proposed penalty of \$8,400.00 will remain unchanged.

Citation 3 Item 3

Complainant alleged a repeat violation of the Act in Citation 3, Item 3 as follows:

29 C.F.R. §1915.73(b): Flush manholes or other comparable small openings in the deck and other working surfaces were not suitably covered or guarded while employees were working in the vicinity:

(a) Paula Lee Barge, Weatherdeck, Port Ballast Tank: On or about April 15, 2009 and times prior thereto, employees were exposed to an open and unguarded flush manhole. This condition exposed employees to fall hazards of up to 15 feet.

(b) Paula Lee Barge, Weatherdeck, Starboard Ballast Tank: On or about April 15, 2009 and times prior thereto, employees were exposed to an open and unguarded flush manhole. This condition exposed employees to fall hazards of up to 15 feet.

(c) Paula Lee Barge, Weatherdeck, Port Crane Void: On or about April 15, 2009 and times prior thereto, employees were exposed to an open and unguarded flush manhole. This condition exposed employees to fall hazards of up to 15 feet.

(d) Paula Lee Barge, Weatherdeck, Starboard Crane Void: On or about April 15, 2009 and times prior thereto, employees were exposed to an open and unguarded flush manhole. This condition exposed employees to fall hazards of up to 15 feet.

(e) Paula Lee Barge, Weatherdeck, Starboard P5 Void: On or about April 15, 2009 and times prior thereto, employees were exposed to an open and unguarded flush manhole. This condition exposed employees to fall hazards of up to 15 feet.

(f) Paula Lee Barge, Weatherdeck, Starboard S5 Void: On or about April 15, 2009 and times prior thereto, employees were exposed to an open and unguarded flush manhole. This condition exposed employees to fall hazards of up to 15 feet.

(g) Paula Lee Barge, Weatherdeck, P/CL Void: On or about April 15, 2009 and times prior thereto, employees were exposed to an open and

unguarded flush manhole. This condition exposed employees to fall hazards of up to 15 feet.

(h) Paula Lee Barge, Weatherdeck, Port Midship Void: On or about April 15, 2009 and times prior thereto, employees were exposed to an open and unguarded flush manhole. This condition exposed employees to fall hazards of up to 15 feet.

Seward Ship's Drydock was previously cited for a violation of a substantially similar hazard under 29 CFR 1915.73(d) which was contained in OSHA inspection number 307503631, Citation 01, Item 4(c), issued on September 18, 2008, with regard to a workplace located at Seward Ship's Drydock, Inc., Seward, Alaska.

The cited standard provides:

29 C.F.R. §1915.73(b): When employees are working in the vicinity of flush manholes and other small openings of comparable size in the deck and other working surfaces, such openings shall be suitably covered or guarded to a height of not less than 30 inches, except where the use of such guards is made impracticable by the work actually in progress.

During the inspection, CSHO Pauli observed eight flush manholes on the deck of the Paula Lee that were open, with no guarding around them which would prevent employees from falling or stepping into the holes. (Tr. 140-147, 412; Ex. C-12, C-28). Each manhole was approximately 19 inches wide. (Tr. 143). Some of the tanks/voids had employees performing work inside them. Some did not. (Tr. 272). All of Respondent's employees were working and traveling near the eight unguarded manholes, and were exposed to the hazard of falling fifteen feet to the bottom of the voids. (Tr. 147-149, 414-415). Falls through the openings could have resulted in serious injuries, including cuts and broken bones. (Tr. 150). The cited standard applied, was violated, and fifteen of Respondent's employees were exposed to the serious condition.

Respondent's Production Manager, Kenneth Willis, acknowledged the existence of the open, unguarded manholes. (Tr. 534). In addition, their condition was in plain view to each of Respondent's three supervisors walking and working on the *Paula Lee*. In direct contradiction of the plain language of the cited standard, Mr. Willis did not think it was reasonable to have to put guards around them. (Tr.

535-536). He was aware, however, that there were various methods of guarding open manholes. (Tr. 557). The manhole openings could have been guarded using a raised U-bar type protection, or by placing standard railing around the opening. (Tr. 141-142, 414). Knowledge of the violative conditions by Respondent's supervisors, and specific means of abating the conditions, were established.

The court rejects Respondent's assertion that the abatement methods were impracticable because employees were working inside the voids, and therefore, the exception language in the standard applied. First, employees were not working inside all of the eight unguarded voids. Second, the railing and U-bar protection methods described by witnesses could have easily been installed so that they would not have impeded prompt entry or exit from the voids.

On September 18, 2008, Respondent was cited for a serious violation of a different fall hazard regulation as a result of OSHA Inspection No. 307503631, in Citation 1, Item 4c, which Complainant argues involved a substantially similar hazard. (Tr. 151; Ex. C-13, p. 12). Where the citations involve different standards, Complainant must introduce evidence to show the substantial similarity of the hazards in each violation. *Monitor Construction Co.*, *supra*. The cited standard in the 2008 case, 29 C.F.R. §1915.73(d), requires guardrails for "unguarded edges of decks, platforms, flats, and similar flat surfaces more than 5 feet above a solid surface..." The 2008 violation was based on an unguarded "leading edge of the hatch to the freezer hold" which was ten feet above the next lower level. (Ex. C-13, p.12). On October 10, 2008, that citation item was accepted through Respondent's execution of an *Informal Settlement Agreement* with the local OSHA Area Office. (Ex. C-13). Therefore, the violation became a *Final Order* of the Commission pursuant to Section 10(b) of the Act prior to the current inspection.

The court finds that Complainant made a *prima facie* showing of substantial similarity by establishing that both the previous and present violations were for fall hazards related to unguarded openings on the deck of a ship. Respondent failed to rebut that showing of substantial similarity.

Potlatch Corp., supra; *Monitor Construction Co.*, supra. Accordingly, Citation 3, Item 3 will be AFFIRMED as a repeat violation. Considering the totality of the circumstances, including the fact that Respondent exposed employees to a similar hazard less than a year earlier, and that there were eight different unguarded openings throughout an already cluttered, icy, and wet deck, creating a high likelihood of an actual accident, the proposed penalty of \$8,400.00 will remain unchanged.

Affirmative Defenses

Respondent did not specifically or separately address the elements of any affirmative defenses in its *Post-Trial Brief*. Typically, this results in a waiver of any affirmative defenses pled in a party's *Answer*. *Georgia-Pacific Corp.*, 15 BNA OSHC 1127, 1991 CCH OSHD ¶29,395 (No. 89-2713, 1991). However, Respondent did briefly refer to an employee failing to comply with company policy with regard to Citation 2, Item 1; used the terms "unfeasible" and "impracticable" with regard to Citation 3, Item 3; and "not feasible" with regard to Citation 1, Item 7. (*Resp. Brief*, pp. 14-15, 21, 24, 44). Therefore, the court will briefly address those assertions.

To establish the affirmative defense of "unpreventable employee misconduct", Respondent must show that: (1) it established work rules designed to prevent the violation, (2) it adequately communicated those rules to its employees, (3) it took steps to discover violations, and (4) it effectively enforced the rules when violations were discovered. *American Sterilizer Co.*, 18 BNA OSHC 1082, 1995-97 CCH OSHD ¶31,451 (No. 91-2494, 1997). When the alleged misconduct is that of a supervisor, the proof of "unpreventable employee misconduct" is more rigorous and more difficult to establish since it is the supervisor's duty to protect the safety of employees under his supervision. *Archer-Western Contractors Ltd.*, 15 BNA OSHC 1013, 1991 CCH OSHD ¶29,317 (No. 87-1067, 1991). Respondent's reference to a violation of company policy pointed to the conduct of welders working inside the crane turnstile void without proper ventilation. However, the conduct addressed in Citation 2 Item 1 was that of Respondent's Shipyard Competent Person, not the welders, for failing to

test the void atmospheres as often as necessary to maintain the conditions of the Marine Chemist Certificate. There were six other factors identified above, besides the two welders working inside an unventilated void, which should have alerted Mr. Williams of the need to periodically re-test the void atmospheres *after* welding began. The court also notes that Shipyard Superintendent and Competent Person Larry Williams never issued any documented discipline for any employee who worked on the *Paula Lee* project. (Tr. 644, 698). Accordingly, Respondent failed to establish the defense of unpreventable employee misconduct.

The defense of infeasibility requires an employer to prove that: (1) the means of compliance prescribed by the standard were technologically or economically infeasible, or necessary work operations were technologically infeasible after implementation; and (2) there were no feasible alternative means of protection available. *V.I.P. Structures, Inc.*, 16 BNA OSHC 1873, 1993-95 CCH OSHD ¶ 30,485 (No. 91-1167, 1994). Although it may not have been convenient to implement good housekeeping measures on the deck (Citation 1, Item 7), including raising electrical lines and air hoses above the walking surface of the deck, it certainly was technically and economically possible. Similarly, several witnesses testified that there were at least two recognized and available methods which could have been implemented to guard the eight manholes identified in Citation 3, Item 3. Accordingly, Respondent failed to establish the affirmative defense of infeasibility with regard to Citation 1, Item 7 or Citation 3, Item 3.

ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law, it is ORDERED that:

1. Citation 1, Item 1 is hereby AFFIRMED and a penalty of \$500.00 is ASSESSED;
2. Citation 1, Item 3 is hereby VACATED;
3. Citation 1, Item 4a is hereby VACATED;
4. Citation 1, Item 4b is hereby AFFIRMED and a penalty of \$1,000.00 is ASSESSED;

5. Citation 1, Item 6 is hereby AFFIRMED and a penalty of \$1,500.00 is ASSESSED;
6. Citation 1, Item 7 is hereby AFFIRMED and a penalty of \$2,500.00 is ASSESSED;
7. Citation 1, Item 8 is hereby AFFIRMED and a penalty of \$500.00 is ASSESSED;
8. Citation 1, Item 9 is hereby AFFIRMED and a penalty of \$1,200.00 is ASSESSED;
9. Citation 2, Item 1 is hereby MODIFIED to a serious violation, Instance (b) is VACATED, Instance (a) is AFFIRMED as modified, and a penalty of \$7,000.00 is ASSESSED;
10. Citation 3, Item 1 is hereby AFFIRMED and a penalty of \$3,000.00 is ASSESSED;
11. Citation 3, Item 2 is hereby AFFIRMED and a penalty of \$8,400.00 is ASSESSED;
12. Citation 3, Item 3 is hereby AFFIRMED and a penalty of \$8,400.00 is ASSESSED.

/s/
PATRICK B. AUGUSTINE
Judge, OSHRC

Date: October 6, 2011
Denver, Colorado