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. SHAW GLOBAL ENERGY SERVICES, INC., Respondent.	OSHRC Docket No. 09-0555

ON BRIEFS:

Kristen M. Lindberg, Attorney; Heather R. Phillips, 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

McCord Wilson, Esq.; Rader & Campbell, P.C., Dallas, TX
For the Respondent

DECISION

Before: ROGERS, Chairman; ATTWOOD, Commissioner.

BY THE COMMISSION:

Shaw Global Energy Services, Inc. ("Shaw") was contracted to decommission and demolish an area of the Occidental Chemical plant in Muscle Shoals, Alabama. This area, designated as the "cell room," contained pipes, tanks, and equipment contaminated with mercury. Shaw used various techniques to remove the mercury while decommissioning the cell room, but all traces of it could not be eliminated before demolition. On September 25, 2008, following an anonymous referral, the Occupational Safety and Health Administration ("OSHA") began an inspection of the worksite and, on March 13, 2009, issued Shaw two citations—one serious and one other-than-serious—alleging violations of the Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651-678. Under the serious citation, the Secretary alleged eleven violations relating to employee mercury exposure and proposed a total penalty of $27,500.

Under the other-than-serious citation, the Secretary alleged one violation of a recordkeeping regulation and proposed a penalty of $1,000. Following a hearing, Administrative Law Judge Ken S. Welsch issued a decision affirming three of the eleven alleged serious violations and assessing a total penalty of $5,500. The judge also affirmed the alleged recordkeeping violation and assessed the proposed penalty.

On review before the Commission are the merits of one of the serious violations—a citation item relating to a "change house" used by Shaw employees at the plant, for which the judge assessed a penalty of $2,500—and the other-than-serious recordkeeping violation. For the reasons that follow, we vacate the change house citation item, affirm the recordkeeping citation item, and assess the proposed $1,000 penalty for that item.

DISCUSSION

I. Serious Citation 1, Item 5 (Change House)

Under this item, the Secretary alleges that Shaw failed to comply with 29 C.F.R. § 1926.51(i), which states that "[w]henever employees are required by a particular standard to wear protective clothing because of the possibility of contamination with toxic materials, change rooms equipped with storage facilities for street clothes and separate storage facilities for the protective clothing shall be provided." It is undisputed that Shaw employees who worked in the plant's cell room were required to wear protective clothing because of the possibility of mercury exposure. Shaw also required that these employees use the change house, a designated area of the plant that had three separate rooms in which employees could store their street clothes, change into their protective clothing, and shower at the end of their shift. Employees entered the room furthest from the work area at the start of their shift, changed out of their street clothes, and stored them in metal lockers with latching doors that lined three walls of that room. The next room included a shower area that employees used at the end of their shift. And the room closest to the work area contained open cubicles in which laundered protective clothing was stored for employee use, and chutes through which employees could deposit contaminated protective clothing.

According to the Secretary, the change house that Shaw "provided for employees working in the cell room . . . was not adequately demarcated to prevent [mercury] contamination." The judge agreed, concluding that § 1926.51(i) "requir[es] storage facilities in separate rooms" as well as "a barrier between them," reasoning that the definition of "separate"

is a "unit apart or by itself, not joined or united with others." Pointing to the undisputed fact that open doorways connected the change house's three rooms, the judge concluded that "the *change area* did not meet the definition of separate." (Emphasis added.) On review, Shaw claims that it complied with the requirements of the cited provision by providing separate *storage facilities* for contaminated protective clothing and street clothes.

We agree with Shaw. Section 1926.51(i) plainly requires that an employer's change rooms contain "storage facilities for street clothes and separate storage facilities for [] protective clothing," but does not address the separateness of the rooms.[1] *See Oberdorfer Indus., Inc.*, 20 BNA OSHC 1321, 1328-29, 2002-04 CCH OSHD ¶ 32,697, p. 51,643 (No. 97-0469, 2003) (consolidated) ("To determine the meaning of a standard, the Commission and the courts consider the language of the standard, the legislative history, and, if the drafter's intent remains unclear, the reasonableness of the [Secretary's] interpretation."). The purpose of providing separate storage facilities is simply to prevent contaminated protective clothing from cross-

[1] To the extent the judge read § 1926.51(i) as requiring separate "change rooms" based on the provision's plural use of that phrase, we find that the provision's regulatory history precludes such an interpretation. *Oberdorfer Indus., Inc.*, 20 BNA OSHC 1321, 1328-29, 2002-04 CCH OSHD ¶ 32,697, p. 51,643 (No. 97-0469, 2003) (consolidated). A review of that history shows that the provision's plural use of "change rooms" is a vestige of its initial version, which was focused on providing separate change rooms based on gender. In 1993, the change room requirement in 29 C.F.R. § 1910.141(e) was incorporated into § 1926.51(i). Incorporation of General Industry Safety and Health Standards Applicable to Construction Work, 58 Fed. Reg. 35,076, 35,084 (June 30, 1993). The first version of § 1910.141(e), effective on August 27, 1971, stated as follows:

> (e) *Change rooms*—(1) *Separate facilities*. Separate change or dressing rooms equipped with individual clothes facilities shall be provided for each sex wherever it is the practice to change from street clothes or wherever it is necessary to change because the work performed involves exposure to excessive dirt, heat, fumes, vapor, or moisture. In the event that change rooms are not provided, facilities shall be furnished for hanging outer garments.

This provision was amended to its current form on May 3, 1973. Part 1910—Occupational Safety and Health Standards, 38 Fed. Reg. 10,930, 10,933-34 (May 3, 1973); Part 1910—Occupational Safety and Health Standards, 39 Fed. Reg. 23,502, 23,675 (May 28, 1974) (republishing standard without explanation of provision). The Federal Register notice analyzing the amendments explained that (1) "[a]ll provisions relating to separate facilities based on sex are eliminated," and (2) the revised provision requires "[s]eparate storage facilities (both for each employee and for street and work clothing)." Sanitation—Proposed Safety and Health Standards, 37 Fed. Reg. 13,996, 13,996 (July 15, 1972).

contaminating the employees' street clothes. This purpose is evidenced by the provision's plain language—it applies only when "employees are required by a particular standard to wear protective clothing because of the possibility of contamination with toxic materials," and it specifies that street clothes and protective clothing be stored separately.[2] 29 C.F.R. § 1926.51(i).

In support of her argument that Shaw's storage facilities failed to satisfy the requirements of § 1926.51(i), the Secretary points to the following evidence: (1) the results of air monitoring conducted by Shaw that the Secretary claims show no significant difference in mercury vapor levels between the room where protective clothing was stored and the room where street clothes were stored; (2) the absence of doors between these rooms, purportedly allowing mercury vapor to "travel freely between" them; and (3) testimony she contends shows that "[e]mployees wearing or carrying contaminated protective clothing or equipment could, and did, walk freely between" these rooms. None of this evidence, however, shows that the contaminated protective clothing, stored inside open cubicles or deposited in a laundry chute, was comingled with the street clothes stored in closed lockers on the opposite end of the change house. Nor does it establish that the protective clothing cross-contaminated the street clothes.

As to the air monitoring referenced by the Secretary, the record shows that between September 9, 2008, and October 2, 2008, Shaw measured airborne mercury levels two times a day at multiple locations throughout the plant, including the two rooms in which the protective clothing and street clothes were stored. Shaw conducted this monitoring in order to assess whether the action level it set for itself—0.05 mg/m^3, which is half of OSHA's 0.1 mg/m^3 threshold limit value ("TLV") for mercury—had been exceeded. 29 C.F.R. § 1926.55(a) & App. A. In every instance, the measured level of mercury vapor in the room with the street-clothes

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[2] This purpose is explicitly identified by OSHA in the preambles to the change room provisions for other substance-specific standards—such as asbestos, lead, chromium, and cadmium. In these preambles, OSHA either states that separate storage "prevent[s] cross-contamination," or explicitly requires the employer to ensure that storage facilities are separated in a manner that prevents protective clothing from contaminating street clothes. 29 C.F.R. §§ 1910.1001(i)(1)(ii), .1025(i)(2)(ii), .1026(i)(2), .1027(j)(2). Tellingly, the preambles to most of these substance-specific standards explain that the change room provisions were intended to serve the same purpose as § 1910.141(e) and/or § 1926.51(i), the cited provision here. Occupational Exposure to Hexavalent Chromium, 71 Fed Reg. 10,100, 10,356 (Feb. 28, 2006) (final rule); Occupational Exposure to Asbestos, 51 Fed. Reg. 22,612, 22,698 (June 20, 1986) (final rules); Occupational Exposure to Lead, 43 Fed. Reg. 52,952, 52,995 (Nov. 14, 1978) (final rule).

lockers was lower than the level in the room with the protective clothing cubicles. Additionally, the measurements show that the levels in the room with the street-clothes lockers never exceeded 0.05 mg/m^3, which is half of the TLV for mercury vapor, and that in all but three instances, the levels did not exceed 0.03 mg/m^3. Moreover, the record shows that employees removed their contaminated protective clothing in the room furthest away from the street-clothes lockers, and there is no evidence linking the airborne mercury vapors measured by Shaw to the protective clothing, which is the only source of contamination contemplated by the cited standard.

The other evidence referenced by the Secretary is no more compelling. The Secretary has not shown here that the absence of doors between the change house's rooms could have led to any mercury cross-contamination. And even if we assume that Shaw employees wore contaminated protective clothing in the room where the street clothes were stored, the record still lacks evidence showing that mercury from the protective clothing could have cross-contaminated street clothes enclosed in lockers. Indeed, no tests were performed to verify that mercury was even present on any employee's street clothes.[3]

Given this record, we find that the Secretary has not established that Shaw failed to comply with the requirements of § 1926.51(i). *Astra Pharm. Prods., Inc.*, 9 BNA OSHC 2126, 2129, 1981 CCH OSHD ¶ 25,578, pp. 31,899-900 (No. 78-6247, 1981) (listing elements of Secretary's prima facie case, one of which is employer's failure to comply with cited standard), *aff'd in pertinent part*, 681 F.2d 69 (1st Cir. 1982). Accordingly, we vacate this citation item.

II. Other-Than-Serious Citation 2, Item 1 (Recordkeeping)

Under this item, the Secretary alleges that Shaw violated 29 C.F.R. § 1904.29(b)(3) because it failed to record the work-related illness of an employee who had been hospitalized and

[3] As further support for her argument, the Secretary points to a photograph and testimony showing that laundered protective coveralls and towels were stored in open cubicles located in the room closest to the work area, "through which all cell room employees walked wearing contaminated clothing." Even if an assumption could be made that the protective clothing and towels became contaminated simply by virtue of their proximity to the work area, such a finding would not establish that laundered protective clothing or towels could, in turn, contaminate street clothes that were separately enclosed in lockers located on the opposite end of the change house.

was receiving medical treatment for mercury toxicity.[4] This provision requires that an employer "enter each recordable injury or illness on the OSHA 300 Log and 301 Incident Report within seven (7) calendar days of receiving information that a recordable injury or illness has occurred." 29 C.F.R. § 1904.29(b)(3). It is undisputed that the employee's illness was not recorded on any of Shaw's OSHA 300 Logs for the relevant time period.

The judge affirmed this citation item based on the nature of the employee's work with Shaw, the results of Shaw's biological monitoring of the employee, and Shaw's knowledge of the employee's mercury toxicity diagnosis. On review, Shaw contends that within seven days of October 22, 2008, the date on which it completed its injury and illness log, it had not yet received enough information regarding the employee's illness to trigger the recording requirements of § 1904.29(b)(3). For the following reasons, we reject Shaw's argument and affirm the judge.

On July 14, 2008, Shaw hired the employee at issue to perform demolition work in the cell room, and on August 20, about five weeks later, Shaw learned that the employee's urinalysis measurement for mercury had exceeded the level at which Shaw's program precluded employees from working in the cell room.[5] Shaw informed the employee of his test result in writing and allowed him to continue working at Shaw, but he was never assigned to the cell room again. While at work on September 8, the employee informed his foreman that he had hurt his back unloading tires at home, and that he needed to visit an emergency room ("ER"). At the ER, he was diagnosed with a strained muscle and prescribed medication. The next day, the employee visited a clinic where he was given a doctor's note identifying his condition as "back strain" and

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[4] Although described more broadly in the citation, the Secretary clarified in her post-hearing brief that this allegation pertains only to Shaw's failure to record the specific work-related illness addressed here.

[5] Although there is no OSHA standard requiring an employer to conduct biological monitoring for mercury or remove an employee based on elevated levels of mercury in urine, Shaw's safety program required removal from the cell room if an employee's urinalysis measurement for mercury exceeded 75 µg/g (micrograms of mercury per gram of creatinine). The record shows that the Chlorine Institute, a relevant industry resource here given that the cell room had been used to produce chlorine, recommends removal if urinalysis shows a mercury level at or above 100 µg/g. According to Shaw's safety manager, when demolition commenced at the plant, Shaw lowered the mercury level for triggering removal under its program from 100 µg/g to 75 µg/g, because its work activity created "the possibility for elevated mercury vapors there."

indicating that the employee should not strain his back for two weeks. After the employee showed this note to the foreman, he was sent home pending a release from his doctor.

Over the next couple weeks, the employee visited an ER near his home several times, complaining of tremors, muscle cramping, sweating, weight loss, and weakness. On September 21, 2008, the employee was admitted to a hospital in Birmingham where he remained for seven to nine days. The employee telephoned Shaw's safety manager on September 23, informing him that he had been diagnosed with mercury toxicity and that his symptoms had started around September 8. After the phone call, the safety manager, along with Shaw's project manager, drove that same day to the hospital in Birmingham to visit the employee. The employee was medicated at the time of their visit, but the employee's parents told them that the employee was being treated for "mercury poisoning." Also on that day, the employee's father called the corporate director of loss control for Shaw's parent company to inform him that the employee was being treated for mercury toxicity and that "this issue" had been reported to the safety manager. In an email sent later that day, the director notified the safety manager of this communication.

There is no question that mercury toxicity is a recordable illness under the recordkeeping regulation. 29 C.F.R. §§ 1904.4(a), .7(a), .29(b)(3). Thus, the only issue is whether Shaw had "receiv[ed] information that a recordable . . . illness [had] occurred." 29 C.F.R. § 1904.29(b)(3). According to Shaw, the only medical documentation it had received from the employee indicated that he had suffered a non-work-related back injury, and the employee provided no medical records to Shaw concerning his mercury toxicity. In addition, Shaw contends that the employee did not exhibit any symptoms of mercury toxicity during an unrelated meeting he attended on September 10 or 11 with the safety manager, causing the safety manager to "question" what the employee had told him about his condition following his hospitalization.

We find that any misgivings Shaw claims to have had about the employee's medical condition do not alter the fact that by September 23, 2008, Shaw had accepted that the employee was diagnosed with mercury toxicity. Shaw was well aware that the employee—assigned to cut pipes that contained mercury—worked in an environment from July 14 to August 20 that could have exposed him to mercury. Also, his urinalysis result from August 20 suggested such exposure. Against this backdrop, Shaw was informed on September 23 by the employee and his parents—both by telephone and in person—of the employee's mercury toxicity diagnosis. And

Shaw's safety manager admitted to visiting the employee in the hospital that very day because "he was being treated for mercury." No evidence in the record indicates that anything occurred during or after the safety manager's hospital visit to dispel this understanding.[6] Under these circumstances, we find that Shaw had sufficient information to determine that a recordable illness had occurred.[7] Shaw therefore violated § 1904.29(b)(3) by failing to record the employee's illness "within seven (7) calendar days of receiving information that a recordable . . . illness [had] occurred." Accordingly, we affirm this citation item.[8]

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[6] And we find no support for Shaw's claim that the employee "appeared to be doctor shopping" for a mercury toxicity diagnosis "to help set up a claim for damages against Shaw." Citing to the employee's testimony, Shaw states in its brief that during each of his visits to the ER, the employee "took his . . . sheet showing that he had elevated mercury levels, yet none of the four doctors he saw in his ER visits diagnosed him with mercury toxicity." This assertion mischaracterizes the employee's testimony. The employee testified that he only showed his urinalysis result to the last doctor he saw before going to the hospital in Birmingham. A blood test was taken at that time, but the employee did not receive the blood test result before being admitted to the Birmingham hospital on September 21, 2008, where, as we have found, he was being treated for mercury toxicity. We find nothing suspect about this sequence of events.

[7] In its brief, Shaw relies on *Amoco Chemicals Corp.* for the proposition that, to establish a violation of § 1904.29(b)(3), the Secretary must prove Shaw's decision not to record the employee's illness was unreasonable in light of the information and expertise available to Shaw at the time of its decision. 12 BNA OSHC 1849, 1855, 1986-87 CCH OSHD ¶ 27,621, p. 35,904 (No. 78-250, 1986). But Shaw's safety manager admitted that at the time of his hospital visit, he knew the employee was being treated for mercury toxicity. In these circumstances, Shaw's decision not to record was plainly unreasonable.

[8] Neither party challenges the judge's characterization of the violation as other-than-serious or his penalty assessment. *See, e.g., KS Energy Servs., Inc.*, 22 BNA OSHC 1261, 1268 n.11, 2004-09 CCH OSHD ¶ 32,958, p. 53,925 n.11 (No. 06-1416, 2008) (affirming judge's characterization of violation and penalty assessment where undisputed on review).

ORDER

We vacate Citation 1, Item 5. Also, we affirm Citation 2, Item 1 as other-than-serious and assess a penalty of $1,000.

SO ORDERED.

/s/
Thomasina V. Rogers
Chairman

/s/
Cynthia L. Attwood
Commissioner

Dated: August 27, 2012

UNITED STATES OF AMERICA
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

Secretary of Labor, Complainant v. Shaw Global Energy Services, Inc., Respondent.	OSHRC Docket No. **09-0555**

Appearances:

Schean G. Belton, Esquire, and Joseph B. Luckett, Esquire, Office of the Solicitor, U.S. Department of Labor, Nashville, Tennessee
For Complainant

McCord Wilson, Esquire, Rader & Campbell, P.C., Dallas, Texas
For Respondent

Before: Administrative Law Judge Ken S. Welsch

DECISION AND ORDER

Shaw Global Energy Services, Inc. (Shaw Global) performs maintenance, decommission, and demolition services at chemical plants.[1] After receiving an employee's complaint of mercury toxicity, the Occupational Safety and Health Administration (OSHA) inspected Shaw Global's demolition work in the cell room at the Occidental Chemical plant in Muscle Shoals, Alabama, on September 25, 2008. As a result of OSHA's inspection, Shaw Global received serious and other than serious citations on March 13, 2008. Shaw Global timely contested the citations.

Citation No. 1 alleges serious violations of 29 C.F.R. § 1926.850(e) (Item 1a) for failing to conduct mercury exposure monitoring; 29 C.F.R. § 1910.134(d)(1)(iii) (Item 1b) for failing to

[1]The citations were issued to Shaw Group, Inc. By unopposed motion to amend, dated May 24, 2010, the Secretary corrected the name of the cited employer to Shaw Global Energy Services, Inc.

evaluate the mercury exposure for the housekeeping and laundry service employees; 29 C.F.R. § 1910.134(f)(2) (Item 2a) for failing to perform annual respirator FIT testing; 29 C.F.R. § 1910.134(h)(1)(i) (Item 2b) for failing to require employees to use clean and sanitary respirators; 29 C.F.R. § 1926.21(b)(2) (Item 3a) for failing to train employees in appropriate hygiene and work practice controls; 29 C.F.R. § 1910.1200(h)(3)(ii) (Item 3b) for failing to advise affected employees of the signs and symptoms of mercury exposure; 29 C.F.R. § 1926.50(a) (Item 4) for failing to provide medical intervention and assessment to employees exposed to mercury; 29 C.F.R. § 1926.51(i) (Item 5) for failing to maintain separate change rooms to prevent contamination; 29 C.F.R. § 1926.55(a) (Item 6a) for exposing an employee above the threshold limit value (TLV) of 0.1 milligrams per cubic meter (mg/m3) of mercury; 29 C.F.R. § 1926.55(b) (Item 6b) for failing to implement feasible administrative or engineering controls to reduce an employee's exposure to mercury; and 29 C.F.R. § 1926.95(a) (Item 7) for providing coveralls which were not impervious to mercury. The serious citation proposes total penalties of $27,500.00.

Citation No. 2 alleges other than serious violation 29 C.F.R. § 1904.29(b)(3) (Item 1) for failing to record on the OSHA 300 log employees restricted from assigned duties in the cell room due to elevated mercury levels and who had experienced symptoms consistent with mercury exposure. The other than serious citation proposes a penalty of $1,000.00.

The hearing was held in Birmingham, Alabama, on March 17-19, 2010. The parties stipulated jurisdiction and coverage (Tr. 4). The parties have filed post hearing briefs.

Shaw Global denies the alleged violations, their classifications, and the reasonableness of the proposed penalties.[2] Shaw Global does not assert any affirmative defenses.

For the reasons discussed, the violations alleged in Citation No. 1, items 1b, 2a, and 5 and item 1 of Citation No. 2 are affirmed and total penalties of $6,500.00 are assessed. Citation No. 1, items 1a, 2b, 3a, 3b, 4, 6a, 6b, and 7 are vacated.

Background

[2]Issues not briefed are deemed waived. See *Georgia-Pacific Corp.*, 15 BNA OSHC 1127 (No. 89-2713, 1991).

Shaw Global contracts to perform maintenance, decommission, and demolition work at chemical companies. Shaw Global provides the labor and skilled craft to maintain facilities while in operation and during decommission/demolition work (Tr. 593-594).

In 2004, Shaw Global contracted to perform maintenance work at the Occidental Chemical plant in Muscle Shoals, Alabama. The Occidental plant manufactured chlorine as well as other products. The chlorine was made in the cell room, and mercury was used in the manufacturing process (Tr. 477, 543, 598-599).

In February 2008, Occidental decided to cease manufacturing chlorine and, through a subsidiary, contracted Shaw Global to decommission and demolition the cell room. Shaw Global's decommission/demolition work began in July 2008. The decommission work included purging, draining, and cleaning the pipes and systems that contained mercury. The demolition work involved cutting into pieces and removing the pipes and systems. The work involved approximately 50 employees working, four days a week, 10 hours per day (Tr. 204, 486, 539, 542, 600).

In performing the demolition work, Shaw Global was aware its employees would be exposed to mercury in liquid and vapor (Tr. 479). As described in the Material Safety Data Sheet (MSDS),

> mercury is a silver-white, odorless, heavy liquid. Mercury is highly toxic, irritating, and causes sensitization and neurological symptoms. The primary health hazard associated with overexposure to this product is the potential for irritation of skin, eyes, or other contaminated tissues. Mercury causes severe, adverse health effects after chronic exposure to low vapor levels; emergency response efforts must be directed to removal of all traces of this product (Exh. C-5).

Due to the presence of mercury, Shaw Global initiated various measures. Prior to the demolition work, the pipes and systems in the cell room were purged with water or other solutions to reduce the presence of mercury. Shaw Global was aware that purging would not remove all of the mercury. Residual amounts would remain around flange areas, pipe threads, and in the pipes low areas due to heavy nature of mercury (Tr. 480). Therefore, during demolition, employees were required to wear half-mask negative respirators, rubber gloves,

coveralls, goggles, hard hats, and rubber boots while in the cell room. The cell room was cleaned with bleach and water twice a day and ventilation fans were utilized.

Before entering and after leaving the cell room, employees changed their street clothes and protective clothing/equipment in a separate change area. One side of the change area was designated for changing from street clothes into clean protective clothing/equipment (clean side). The other side was for changing out of their worn protective clothing/equipment (dirty side). The two sides of the change area were separate rooms accessed through two open doorways. A shower facility was located in the middle of the change area which employees were required to use upon leaving the cell room for breaks, lunch and the end of shift (Exh. ALJ-1; Tr. 79, 242, 381, 503, 509).

To monitor the mercury levels in the cell room, Shaw Global used direct read instruments twice a day. If the instrument's reading exceeded .05 milligrams per cubic meter (mg/m3) action level,[3] the employees were removed from the cell room until the level was reduced (Exh. C-14; Tr. 481, 483, 519). Each employee also received a weekly urinalysis. If the employee's urinalysis results exceeded 75 micrograms per gram (ug/g), the employee was not allowed to work in the cell room until his level was reduced (Exh. R-21; Tr. 485-486).

On July 14, 2008, a new employee was hired to perform demolition work in the cell room. This was the employee's first job after graduating from high school. He was assigned to cut PVC pipe into 6-foot sections. In August 2008, the employee complained to Shaw Global of back pain which he believed was caused from lifting tires during the weekend. After going to the emergency room, the employee was diagnosed with a strained muscle. He was prescribed medication and returned to work. The next day, he went to a clinic and was given a note for two weeks of light duty. Instead, the employee was sent home by Shaw Global until released by the doctor. In mid-August, Shaw Global was informed the employee's last urinalysis exceeded 75 ug/g. When his symptoms including tremors, sweating, lose of weight, and weakness persisted and after several more visits to the emergency room, the employee went to a hospital in Birmingham, Alabama, on September 21, 2008. The hospital's toxicologist diagnosed the

[3]Shaw's action level of .05 is half of the OSHA Threshold Limit Value (TLV) of .1 mg/m3 for mercury (Tr. 483). See 29 C.F.R. §1926.55(a), Appendix A.

employee with mercury toxicity. The employee remained in the hospital for nine days. At the hearing, the employee testified that he was receiving treatment for mercury toxicity and his symptoms included numbness in his hands and poor memory. He believed the mercury poisoning was the result of a scratch he received while loading copper-plated straps in the cell room. He did not inform Shaw Global of the scratch. Because of the mercury poisoning, the employee testified he has sued Shaw Global for money damages (Exhs. R-1, R-31; Tr. 8, 22, 31, 58, 69, 78)

As a result of the employee's hospitalization, a referral was made to OSHA. Compliance Safety and Health Officer (CSHO) Alpha Davis initiated the inspection of Shaw Global's work in the cell room on September 25, 2008. Davis interviewed employees and observed the cell and change area. She walked through the change area but did not enter the cell room. On October 2, 2008, Davis performed personal monitoring on five employees working in the cell room. One employee's sample result showed an elevated level of mercury exposure above the threshold level of .1 mg/m3 (Exhs. C-9, C-10; Tr. 196-197, 207, 211).

The serious and other than serious citations were received by Shaw Global based upon OSHA's inspection.

Discussion

The Alleged Violations

> In order to establish a violation of an occupational safety or health standard, the Secretary has the burden of proving: (a) the applicability of the cited standard, (b) the employer's noncompliance with the standard's terms, (c) employee access to the violative conditions, and (d) the employer's actual or constructive knowledge of the violation (*i.e.*, the employer either knew or, with the exercise of reasonable diligence could have known, of the violative conditions).

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

Shaw Global does not dispute the application of the construction standards to the decommission/demolition work at the Occidental Chemical plant. Part 1926 standards apply to employees who are engaged in construction work or who are engaged in operations that are an integral and necessary part of construction activities. *Snyder Well Servicing, Inc.,* 10 BNA

OSHC 1371 (No.77-1334, 1982). The decommission/demolition work in the cell room is considered an integral part of construction activities.

Serious Citation No. 1

Item 1a -Alleged Serious Violation of § 1926.850(e)

The citation alleges that "during demolition operation(s) when the presence of a hazardous chemical was present or suspected, testing and purging was not performed, such as but not limited to, exposure monitoring was not conducted to determine the amount of the mercury present in the work area." Section 1926.850(e) provides:

> It shall also be determined if any type of hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in any pipes, tanks, or other equipment on the property. When the presence of any such substances is apparent or suspected, testing and purging shall be performed and the hazard eliminated before demolition is started.

Mercury, as demonstrated by the MSDS, is a hazardous chemical. The MSDS notes that "the most significant routes of occupational over-exposure are inhalation and contact with skin and eyes" (Exh. C-5). There is no dispute the hazards posed by mercury were present during Shaw Global's demolition work of cutting and removing the pipes from the cell room. The employees testified to the presence of mercury (Tr. 10, 96). Shaw Global's direct monitoring during the demolition work verified the presence of mercury (Exh. C-14).

Despite purging the pipes, Shaw Global knew traced amounts of mercury remained in the pipe's joints, around flanges and threads because of mercury's heavy nature (Tr. 479, 480). Shaw Global's purging efforts did not eliminate the presence of mercury.

The Secretary acknowledges that the mercury could not have been totally purged from the pipes before starting the demolition work.[4] Davis agreed purging would not remove the trace amounts of mercury (Tr. 365). Shaw Global complied with the purging requirements of §1926.850(e).

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[4]Shaw Global's argument that the issue of inadequate purging was not properly before the court, is rejected. The citation specifically alleged "testing and purging was not performed."

With regard to the testing requirement, Shaw Global performed area direct read monitoring of the mercury vapor levels twice daily throughout the cell room (Tr. 481, 484). If the direct read instrument showed a reading in excess of .05 mg/m3 for mercury vapor (half the TLV of 0.1 mg/m3), the employees were removed from the cell room until the level was reduced below the action level (Tr. 483, *see* §1926.55(a), Appendix A). Also, Shaw Global conducted weekly urine tests on employees. If the employee's urinalysis exceeded 75 ug/g, the employee was removed from the cell room and not allowed to return until an acceptable urinalysis (Exh. R-21; Tr. 485-486). The MSDS for mercury provides that "analysis of the blood, hair, urine, or feces can be done to determine the level of Mercury exposure" (Exh. C-5, p. 4).

The Secretary argues the testing required by §1926.850(e) is personal monitoring. Davis testified that personal monitoring was required to determine each employee's time-weighted average (TWA) exposure to mercury (Tr. 260). Shaw Global agrees that it only performed area monitoring. The Secretary's argument is rejected. The cited standard does not specifically require personal monitoring of employees. It only requires "testing." Davis was unable to identify any OSHA document or interpretation which defined "testing" to require personal monitoring (Tr. 363-365). The standard expresses mercury exposure in terms of location and not personal employee exposure.

Also, conditions in the cell room changed constantly when cutting and removing the pipes. Direct read instruments provided instantaneous readings of the work. There was no waiting for laboratory results (Tr. 518-519). As noted in OSHA's Technical Manual, direct read instruments provide "information at the time of sampling, thus enabling rapid decision-making" and the data obtained is useful "to evaluate existing health and/or safety programs and to assure proper selection of personal protective equipment (PPE), engineering controls and work practices" (Exh. R-20, p. 32). The use of direct read instruments was appropriate.

The violation of §1926.850(e) is not established.

Item 1b - Alleged Serious Violation of § 1910.134(d)(1)(iii)

The citation alleges "the employer had not evaluated respiratory hazards related to mercury exposure for employees performing various tasks such as but not limited to housekeeping and laundry services." Section 1910.134(d)(1)(iii)[5] provides:

> 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.

[5]The general industry standards for respirators apply to Shaw Global's demolition work because the construction standard at §1926.103 incorporates the respiratory requirements of §1910.134 (Tr. 274).

There is no dispute Shaw Global required all employees working in the cell room to wear appropriate half-face respirators. There is no evidence employees failed to wear the respirators. The duties of the laundry room worker and housekeeper did not require them to work in the cell room. The laundry worker handled and washed the dirty towels, coveralls and other clothing worn by the employees who worked in the cell room. The housekeeper was responsible for cleaning the change area and transporting the dirty towels and coveralls to the laundry. According to the Secretary, the dirty towels and coveralls were potentially contaminated with mercury which could have exposed the two employees (Tr. 218, 276, 278).

An employer's respiratory hazard evaluation must include a reasonable estimate of employee exposure to the hazard, the toxicity and concentration of the hazardous material, and the amount of oxygen present. Where the employer cannot identify or reasonably estimate the employee exposure, the employer must consider the atmosphere IDLH and select a respirator accordingly.

Shaw Global acknowledges the housekeeper and laundry worker were not required to wear a respirator. Site safety manager Rick Carraway testified that the housekeeper and laundry worker were part of the Shaw Global's urinalysis program. He said Shaw Global determined the employees did not need to wear a respirator based upon their urinalysis tests (Tr. 532, 576).

The standard requires an employer to identify and evaluate the respiratory hazard created by mercury exposure. Shaw Global's job safety analysis of the various tasks involved in the demolition work did not include the laundry worker and housekeeper jobs (Exh. R-24). Shaw Global's training acknowledgment states that "respiratory protection is required for all tasks where mercury vapor concentrations exceed .05, when handling contaminated materials and to enter coned or barricaded areas" (Exh. R-12). Shaw Global's mercury vapor direct read results show that on at least two occasions, August 27, 2008 and September 2, 2008, the washing machine and laundry room tested at or above the TLV with respective readings of 1.0 and 1.80 (Exh. C-14; pp. 31, 35). Although Shaw Global's urinalysis testing showed an employee's absorption of mercury, the cited standard addresses respiratory hazards such as mercury vapor. To evaluate the respiratory hazard, Shaw Global needed to evaluate it based upon air monitoring.

By not including the housekeeping and laundry jobs in its respiratory program, Shaw Global ignored its direct read monitoring. Such air monitoring results showed levels comparable to those obtained in the cell room where employees were required to wear respirators.

The violation of §1910.134(d)(1)(iii) is established.

Item 2a - Alleged Serious Violation of § 1910.134(f)(2)

The citation alleges that "annual FIT testing had not been provided for employees using negative pressure respirators." Section 1910.134(f)(2), provides:

> The employer shall ensure that an employee using a tight-fitting facepiece respirator is fit tested prior to initial use of the respirator, whenever a different respirator facepiece (size, style, model or make) is used, and at least annually thereafter.

When Davis reviewed Shaw Global's respiratory records, she found four employees whose respirators were fit tested in June 2007 but were not retested until October 2008 (Exhs. C-11, R-30; Tr. 283-285). OSHA's inspection was initiated in September 2008. Shaw Global was aware of the requirement for annual fit testing. It was addressed in its Respiratory Protection Policy (Exh. C-7).

Shaw Global concedes there was a lapse of approximate 16 months between the employees' fit testing. It argues the standard requires fit testing within each calendar year and not within 365 days (Tr. 523-524). If the Secretary meant within 365 days, she should have so stated. For example, Shaw Global notes that §1910.134(k)(4), involving respiratory training, states training must be repeated "no later than 12 months from the date of the previous training."

OSHA Standard Interpretation letter dated December 23, 1998, defines "annual" as within 365 days (Exh. C-12). The Secretary's interpretation is reasonable and is entitled to deference. The standard's purpose is to ensure the employee's continued protection from respiratory hazards by requiring retesting within a proscribed period.

The standard requires "fit testing at least annually thereafter" the initial fit test. Such language anticipates no more than 365 days. Calendar year fit testing does not achieve this purpose. To apply a calender year, respirator retesting could range from more than 22 months to less than 12 months apart. Such range would lead to inconsistent application.

Shaw Global's argument that if it violated the standard, the Secretary failed to prove a hazard is rejected. As a specific standard, a hazard is presumed. *National Engineering & Contracting Co., v. OSHA*, 928 F.2d 762 (6th Cir. 1991). Proper fit testing ensures the adequacy of the respiratory protection from possible inhalation of mercury vapor.

The violation of §1910.134(f)(2) is established.

Item 2b - Alleged Serious Violation of § 1910.134(h)(1)(i)

The citation alleges "respirators being used in 'cell demolition' were not clean, sanitary and placed in 'cubbies' with other contaminated equipment." Section 1910.134(h)(1)(i) provides:

> Respirators issued for the exclusive use of an employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.

Davis observed respirators stored with other equipment in cubbies located between the cell room and the change area (Exh. C-4; Tr. 289). She was concerned the respirators were contaminated because of the possible presence of mercury from the cell room and other equipment. The cubbies were located near the cell room. Davis did not test the respirators for mercury or otherwise observe the respirators worn in an unsanitary condition (Tr. 381). She was told the employees cleaned the respirators before use with wipes which she considered inadequate for cleaning (Tr. 382-383, 290). Shaw Global's written respiratory program requires employees to clean their respirators before each use (Exh. C-7). The policy states that the proper procedures to sanitize respirators require the respirators to be washed in warm running water or immersed in a chlorine, iodine or disinfecting solution.

The Secretary failed to establish the alleged violation. The standard addresses the need for sanitary respirators, not their storage. There is no evidence the employees failed to clean their respirators before use or used unsanitary respirators. Employees were trained to make sure their respirators were maintained in a clean and sanitary condition before its use (Tr. 525). Shaw Global's respiratory protection program requires respirators to be cleaned and disinfected as often as necessary to keep them sanitary.

Davis agreed that all employees had been trained on Shaw Global's respiratory program. Also, Davis acknowledged the company's work rule required employees to clean their

respirators prior to each use. There is no evidence employees failed to clean their respirators. Davis never tested or looked at any respirator to determine if it was unsanitary. She did not pick one up, check it or test it (Tr. 380, 401).

The two employees who testified for the Secretary said they were trained to clean their respirators and they never used them in an unsanitary condition. The employees testified they cleaned their respirators daily and always cleaned them before putting them on (Tr. 59, 124-125, 156-157). It was not shown why Davis believed the Mercon wipes were inadequate (Tr. 381, 383). Also, with regard o the respirators in the cubbies, Davis did not verify the respirators even belonged to Shaw Global employees (Tr. 383). The record shows that employees of other companies (Occidental and Nelson Services) were using the same cubbies (Tr. 184, 524). There were no names on the respirators.

The violation of §1910.134(b)(1)(i) is not established.

Item 3a - Alleged Serious Violation of § 1926.21(b)(2)

The citation alleges "employees were not adequately trained in hygiene and work practice controls." Section 1926.21(b)(2) provides:

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

According to Davis, the employees working in the cell room did not "appear to be adequately trained in the hygiene and work practices that were adequate to ensure that they weren't going to be exposed to mercury vapor" (Tr. 294). Her concerns were based on her general observations of the work area, the change area, and respirator usage. Although she was shown training documents, she did not believe that such training related to the employees' decommission/demolition work. A training video shown all employees by the Tennessee Valley Authority did not cover the specific work at the Occidental plant (Tr. 296). Davis considered the hazards encountered during demolition of the cell room were different from those encountered in operating the cell room.

To prove a violation of the standard, the Secretary must show that the cited employer failed to instruct employees on how to recognize and avoid the unsafe conditions that they may

encounter on the job and the regulations applicable to those hazardous conditions. *SEMA Construction Inc.*, 19 BNA OSHC 1667 (No. 01-0084, 2001). The Secretary has to burden to show that the instructions given were inadequate or somehow deficient.

Carraway testified the overall training of mercury awareness and the hazards presented by mercury is the same whether dealing with an operating cell house or one being demolished (Tr. 544). He described that employees were trained on where mercury would be located, the proper PPE to wear to protect themselves from mercury exposure, and what to do if they got mercury on themselves. He claimed this training applies no matter what work was being conducted.

Davis agreed that "every Shaw employee had mercury awareness training" and respirator protection training (Tr. 399. 401). She did not identify any problems with Shaw's employee training documents. Although Davis considered the training failed to address demolition work, she offered no evidence identifying any specific deficiencies. She did not identify any differences in the type of training because of the demolition work. Davis based her lack of training concerns on her observations in the change area and cubbies. Such observations do not establish the lack of training.

The testimony of the two employees showed proper training. They received four hours of basic safety training at hire and site specific orientation which included mercury exposure (Tr. 9, 43, 82-83, 156, 171, 179). The site specific training required employees to have Mercury Awareness Training before being allowed to enter the cell room. The employees' training also included the MSDS for mercury (Tr. 44-45, 163). Shaw Global's training records and employees' testimony establish the sufficiency of the training.

The violation of §1926.21(b)(2) is not established.

Item 3b - Alleged Serious Violation of § 1910.1200(h)(3)(ii)

The citation alleges "employees' training did not advise affected employees of the signs and symptoms of mercury." Section 1910.1200(h)(3)(ii)[6] provides:

> *Employee training shall include at least*: The physical and health hazards of the chemicals in the work area.

[6]The standards at §1910.1200 are incorporated into the construction standards by §1926.59.

Davis claims employees were not instructed in the signs and symptoms of mercury exposure. She testified that when she asked one employee if he knew mercury can cause dermatitis, the employee said "no" (Tr. 401-402). She believed this showed a deficiency in the employee's training.

The Secretary did not meet her burden of proof. Shaw Global showed that its training program included employee's training on what mercury looked like, its exposure limits, its location, its safe handling, the proper PPE, and effects of mercury exposure (Exh. R-10, p. 16: Tr. 82-83, 171, 179). Employees were trained on the MSDS for mercury (Tr. 48, 128, 495).

Although two employees testified to not understanding the symptoms and signs of mercury exposure, the record shows that the employees received training on mercury including two videos, mercury awareness and the MSDS. Such training included the signs and symptoms of mercury exposure.

The inability of an employee to remember that dermatitis can be caused by mercury does not establish that the employee was not trained. An employer is not responsible if the employee does not retain the information or does not understand the compliance officer's questions.

The violation of §1910.1200(h)(3)(iii) is not established.

Item 4 - Alleged Serious Violation of § 1926.50(a)

The citation alleges, in part, that "Medical intervention and assessment was not provided to employees who either exhibited health effects or had elevated urinary mercury levels." Section 1926.50(a) provides:

> The employer shall insure the availability of medical personnel for advice and consultation on matters of occupational health.

According to Davis, employees working in the cell room were exposed to mercury without medical assessments of the health hazards (Tr. 305). The record shows that during its demolition work, 17 employees had elevated mercury levels based on Shaw Global's urine test. The employees were removed from the cell room. At the time of the inspection, 12 employees were on removal status (Tr. 307-308). According to Davis, Shaw Global did not review the urinalysis results (Tr. 310). When the employees were removed from the cell room, Davis testified no further instruction was given to the employees. One employee testified that when he

was removed from the cell room, he was given a sheet of paper with a number on it. He did not know what it meant. He was only told that his levels were elevated (Tr. 69). Another employee testified that there was no one he could go to regarding an illness (Tr. 176).

The standard requires an employer to have medical personnel available for advice and consultation on occupational health issues that arise at the worksite. Rick Carraway, the site safety manager who was a licensed advanced EMT, testified that he was available at the plant for medical consultation. Carraway has worked at hospitals as an EKG and hyperbaric technician. He also was a corporate first aid and CPR instructor for the Red Cross. His hard hat had EMT written on the side. He testified that employees were told that he was available to answer any questions regarding the health effects of mercury exposure (Tr. 473-474, 531). Davis knew of Carraway's status as an EMT (Tr. 310).

As an example of Carraway's assistance, one employee who developed a rash on his arm was taken to the doctor by Carraway when he became aware of the rash (Exh. C-1; Tr. 97, 99). The doctor did not relate the rash to mercury exposure. The rash disappeared when Carraway did a followed-up, even though the employee refused the doctor's treatment suggestion (Tr. 99, 566). Physicians to whom employees were sent included Dr. Daniel and Dr. Krebs who oversaw the urinalysis program. The physicians were located within 5 miles of the Occidental plant.

The record shows medical personnel were available for advice and consultation on medical matters in the workplace. Carraway was available to give advice and counsel on medical matters. He was qualified to render such advice based on his training and experience. *Raytheon Constructors, Inc.,* 19 BNA OSHC 1311, 1313 (No. 00-0128, 2000) (EMT's are considered medical personnel under the standard). Other medical personnel were also available including an EMT with Occidental and a health clinic within five miles from the plant. There is no evidence that an employee was denied an opportunity to see a doctor or his questions were unanswered (Tr. 404-405). The written notification of the urinalysis results was self-explanatory (Exh. R-21; Tr. 486-487). The fact that employees were removed from the cell room because of elevated mercury levels does not establish a violation of the standard. The cited standard requires an employer to ensure the "availability" of medical personnel.

The violation of §1926.50(a) is not established.

Item 5 - Alleged Serious Violation of § 1926.51(i)

The citation alleges "the change area provided for employees working in the cell room and exposed to mercury was not adequately demarcated to prevent contamination." Section 1926.51(i) provides:

> "Change rooms." Whenever employees are required by a particular standard to wear protective clothing because of the possibility of contamination with toxic materials, change rooms equipped with storage facilities for street clothes and separate storage facilities for the protective clothing shall be provided.

Shaw Global's change area, used by employees to change into and out of their work clothing and equipment, was a separate, enclosed area. One room in the change area, referred to as the "clean side," was where employees stored their street clothes and put on clean coveralls. The other room referred to as "dirty side" with lockers was for employees to place their worn dirty coveralls and protective equipment used in the cell room (Exh. ALJ-1; Tr. 111, 407). The change area also had a shower facility. The showers were used by employees after working in the cell room. Between the clean side and dirty side of the change area, there were two open doorways. The doorways lacked doors.

Shaw Global argues it complied with the standard because the change area was "equipped with storage facilities for street clothes and separate storage facilities for the protective clothing." The change area had separate storage for street clothes and for protective clothing. The standard says nothing about requiring storage facilities in separate rooms, much less a barrier between them. The standard requires "separate" storage facilities for street clothes and protective clothing. The definition of "separate" means a "unit apart or by itself, not joined or united with others." By having open doorways, the change area did not meet the definition of separate. Although generally lower, Shaw Global's direct monitoring in the change area showed mercury contamination in the clean side despite its regular cleaning. The direct monitoring results in the change area show no significant difference in mercury contamination between the clean side and dirty side, thus indicating the lack of separation (Exh C-14; Tr. 325).

The lack of doors establishes the lack of separation between the clean and dirty storage areas (Tr. 316-317). There were no barriers to prevent mercury contamination from transferring

from the dirty side to the clean side. Nothing restricted the employee's movement from one side to the other. The two employees who testified said that although employees were not supposed to, employees did move between clean and dirty side with their dirty coveralls and equipment because of the open doorways.

The violation of §1926.51(i) is established.

Item 6a - Alleged Serious Violation of § 1926.55(a)

The citation alleges that "the cell room worker was exposed to a time-weighted average of 0.134 milligrams per cubic meter (mg/m3) of mercury. The level is 1.3 times the TLV of 0.1 milligrams per cubic meter (mg/m3). The sampling time was 460 minutes during one shift on October 2, 2008. Zero exposure was assumed for the unsampled time." Section 1926.55(a) provides:

> Exposure of employees to inhalation, ingestion, skin absorption, or contact with any material or substance at a concentration above those specified in the "Threshold Limit Values of Airborne Contaminants for 1970" of the American Conference of Governmental Industrial Hygienists, shall be avoided. See Appendix A to this section.

Davis conducted personnel monitoring on five employees who were working in the cell room on October 2, 2008. Her monitoring results found one employee with a mercury exposure level of 0.134 mg/m3 (Exhs. C-9, C-10; Tr. 326-329, 411). The TLV for mercury is 0.1 mg/m3 (Appendix A to §1926.55(a)). The TLV is "the exposure level to which it is believed that nearly all workers may be repeatedly exposed, day after day or short term, without adverse effect" (Exh. C-6, p. 2). The employee's TWA of mercury exposure was 1.3 times the TLV. The sampling time was 460 minutes. None of the other employees monitored by Davis exceeded the TLV.

Davis' personal monitoring was shown unreliable and contradictory. The four other employees sampled by Davis showed exposure levels less than half of the TLV (Tr. 411). The sampling media used to monitor the employees was not kept with the employee or in view of Davis during the sampling period. The sampling equipment was removed by employees several times during the sampling period in order to take showers and change clothes. During these times, Davis had no idea what was done with the sampling equipment. She did not retain control or maintain visibility of the sampling equipment when the employees removed it. Davis also

failed to give the employees adequate instruction concerning what to do with the sampling media during breaks or showers (Tr. 527-528). OSHA's Technical Manual provides at section III.B that the compliance officer should "stress the importance of not removing or tampering with sampling equipment (Exh. R-20, p. 3).

In performing her sampling, Davis allowed the employee to go into the change area and remove the monitoring pump to change clothes and take a shower. While in the change room, Davis was unable to observe the employee to ensure no tampering with the equipment. Her sampling method failed to ensure reliability of the monitoring results.

The violation of §1926.55(a) is not established.

Item 6b - Alleged Serious Violation of § 1926.55(b)

The citation alleges that based on an employee's exposure to mercury exceeded the TLV, the "general methods of abatement include but are not limited to: Install local and general ventilation of the work areas." Section 1926.55(b) provides:

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

The Secretary asserts Shaw Global needed to implement administrative and engineering controls in the cell room and change area because of an employee's over exposure to mercury (Tr. 330). Davis testified that additional ventilation was needed to reduce exposure (Tr. 331, 332). Because the Secretary failed to establish the over exposure to mercury as discussed in item 6a above, there was no requirement on Shaw Global to implement administrative or engineering controls. However, the record shows such controls were in place.

As discussed by Carraway, the cell room was provided with ventilation fans. There were fans on the walls for circulation and dozens of exhaust fans in the ceiling of the cell room (Exhs.

R-17, R-25, R-26, R-28; Tr. 508-512). The floors of the cell room were cleaned twice a day with bleach and water. Additionally, there were ventilation fans and air conditioning in both sides of the change area and laundry room (Tr. 370-371).

Although Davis knew ventilation was in place in the cell room and the change area, the only control identified was ventilation (Tr. 369). She failed to describe where the additional ventilation should be installed and how additional ventilation would reduce the levels of mercury exposure. There was no showing how the ventilation should be changed, increased or improved. Davis admitted that she was unaware how or where additional controls should be implemented (Tr. 434-435). Davis' concern about the lack of personal monitoring to evaluate controls says nothing about whether feasible controls were in place.

The violation of §1926.55(b) is not established.

Item 7 - Alleged Serious Violation of § 1926.95(a)

The citation alleges "the coveralls provided and used for cell room demolition work were not impervious to mercury and could not be reliably decontaminated." Section 1926.95(a) provides:

> Application. Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

Compliance with § 1926.95(a) requires personal protective equipment (PPE) be provided when the employer has knowledge of a hazard requiring the use of personal protective equipment. *Armour Food Co.*, 14 BNA OSHC 1817, 1820 (No 86-247, 1990) (case involves § 1910.132(a), a similar provision as § 1926.95(a), applies to general industry).

Shaw Global provided employees working in the cell room with PPE including coveralls to protect them from contact with mercury. The MSDS for mercury describes the hazards associated with skin contact and absorption (Exh. C-5). The MSDS states that "Mercury can be irritating to contaminated skin and eyes. Symptons of skin exposure can include redness, dry

skin, and pain." Also, it states that "skin absorption is a significant route of potential over-exposure to Mercury. Currently, no quantitative estimates of the rate of penetration are available. Symptoms of such over-exposure would include redness and irritation of the contaminated area, as well as the development of symptoms described for 'inhalation." Under personal protection for the body, the MSDS recommends to "use body protection appropriate for task (i.e. lab coat, coveralls, Tyvek suit)."

The coveralls provided by Shaw Global were described as blue poly-cotton. Davis testified that such coveralls were not impervious to mercury (Tr. 336). She claimed that she was told the coveralls had to be washed multiple times and that testing on the coveralls after washing showed high levels of mercury (Tr. 237). She also testified that Carraway agreed the coveralls were not designed to prevent mercury contamination on the employee (Tr. 338). Davis also relied on Shaw Global's urinalysis results requiring employees to be removed from working in the cell room to show the inability of the coveralls to protect employees from mercury contact.

There was no testing data offered showing that cleaned coveralls remained contaminated with mercury. The laundry worker did not tell Davis that the clean uniforms were checked and found to be contaminated (Tr. 395). While the laundry worker did tell Davis that the coveralls were washed three times a day, she did not say the numbers of washing were increased because of problems with contamination.

The OSHA CPL 2-2.6 similar to the MSDS states that coveralls can be used as PPE when dealing with mercury (Tr. 388). It further states that it is appropriate to wear coveralls when exposed to mercury above the PEL and when there is repeated contact with mercury fumes, dust or solution (Tr. 390).

Davis did not test any pair of coveralls (Tr. 394). She could not identify any documents showing the coveralls were still contaminated after washing (Tr. 394). She failed provide any support for her opinion that poly-cotton coveralls were not suitable coveralls to prevent mercury contact. Although she testified as to an OSHA web site not recommending cotton coveralls, such interpretation was not specifically identified or provided as part of the record.

The violation of § 1926.95(a) is not established.

Serious Classification

Items 1b, 2a, and 5, affirmed for the reasons discussed, were classified as serious. In order to establish that a violation is "serious" under § 17(k) of the Occupational Safety and Health Act (Act), 29 U.S.C. §651 *et. Seq*., the Secretary needs to show that there is a substantial probability of death or serious physical harm that could result from the cited condition and the employer knew or should have known with the exercise reasonable diligence of the presence of the violation. She need only show that the result of an accident would likely be death or serious physical harm. The likelihood of an accident is not an issue. *Spancrete Northeast, Inc.*, 15 BNA OSHC 1020,1024 (No. 86-521, 1991).

The affirmed violations were properly classified as serious. Shaw Global's failures to evaluate the housekeeper and laundry worker's exposure to a respiratory hazard; to provide annual respirator fit retesting of respirators for employees; and to have separated change rooms can cause employees serious health illnesses due to mercury exposure as described in the MSDS.

There is no dispute Shaw Global knew of these unsafe conditions. Site manager Carraway was present at the plant and was aware of the conditions involving the two employees, respirator fit testing and the change area. Carraway's knowledge is imputed to Shaw Global. *Dun Par Engineered Form Co*., 12 BNA OSHC 1962 (No. 82-928, 1986)(the actual or constructive knowledge of an employer's supervisor can be imputed to the employer).

Other than Serious Citation No. 2

Item 1 - Alleged Other Violation of § 1904.29(b)(3)

The citation alleges "employees restricted from assigned duties in the cell room due to mercury levels and who had experienced symptoms consistent with mercury exposure or who had received medical treatment for mercury exposure were not recorded on the OSHA 300 log." [7] Section 1904.29(b)(3) provides:

[7]Although the citation alleges the failure to record employees removed from the cell room because of high urinalysis results, the Secretary did not address this issue in her brief and the evidence presented is not sufficient to make a finding. The court considers the issue waived. At the time of OSHA's inspection, there were approximately 12 employees on medical removal status from the cell room (Tr. 308). There is no evidence regarding the date(s) of their removal from the cell room.

> ***How quickly must each injury or illness be recorded?*** You must enter each recordable injury or illness on the OSHA 300 Log and 301 Incident Report within seven (7) calendar days of receiving information that a recordable injury or illness has occurred.

In order to be recordable, the illness or injury must be work related. 29 C.F.R. § 1904.4(a)(1). The illness or injury is work related "if the event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing injury or illness." 29 C.F.R. § 1904.5(a). If it is not obvious the injury or illness occurred in the work place, an employer "must evaluate the employee's work duties and environment to decide whether or not one or more events or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing condition." 29 C.F.R. § 1904.5(b)(3). The employer must consider an injury or illness recordable "if it results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness." 29 C.F.R. § 1904.7(a). However, an employer does not have to record any injury or illness that resulted solely from a non-work related event or exposure that occurs outside the work environment. 29 C.F.R. § 1904.5(b)(2)(ii).

Shaw Global's OSHA 300 logs on September 26, 2008 and October 22, 2008 recorded no employee illness or injury (Exhs. C-15, C-16). During this period, an employee was in the hospital for nine days and receiving treatment for mercury toxicity. His hospitalization and mercury toxicity was not recorded on the Shaw Global's 300 log (Tr. 343). Davis testified that Carraway told her he was aware of the employee's hospitalization on October 22, 2008 (Tr. 346, 346).

Shaw Global argues that the employee's only medical information provided to the company was not sufficient to establish a recordable illness. The employee worked a short period of time, July 14 to September 9, 2008. After such a short period, the employee reported that he hurt his back unloading tires at home (Exh. R-1). His doctor's statement verified a back strain and requested that he be placed on two weeks of light duty (Exh. R-31; Tr. 31). Such injury was not work related.

Shaw Global's argument ignores other information pertinent to a recordable illness. Carraway visited the employee in the hospital (Tr. 25). There is no dispute the employee's hospitalization was not reported by Shaw Global on the OSHA 300 log (Tr. 581). Company e-mails show that as of September 22, 2008, Shaw Global was aware of the employees hospitalization for mercury toxicity (Exhs. C-17, C-18; Tr. 552). In a telephone conversation, the employee informed Carraway of his mercury poisoning and that his symptoms included tremors, sweats, constipation, high blood pressure and fast heart beat (Tr. 590). Carraway recognized these symptoms as consistent with an overexposure to mercury. Such symptoms are described in the MSDS for mercury (Tr. 589). Shaw Global knew the employee's job of cutting pipes exposed him to mercury based upon its direct monitoring and urinalysis. The employee's last urine test on August 20, 2008 showed a elevated level of mercury which according to the company's policy, prohibited him from working in the cell room (Tr. 69, 556). *Johnson Controls Inc*., 15 BNA OSHC 2132, 2139 (No. 89-2614, 1993) (elevated blood lead levels are considered an illness). Such record is sufficient to require recording on Shaw Global's 300 log.

A violation of §1904.29(b)(3) is established.

Penalty Consideration

In determining an appropriate penalty, the Act requires consideration of the size of the employer's business, history of the employer's previous violations, the employer's good faith, and the gravity of the violation is required. Gravity is the principal factor.

Shaw Global is part of a large company with 30,000 employees. It is also not entitled to credit for history because prior serious citations were issued within the proceeding three years. Shaw Global is entitled to credit for good faith because it maintained a safety program with a written safety manual, safety training and monitoring.

A penalty of $2,000.00 is reasonable for serious violation of § 1910.134(d)(1)(iii) (Citation no. 1, item 1b). Two employees (laundry room worker and housekeeper) were not properly evaluated to determine their exposure to respiratory hazards associated with mercury. On at least two occasions, the mercury levels in their work area exceeded the .1 mg/m3 TLV based on Shaw Global's direct read instruments.

A penalty of $1,000.00 is reasonable for serious violation of § 1910.134(f)(2) (Citation no. 1, item 2a). The four employees who were exposed to mercury vapor in the cell room had not received respirator fit retesting in excess of 16 months.

A penalty of $2,500.00 is reasonable for serious violation of §1926.51(i) (Citation no. 1, item 5). Shaw Global provided a separated change room with shower facility. However, the doorways between the clean side and dirty side change rooms were open, without doors, allowing mercury contamination to pass into the clean side. Although low, the area direct readings by Shaw Global reflect no variation in mercury levels between the two sides.

A penalty of $1,000.00 is reasonable for other than serious violation of § 1904.29(b)(3) (Citation no. 2, item 1). One employee was not recorded on Shaw Global's 300 log. His last urinalysis showed an elevated level of mercury exposure subjecting him to removal from the cell room. Shaw Global was aware of his symptoms were related to mercury exposure.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

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

ORDER

Based upon the foregoing decision, it is ORDERED:

Serious Citation No. 1

Item 1a, serious violation of § 1926.850(e), is vacated and no penalty is assessed.

Item 1b, serious violation of § 1910.134(d)(1)(iii), is affirmed and a penalty of $2,000.00 is assessed.

Item 2a, serious violation of § 1910.134(f)(2), is affirmed and a penalty of $1,000.00 is assessed.

Item 2b, serious violation of §1910.134(h)(1)(i), is vacated and no penalty is assessed.

Item 3a, serious violation of § 1926.21(b)(2), is vacated and no penalty is assessed.

Item 3b, serious violation of § 1910.1200(h)(3)(ii), is vacated and no penalty is assessed.

Item 4, serious violation of § 1926.50(a), is vacated and no penalty is assessed.

Item 5, serious violation of §1926.51(i), is affirmed and a penalty of $2,500.00 is assessed.

Item 6a, serious violation of § 1926.55(a), is vacated and no penalty is assessed.

Item 6b, serious violation of § 1926.55(b), is vacated and no penalty is assessed.

Item 7, serious violation of § 1926.95(a), is vacated and no penalty is assessed.

Other Than Serious Citation No.23

Item 1, other than serious violation of § 1904.29(b)(3), is affirmed and a penalty of $1,000.00 is assessed.

/s/
Judge

Date: October 25, 2010