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

THOMAS E. PEREZ, Secretary of Labor,  
United States Department of Labor,  
Complainant,

v.

JACOBS FIELD SERVICES OF NORTH  
AMERICA, INC., And its Successors,  
Respondent.

OSHRC DOCKET No. 13-1623

**DECISION AND ORDER**

COUNSEL: M. Patricia Smith, Solicitor of Labor, James E. Culp, Regional Solicitor, Madeleine

T. Le, Counsel, Jennifer J. Johnson, Trial Attorney, for Complainant.

Darren S. Harrington, Esq., Key Harrington Barnes, P.C., for Respondent.

JUDGE: John B. Gatto.

**I. INTRODUCTION**

The above-styled action comes before the Court pursuant to a Complaint filed by Thomas E. Perez, Secretary of Labor, United States Department of Labor (Secretary) pursuant to section 10(c) of the Occupational Safety and Health Act of 1970 (the Act)<sup>1</sup> and Commission Rule 34(a)<sup>2</sup> against Jacobs Field Services North America, Inc. (Jacobs).<sup>3</sup> The Complaint incorporated by reference a Citation and Notification of Penalty (the Citation) issued on August 27, 2013, by the

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<sup>1</sup> See 29 U.S.C. § 659(c); 29 U.S.C. §§ 651–678.

<sup>2</sup> See 29 C.F.R. § 2200.34(a).

<sup>3</sup> The parties stipulate the Commission has jurisdiction of this proceeding under § 10(c) of the Act and that Jacobs is a covered business under § 3(5) of the Act. The parties also stipulate Jacobs filed a timely notice of contest in accordance with § 10(c) of the Act (Jt. Pretrial Order, Ex. E, Stipulations (Stip.) ¶¶ 1, 2, 4).

Houston, Texas Area Director<sup>4</sup> of the Occupational Safety and Health Administration (OSHA) pursuant to section 9(a) of the Act,<sup>5</sup> which alleged six serious<sup>6</sup> violations involving the Process Safety Management (PSM) Standard<sup>7</sup>, the Lockout/Tagout Standard,<sup>8</sup> and the General Requirements section of the Personal Protective Equipment (PPE) Standard,<sup>9</sup> with proposed penalties totaling \$33,000.00. (Compl., Ex. A, pp. 6-13.)

On March 5, 2013, Richard Nickerson, an OSHA Compliance Safety and Health Officer initiated an inspection of the chemical facility owned by AkzoNobel Polymer Chemicals (Akzo or AkzoNobel) in La Porte, Texas, the chemical plant at issue in this case. Jacobs is the onsite maintenance contractor for AkzoNobel (Stip. ¶ 5). The inspection was in response to media reports that [redacted], a Jacobs employee, had been injured as a result of a chemical release on March 4, 2013 (Exs. C-2, C-3). The Secretary cited both Jacobs and AkzoNobel for violations of the cited standards.

In response to the Secretary's allegations, Jacobs asserts that because AkzoNobel is the owner and operator of the plant, "Akzo is the appropriate 'employer' for purposes of fulfilling the responsibilities set forth in the cited standards[.]" and therefore, "the [cited standards]

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<sup>4</sup> By regulation, the Secretary has authorized OSHA's Area Directors to issue citations and proposed penalties. *See* 29 C.F.R. §§ 1903.14(a) and 1903.15(a).

<sup>5</sup> *See* 29 U.S.C. § 658(a).

<sup>6</sup> With respect to alleged serious violations, "a serious violation shall be deemed to exist in a place of employment if there is a substantial probability that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use, in such place of employment unless the employer did not, and could not with the exercise of reasonable diligence, know of the presence of the violation." 29 U.S.C. § 666(k).

<sup>7</sup> *See* 29 C.F.R. § 1910.119.

<sup>8</sup> *See* 29 C.F.R. § 1910.147.

<sup>9</sup> *See* 29 C.F.R. § 1910.132.

identified in the Citation [did] not apply to Jacobs.” (Resp’t’s Br., p.3.) Jacobs also argues that the lockout/tagout standard [did] not apply to the cited activity. Jacobs further contends that [redacted] was wearing appropriated PPE. Finally, should the Court find a violation existed for any of the cited items, Jacobs assert the affirmative defense of unpreventable employee misconduct.

In Item 1 of the Citation, the Secretary alleged a serious violation of 29 C.F.R. § 1910.119(d)(3) for failing to make information available to employees pertaining to equipment in the process. The Secretary proposed a penalty of \$6,000.00 for Item 1. (Compl., Ex. A, p. 6.)

Item 2a alleged a serious violation of 29 C.F.R. § 1910.119(f)(4) for failing to develop and implement safe work practices to provide for the control of hazards. Item 2b alleged a serious violation of 29 C.F.R. § 1910.147(c)(4)(i) for failing to ensure procedures were developed, documented, and utilized for the control of potentially hazardous energy when employees were engaged in maintenance activities. The Secretary proposed a grouped penalty of \$7,000.00 for Items 2a and 2b. (*Id.* at pp. 7-8.)

Item 3 alleged a serious violation of 29 C.F.R. § 1910.119(j)(2) for failing to establish and implement written procedures for maintaining the on-going integrity of process equipment. The Secretary proposed a penalty of \$7,000.00 for Item 3. (*Id.* at p. 9.)

Item 4 alleged a serious violation of 29 C.F.R. § 1910.119(j)(3) for failing to train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee’s job tasks to assure that the employee can perform the job tasks in a safe manner. The Secretary proposed a penalty of \$7,000.00 for Item 4. (*Id.* at p. 10.)

Item 5 alleged a serious violation of 29 C.F.R. § 1910.132(d)(1)(i) for failing to assess hazards in the workplace and select and require affected employees to use appropriate personal protective equipment. The Secretary proposed a penalty of \$6,000.00 for Item 5. (*Id.* at p. 11.)

The Court held a trial in this matter on April 16 and 17, 2014, in Houston, Texas.<sup>10</sup> On September 4, 2014, the Secretary withdrew Item 1 of the Citation. The Court thereafter issued an order on September 8, 2014, vacating Item 1. The parties filed post-trial briefs and the Secretary also filed a reply brief. For the reasons indicated *infra*, the Court **VACATES** Items 2a, 2b, and 5 of the Citation, **AFFIRMS** Items 3 and 4 of the Citation, and assesses a penalty of \$7,000.00 for Item 3 and \$7,000.00 for Item 4 of the Citation.

## II. BACKGROUND

AkzoNobel is a Dutch company headquartered in Amsterdam. It manufactures paint and coatings, as well as specialty chemicals. AkzoNobel operates the facility at issue, located in La Porte, Texas, which sits on 25 acres (Tr. 34). The La Porte facility<sup>11</sup> manufactures organometallic specialty chemicals used as catalysts and co-catalysts for the plastics industry (Tr. 29-30). Jacobs was the resident maintenance contractor for AkzoNobel and had held that position for at least a decade at the time of trial (Tr. 36, 38). Jacobs employed 27 to 35 employees at the La Porte facility (Tr. 381). Its most senior employee onsite was Thomas Pettus,

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<sup>10</sup> Commission Rule 52(e)(7) provides, “In connection with any discovery procedures and where a showing of good cause has been made, the Commission or Judge may make any order including . . . [t]hat a trade secret or other confidential research, development, or commercial information not be disclosed or be disclosed only in a designated way.” On March 21, 2014, the Court issued a Stipulated Protective Order ruling that certain documents produced by AkzoNobel during the instant proceeding “contain trade secrets or other information that requires protection to prevent the loss of AkzoNobel’s competitive advantage.” (Stipulated Protective Order, ¶ 4.) The parties agreed to mark such documents as *Confidential*. Confidential documents adduced as exhibits at trial were placed under seal. Jacobs “agrees that it will destroy all original copies and later copies, if any, of the Confidential documents at the conclusion of litigation of the contest proceedings.” (Stipulated Protective Order, ¶ 6) (Tr. 22, 90).

<sup>11</sup> In addition to being called the La Port facility, the site is also referred to as the Deer Park facility and the Battleground facility (Tr. 32-33).

Jacobs's site manager over the AkzoNobel contract (Tr. 355). David Atcheson was Jacobs's instrument and electrical supervisor and supervised [redacted] (Tr. 174).

The equipment at issue is located in the facility's settling tank area, which contains one reactor and six settling tanks. A reactor is a pressure-rated process vessel that transforms raw materials into a different product by controlling the temperature and pressure inside the reactor. A settler tank, or decanter, is a pressure-rated process vessel used to separate chemicals into heavier and lighter compounds. It is a vertical structure with six decant valves running up its side. Employees use the valves to regulate and direct the flow of the fluid by opening and closing the various passageways. The valves are mounted to the settling tank and are connected to the pipes. The capacity of each settling tank is 15,000 gallons. AkzoNobel normally works with approximately 8,000 gallons of a butylethylmagnesium (BEM) mixture inside a tank. The equipment at issue was a settling tank for BEM and was designated as the T-802 BEM settler tank. (Ex. C-52, pp. 72-74, 85-86, 92, 117-118, 241; Tr. 31-32).

In order to process the chemical product, employees place the raw materials in the reactor. After the materials have been changed, the resulting product is transferred to the various settling tanks for settling and decanting. The settling process takes place generally over two days (Ex. C-52, pp. 86, 120). Once the chemicals have separated, employees open and close the decant valves at the different levels and move the separated chemicals to the next stage in the process (Ex. C-52, pp. 85-87). In order to open and close the valves, AkzoNobel uses automated devices known as actuators, which are mounted on top of each valve using bolts (Ex. C-52, p. 128).

AkzoNobel used two different methods to mount the actuators to the valves. The "old style" was to use a bracket to mount the actuator to the valve bonnet. The bracket functioned

only to assist with the mounting of the actuator. The same bolts that hold the bonnet and valve body together also connect the actuator to the valve (Tr. 80-86). The “new style” does not require the use of the same bolts connected to the bonnet and valve body to mount the actuator and the bolts do not go through the bonnet (Ex. C-52, pp. 291-293, Tr. 88). The new style of mounting the actuators allows an employee to remove all of the bolts without causing a loss of containment of the tank’s contents (Tr. 88, 160, 223). AkzoNobel had used the old style to mount the actuator to the valves on the T-802 BEM tank (Tr. 81, 83-86). Employees activate the actuators using RO-2 switches, which are operated by a local hand switch in the field. When an employee turns on the hand switch, it opens an air supply to the RO-2 switch. The RO-2 switch activates the actuator, which turns the valve and allows the product to decant into the pipelines (Tr. 281).

On March 4, 2013, David Atcheson, instrument and electrical supervisor for Jacobs, instructed [redacted] to repair the actuated valves of the T-802 BEM tank (Ex. C-15; Tr. 282). [redacted] had previously assisted Atcheson with the removal and troubleshooting of an actuator mounted (Tr. 208-209). Although it is possible to remove an actuator mounted in the old style without causing a loss of containment, one of the brackets connected to the valve had rusted to such an extent that [redacted] was unable to remove it (Tr. 263). [redacted] stood on a ladder and attempted to pry off the rusted bracket, but was unable to do so. [redacted] elected to remove the four bolts that connected the actuator to the valve bonnet.

When he did so, the BEM mixture released from the valve and splashed onto [redacted], causing 1<sup>st</sup> and 2<sup>nd</sup> degree burns to his face, wrists, and neck (Tr. 229-231). On that day, the T-802 BEM tank held approximately 9,500 gallons of a BEM/heptane mixture (80% heptane and 20 % BEM) (Ex. 52, p. 300). Approximately 57,000 pounds were released during the incident

(Ex. C-52, pp. 299-300). [redacted] attempted to run to the safety shower but was unable to open his eyes. He eventually was able to follow the sound of another employee's voice to the safety shower where he was able to strip off his coveralls and wash away the BEM mixture (Tr. 229-230). [redacted] was taken by ambulance to the hospital. He was not able to work for three or four months after the accident (Tr. 230). [redacted] testified, however, that although he was neither disciplined nor terminated by Jacobs, he never returned to work for the company because "[t]hey never called me back." (Tr. 231). At the time of trial, [redacted] was working for a different company (Tr. 166).

BEM is pyrophoric, meaning it will catch fire when exposed to air. It also reacts to water (Exs. C-40, C-52, p. 58). In addition to splashing [redacted] and causing him injury, the chemical release also resulted in a fire that caused extensive damage to the exposed pipe rack, piping, wiring, instrumentation, and process equipment (Exs. C-21, C-52, pp. 233-234, 251).

### **III. THE CITATION**

"To prove a violation of an OSHA standard, the Secretary must show by a preponderance of the evidence that (1) the cited standard applies; (2) [Jacobs] failed to comply with the terms of the cited standard; (3) employees had access to the violative condition; and (4) [Jacobs] either knew or could have known with the exercise of reasonable diligence of the violative condition." *JPC Group Inc.*, 22 BNA OSHC 1859, 1861 (No. 05-1907, 2009).

#### **Item 2a: Alleged Serious Violation of 29 C.F.R. § 1910.119(f)(4)**

In Item 2a of the Citation the Secretary alleged that Jacobs violated 29 CFR § 1910.119(f)(4) because it "did not develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening

process equipment or piping; and control over entrance into a facility by maintenance, contractor, laboratory, or other support personnel.” (Cit., p. 7.) More specifically, the Secretary asserted that Jacobs “did not implement safe work practices to provide for the control of hazards during repair of valves in the BEM Settler area of the AkzoNobel facility in La Porte, Texas.” (*Id.*) The Secretary asserted that “[t]his most recently occurred on/around March 4, 2013, when [Jacobs] did not implement its Hazardous Energy Control Procedure or another program/procedure or method to prevent workers being injured while troubleshooting and repairing the valves in the decant piping from the T-802 Settler.” (*Id.*)

#### *Cited Subsection*

Section 1910.119(f)(4) mandates that: “[t]he employer shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a facility by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.” 29 C.F.R. § 1910.119(f)(4).

#### *Applicability of Section 1910.119(f)(4)*

As indicated *supra*, the first element the Secretary must establish to meet his burden of proof is that “the cited standard applies[.]” *JPC Group Inc.*, 22 BNA OSHC at 1861. Section 1910.119 is a part of the PSM standard found in Subpart H (Hazardous Materials) of OSHA’s general industry standards and addresses “[p]rocess safety management of highly hazardous chemicals” and “contains requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. These releases may result in toxic, fire or explosion hazards.” 29 CFR § 1910.119(f)(4). The PSM standard applies to a “process which involves a flammable liquid or gas . . . on site in one location, in a quantity

of 10,000 pounds (4535.9 kg) or more[.]”<sup>12</sup> 29 CFR § 1910.119(a)(1)(ii). The parties stipulated that the BEM settling process at the La Porte facility involved a flammable liquid (BEM/heptane) with a flashpoint below 100° F (37.8° C) on site in one location, in a quantity of 10,000 pounds (4534.9 kg) or more (Stip. ¶ 6). Thus, the PSM standard applied to the BEM settling process at the La Porte facility. The issue, however, is whether the cited PSM standard, subsection 1910.119(f)(4), applied to Jacobs in its capacity as *contractor* to the facility’s owner, AkzoNobel.

Jacobs argues the term *employer* used throughout the PSM standard refers solely to the owner/operator of the equipment (in this case AkzoNobel) except for paragraph (h), which is captioned *Contractors*.<sup>13</sup> Section 1910.119(h)(2) is captioned *Employer responsibilities* and sets

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<sup>12</sup> A “process” is “any activity involving a highly hazardous chemical including any use, storage, manufacturing, handling, or the on-site movement of such chemicals, or combination of these activities. For purposes of this definition, any group of vessels which are interconnected and separate vessels which are located such that a highly hazardous chemical could be involved in a potential release shall be considered a single process.” 29 CFR § 1910.119(b).

<sup>13</sup> Section 1910.119(h) in its entirety provides the following:

(h) *Contractors*--(1) *Application*. This paragraph applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry, delivery or other supply services.

(2) *Employer responsibilities*. (i) The employer, when selecting a contractor, shall obtain and evaluate information regarding the contract employer's safety performance and programs.

(ii) The employer shall inform contract employers of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.

(iii) The employer shall explain to contract employers the applicable provisions of the emergency action plan required by paragraph (n) of this section.

(iv) The employer shall develop and implement safe work practices consistent with paragraph (f)(4) of this section, to control the entrance, presence and exit of contract employers and contract employees in covered process areas.

(v) The employer shall periodically evaluate the performance of contract employers in fulfilling their obligations as specified in paragraph (h)(3) of this section.

(vi) The employer shall maintain a contract employee injury and illness log related to the contractor's work in process areas.

(3) *Contract employer responsibilities*. (i) The contract employer shall assure that each contract employee is trained in the work practices necessary to safely perform his/her job.

(ii) The contract employer shall assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his/her job and the process, and the applicable provisions of the emergency action plan.

out the obligations of the owner/operator vis-a-vis contractors. Section 1910.119(h)(3) is captioned *Contract employer responsibilities* and lists the duties of the contract employer, always referring to it with the two-word label *contract employer*.

Based on section 1910.119(h), Jacobs argues it is not required to comply with the other subsections of the PSM standard for which it was cited, because Jacobs contends, “[t]he plain reading of the PSM standard requires the responsibilities to be delineated between the host employer and the contractor employer.” (Resp’t’s Br., p. 20) (emphasis omitted). The Court agrees with Jacobs that the wording of section 1910.119(h) seems to imply that contract employers are required to comply only with the subsections of the PSM standard that explicitly refer to contract employers. The subsections cited by the Secretary refer to *the employer*, and not *the contract employer*, so it would appear at first blush that the cited subsections do not apply to Jacobs in its capacity as a contract employer. However, the preamble to the final rule of the PSM standard, in addressing section 1910.119(h), states in relevant part that “[t]his is *not* to say, however, that paragraph (h) is the *only* section of the process safety rule that applies to contractors. . . . In determining who to hold responsible, OSHA will look at who created the hazard, who controlled the hazard and whether all reasonable means were taken to deal with the hazard.” *Process Safety Management of Highly Hazardous Chemicals; Explosives and Blasting Agents*, 57 Fed. Reg. 6356, 6384-6385 (February 24, 1992) (emphasis added).

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(iii) The contract employer shall document that each contract employee has received and understood the training required by this paragraph. The contract employer shall prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that the employee understood the training.

(iv) The contract employer shall assure that each contract employee follows the safety rules of the facility including the safe work practices required by paragraph (f)(4) of this section.

(v) The contract employer shall advise the employer of any unique hazards presented by the contract employer's work, or of any hazards found by the contract employer's work.

29 C.F.R. § 1910.119(h).

More importantly, the Commission has recently issued an opinion that is contrary to Jacobs's position. In *Southern Pan Services Co.*, 2014 WL 7338403 (No. 08-0866, Dec. 18, 2014), Southern Pan was subcontracted to perform concrete formwork on a six-story concrete parking deck, which was part of a construction project known as the Berkman project. Part of the structure collapsed during a concrete pour, resulting in the death of a Southern Pan employee, serious injuries to another Southern Pan employee, and injuries to more than twenty employees employed by various subcontractors. Southern Pan was cited for several violations of the Act, including a willful violation of section 1926.701(a), which provides:

No construction loads shall be placed on a concrete structure or portion of a concrete structure unless the employer determines, based on information received from a person who is qualified in structural design, that the structure or portion of the structure is capable of supporting the loads.

29 CFR §1926.701(a).

In the underlying decision, former Commission Judge Ken S. Welsch cited the preamble to the final rule for the concrete and masonry construction standard, which states,

OSHA is requiring that the employer make the determination that the structure or portion of the structure is capable of supporting the construction loads. The employer must make this determination on the basis of information received from a person qualified in structural design. *This revision also places responsibility for employee safety with the person directly responsible for the concrete operations.*

*Concrete and Masonry Construction Safety Standards*, 53 Fed. Reg. 22612, 22617 (June 16, 1988) (emphasis added). Judge Welsch vacated this item, finding that based on the plain language of the cited standard and the preamble to the final rule, the requirements of the standard apply only to “the employers directly responsible for the concrete operation”—in this case Choate, the general contractor, and Pittman, the concrete finishing subcontractor. *Id.* at \*4.

The Commission reversed Judge Welsch's decision since, under Commission precedent, "the focus of the Secretary's burden of proving that the cited standard applies pertains to the cited *conditions*, not the particular cited *employer*." *Id.* (emphasis added) (citing e.g. *Ryder Transp. Servs.*, 24 BNA OSHC 2061, 2064, 2014 CCH OSHD ¶ 33,412, p. 57,383 (No. 10-0551, 2014) (concluding "that the Secretary has failed to establish that the cited general industry standard applies to the working conditions here"); *KS Energy Servs., Inc.*, 22 BNA OSHC 1261, 1267, 2004-08 CCH OSHD ¶ 32,958, p. 53,924 (No. 06-1416, 2008) (finding "the cited ... provision was applicable to the conditions in KS Energy's traffic control zone"), *aff'd*, 701 F.3d 367 (7th Cir. 2012); *Active Oil Serv., Inc.*, 21 BNA OSHC 1092, 1094, 2004-09 CCH OSHD ¶ 32,802, pp. 52,486-7 (No. 00-0482, 2005) (finding "that the confined space standard applies to the cited conditions" because "the vault was a confined space"); *Arcon, Inc.*, 20 BNA OSHC 1760, 1763, 2002-04 CCH OSHD ¶ 32,728, p. 51,896 (No. 99-1707, 2004) ("In order to establish a violation, the Secretary must show that the standards applied to the cited conditions.").

The Commission ultimately concluded that Southern Pan was an "exposing employer" because its own employees were exposed to the cited hazard. As an exposing employer, Southern Pan was required to "do what [was] 'realistic' under the circumstances to protect its employees from the hazard to which a particular standard is addressed, even though literal compliance with the standard may [have been] unrealistic." *Id.* at \*5 (citations omitted). Thus, the Commission held that "[w]hat remains at issue is determining the nature of Southern Pan's *compliance* obligations under the cited provision given the circumstances of this case." *Id.* at \*4. "Thus, the issue for consideration is whether, under applicable precedent, Southern Pan made reasonable efforts to protect the two employees exposed to the violative condition." *Id.* at \*7 (citation omitted).

Therefore, the Court finds no merit in Jacobs's assertion that it had no obligation to comply with the cited subsections of the PSM standard because they did not specifically refer to the *contract employer*. [redacted] was seriously injured while working at the La Porte facility, a multi-employer worksite. As the exposing employer, Jacobs was responsible for all violative conditions to which its employee had access. Thus, the issue for consideration is whether, under applicable precedent, Jacobs made reasonable efforts to protect [redacted].

As the Commission emphatically held in *Southern Pan*, the Secretary must establish that the cited standard applies to the cited *conditions*, not to the cited *employer*. Jacobs does not dispute that “the BEM settling process at the La Porte facility involved a flammable liquid (BEM/heptane) with a flashpoint below 100° F (37.8° C) on site in one location, in a quantity of 10,000 pounds (4534.9 kg) or more.” (Stip. ¶ 6). The Court therefore concludes that the Secretary has established that section 1910.119(f)(4) applies to the cited *conditions*.

#### *Compliance with the Terms of the Cited Standard*

The Secretary must establish that Jacobs failed to comply with the terms of section 1910.119(f)(4) by proving Jacobs failed to “develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout . . . by . . . contractor . . . personnel.” The Citation asserts that the task that Jacobs assigned [redacted] to perform was the “repair of valves in the BEM Settler area.” The Secretary argues that Jacobs failed “to properly detail the procedures necessary to complete the [[redacted]]’s assigned work . . . [and] thus failed to identify the hazards and guard against the foreseeable hazards associated with the work [[redacted]] was performing on March 4, 2013. Respondent failed to implement its line

break procedures when [[redacted]] opened the process equipment on March 4, 213, resulting in an unexpected release of [BEM].” (Compl’t’s Br., p. 20).

However, Jacobs contends Item 2a should be vacated because the task assigned to [redacted] “did not require a line break or any other action that involved potential exposure to a hazard. Given the assigned task, Jacobs was not required to implement Akzo’s hazard control procedure.” (Resp’t’s Br., p. 30). For the reasons indicated *infra*, the Court finds no merit in Jacobs’s contention.

The Court qualified James Johnstone, the Secretary’s witness, as an expert in chemical engineering and process safety management in accordance with F.R.Evid. 702.<sup>14</sup> Johnstone is the president of Contec Solutions, a company that provides safety and environmental engineering services, with an emphasis on process safety management, and he has a degree in mechanical engineering from Washington State University (Ex. C-54; Tr. 396-397). Johnstone opined “that the safe work practices were not *documented* for this valve” and that such documentation is important because the actuator attached in the old style was “a very unusual device out there for somebody to go work on. And so because it’s so unusual and obviously the risk was quite high of something happening, it would have been very important to have a procedure set up for doing this type of work.” (Tr. 438) (emphasis added).

In his post-trial brief the Secretary also argued that Jacobs had actual and constructive knowledge that it had failed to comply with the terms of the standard because it “was aware for years that it had no *written* procedures detailing the job tasks of troubleshooting actuators and also knew that the “old style” mounting existed at the Battleground site, but . . . had conducted no assessment of the associated hazards.” (Compl’t’s Br., p. 22) (emphasis added). The Court

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<sup>14</sup> At trial, the parties stipulated to the qualifications of their respective experts (Tr. 405).

finds no merit in the Secretary's position since he is imposing a requirement on Jacobs that is not required in the standard.

The Commission has already addressed the issue of whether section 1910.119(f)(4) requires the employer's safe work practices to be in writing and has determined that it does not. "It is well settled that the test for the applicability of any statutory or regulatory provision looks first to the text and structure of the statute or regulations whose application is questioned." *Unarco Commercial Prod.*, 16 BNA OSHC 1499, 1502, 1993-95 CCH OSHD ¶ 30,294 at p. 41,732 (No. 89-1555, 1993). Thus, in *Albemarle Corp.*, 18 BNA OSHC 1730, 1732 (Nos. 93-0848 & 93-1715, 1999), the Commission noted that section 1910.119(f)(4) does not use the word "written," or otherwise require that procedures be in writing. For example, "written" operating procedures must be developed and implemented under section 1910.119(f)(1); "readily accessible" to the employees under section 1910.119(f)(2); and "reviewed" to ensure that they reflect "current operating practice" under section 1910.119(f)(3). In contrast, while section 1910.119(f)(4) requires the development and implementation of safe work practices, it neither expressly nor by implication requires that they be in writing. Accordingly, the Commission concluded that no writing was intended to be required.

The Secretary nonetheless alleges Jacobs violated section 1926.119(f)(4) in part because it did not have written safe work practices. Under *Albemarle Corp.*, safe work practices are not required to be in writing. Further, to the extent that the Secretary alleges Jacobs failed to develop and implement unwritten safe work practices to provide for the control of hazards such as LOTO, he has failed to prove that allegation. The phrase *safe work practices* is not defined in the PSM standard. The Secretary has not offered a definition of what he would consider

acceptable as safe work practices. Instead, the Secretary appears to equate safe work practices with compliance with section 1910.147(c)(4)(i).

In his discussion of Jacobs's alleged failure to develop and implement safe work practices, the Secretary focuses on [redacted]'s failure to implement LOTO procedures before attempting to troubleshoot the actuator. The Secretary argues that "[h]ad [Jacobs] complied with any of the standards for which it was cited, [Jacobs] would have known that LOTO was needed. . . . [Jacobs] was required to execute internal lockout tagout policies and procedures to ensure that a loss of containment would not occur while [[redacted]] was working on the valves and troubleshooting the actuators." (Compl't's Br., pp. 21-22.)

Item 2b alleges Jacobs failed to ensure its employee used LOTO procedures when troubleshooting the actuator on March 4, 2013. The "safe work practices" the Secretary alleges in Item 2a that Jacobs failed to implement appear to be the LOTO procedures for troubleshooting the actuators that the Secretary also alleged Jacobs failed to implement in Item 2b. The Secretary has shown no significant difference between his requirements for compliance with the subsections cited in Items 2a and 2b. Violations may be found duplicative where the standards cited require the same abatement measures, or where abatement of one citation item will necessarily result in abatement of the other item as well. *Flint Eng. & Const. Co.*, 15 BNA OSHC 2052, 2056-2057 (No. 90-2873, 1997). Here, the abatement is the same for both cited subsections: Develop and implement procedures for the control of potentially hazardous energy. The Court therefore concludes that Item 2a is duplicative of Item 2b. Accordingly, the Court concludes that Item 2a must be VACATED.

**Item 2b: Alleged Serious Violation of 29 CFR § 1910.147(c)(4)(i)**

The Secretary asserted in Item 2b of the Citation that Jacobs violated 29 CFR § 1910.147(c)(4)(i) because it “did not ensure that procedures were developed, documented and utilized for the control of potentially hazardous energy when employees were engaged in maintenance activities.” More specifically, the Secretary asserted that “[o]n/around March 4, 2013, at the AkzoNobel Facility in LaPorte, Texas, [Jacobs] did not implement an energy control procedure to control potentially hazardous energy to ensure that before any employee performed maintenance on the actuated valves in the decant line piping from the T-802 settler, where the unexpected release of stored energy could occur and cause injury, equipment shall be isolated from the energy source.”

*Cited Subsection*

Section 1910.147(c)(4)(i) mandates that “[p]rocedures shall be developed, documented and utilized for the control of potentially hazardous energy when employees are engaged in the activities covered by this section.” 29 CFR § 1910.147(c)(4)(i).

*Applicability of Section 1910.147(c)(4)(i)*

The cited subsection appears in section 1910.147, which governs the control of hazardous energy (lockout/tagout) (LOTO). Section 1910.147(a)(i) defines the scope of the LOTO standard:

This standard covers the servicing and maintenance of machines and equipment in which the *unexpected* energization or start up of the machines or equipment, or release of stored energy could cause injury to employees. This standard establishes minimum performance requirements for the control of such hazardous energy.

(emphasis in original). Section 1910.147(b) defines *servicing and/or maintenance* as:

Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the *unexpected* energization or startup of the equipment or release of hazardous energy.

(emphasis in original). That same subsection defines *energy source* as “[a]ny source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.”

The Secretary contends section 1910.147(c)(4)(i) applies to the cited conditions because [redacted]’s removal of the actuator was a servicing activity that exposed him to the release of stored chemical energy in the form of BEM. Jacobs argues the assigned task of troubleshooting the actuator did not involve any potential exposure to hazardous energy. “Had the employee properly performed the task assigned, there would have been no exposure to hazardous energy. Therefore, the requirement that the employer implement safe work practices to provide for the control of hazards during operation was not applicable.” (Resp’t’s Br., p. 5).

The Court agrees with the Secretary that the cited standard applies to the cited conditions. Section 1910.147(c)(4)(i) provides that LOTO procedures be “developed, documented and utilized for the control of potentially hazardous energy when employees are engaged in the activities covered by this section.” [redacted] was engaged in a servicing activity covered by section 1910.147 and he was exposed to the potential release of hazardous chemical energy.” Section 1910.147(c)(4)(i) therefore applies to [redacted]’s troubleshooting task.

#### *Compliance with the Terms of the Cited Standard*

AkzoNobel has developed and documented LOTO procedures for planned line breaks at the La Porte facility. Jacobs follows AkzoNobel’s LOTO procedure and trains its employees to

follow it (Exs. R-7 & R-8; Ex. C-52, pp. 297; Tr. 46). Jacobs's supervisor David Atcheson explained the process for implementing LOTO procedures:

Atcheson: [A Jacobs employee] would realize that [the LOTO procedures are being implemented] because there's forms to be filled out. If it was going to make a line break, it's a totally different job than what –

Q. Describe that procedure to me.

Atcheson: Okay. If there's going to be a line break out there, the permitting is different. You're not in a category one. The operator would write it up putting it in a category two.

Q. When you say that, what is category one and category two?

Atcheson: Category one is your FRCs, basically your basic PPE, which is hard hat, safety glasses, flame retardant coveralls and steel-toed boots. Category two is silver suit we wear for line breaks, which consists of a shroud, a face shield, a silver suit top and bottom, PVC gloves.

Q. And you said there are a number of documents. What type of documents would be associated with a line break?

Atcheson: Okay. Well, if you're going to make a line break, Jacobs has a line break check off sheet, which we'd have to fill out and that's got various things on it like, you know, where's your safety showers and bucket, load point, identification.

(Tr. 285-286).

Ronald Wilson, AkzoNobel's health, safety, and security manager, testified that the LOTO procedure is implemented any time there is a line break. "Line breaking would by any time you open process piping . . . And with our material, you've got pyrophoric potential if you don't prepare the equipment properly . . . [A]ny piping or equipment that is opened at our facility needs to be prepared properly before it's opened" (Ex. C-52, p. 223). Atcheson admitted that Jacobs did not implement its LOTO procedures for the T-802 BEM Settler on March 4, 2013 (Tr. 285). [redacted] also admitted he did not implement LOTO procedures on March 4, 2013, because "it is not a procedure to lockout if you're working on [an] actuator." (Tr. 249). It is

undisputed that [redacted], in removing the bolts that connected the actuator bracket to the valve bonnet on March 4, 2013, broke the line. Wilson testified that removing the valve bonnet is line breaking (Ex. C-52, p. 225). Therefore, the Court concludes that the Secretary has established that Jacobs failed to comply with section 1910.147(c)(4)(i) on March 4, 2014, when [redacted] was troubleshooting the actuator.

#### *Employee Access to the Violative Condition*

Jacob's failure to implement LOTO procedures on March 4, 2013, on the T-802 BEM Settler exposed [redacted] to the hazard of the release of stored chemical energy. BEM splashed on [redacted], causing 1<sup>st</sup> and 2<sup>nd</sup> degree burns to his face, wrists, and neck (Tr. 229-231). Therefore, the Court concludes that the Secretary has established employee access to the violative condition.

#### *Employer Knowledge*

“As part of the Secretary's *prima facie* case, [he] must show that the employer had actual knowledge of the violation or could have discovered it with the exercise of reasonable diligence.” *Otis Elevator Co.*, 21 BNA OSHC 2205, 2207 (No. 03-1344, 2007). Thus, the Secretary must establish that Jacobs had either actual or constructive knowledge that it had failed to implement LOTO procedures when its employee had access to the hazard of the release of stored chemical energy. The record does not establish Jacobs had actual knowledge of such access. Acheson testified he did not anticipate that [redacted]'s assignment on March 4, 2013, would require a line break that would trigger the implementation of the LOTO procedures (Tr. 291).

The Secretary also failed to establish Jacobs had constructive knowledge of [redacted]'s line break. "The test is whether the Secretary established that [Jacobs] could have discovered the violative condition through the exercise of reasonable diligence." *Otis Elevator Co.*, 21 BNA OSHC at 2210 (citing *Pride Oil Well Serv.*, 15 BNA OSHC 1809, 1814, 1991-93 CCH OSHD ¶ 29,807, p. 40,583 (No. 87-692, 1992)). "An inquiry into whether an employer was reasonably diligent involves several factors, including the employer's obligation to have adequate work rules and training programs, to adequately supervise employees, to anticipate hazards to which employees may be exposed, and to take measures to prevent the occurrence of violations." *Stahl Roofing Inc.*, 19 BNA OSHC 2179, 2181 (No. 00-1268, 2003).

Acheson testified the task he assigned [redacted] of troubleshooting the actuator did not require [redacted] to cause a line break.

Q. How do you remove an actuator?

Acheson: The bolts that attach it to a bracket.

Q. And what do you do with those bolts?

Acheson: Okay. You remove the bolts and take the actuator off.

Q. So there's no need then to remove the bracket?

Acheson: No.

\* \* \*

Q. And if you have to replace an RO2, or an actuator for that matter, does that involve a line break?

Acheson: No.

Q. Are you required to lockout or tagout the RO2 or the actuator?

Acheson: No.

Q. Why not?

Atcheson: Because like in this particular -- well, you've got control of the instrument area. It's in your vicinity right there at it, so you just simply block in the air and remove the RO2.

\* \* \*

Q. And once that tubing is removed, is it possible for the RO2 to become energized?

Atcheson: No.

Q. Are there any moving parts that might injure the employee if the RO2 were to become energized?

Atcheson: It's all internal movement.

Q. What about the actuator? Are there any moving parts that might injure the employee if it becomes –

Atcheson: No. It's just turning the stem so it's in the middle of it. It's not out in the open.

Q. All the moving parts are internal to the component, to the inside of the actuator?

Atcheson: No, it's not internal on that. There's internal moving parts on an actuator but it's tied to the stem.

Q. And so if the actuator were to unexpectedly become energized, would an employee be exposed to a hazard by the actuator operating?

Atcheson: No.

(Tr. 292-295).

AkzoNobel's safety manager Wilson agreed with Atcheson that [redacted]'s assigned task did not trigger the LOTO procedure:

Wilson: Troubleshooting an actuator does not require breaking into a line, doing a line-break. It doesn't require opening any piece of equipment. The only energy source involved with troubleshooting an actuator is moving a quarter-inch instrument airline, which poses no hazard to anybody.

Q. Okay. Well, does 1910.147 apply to troubleshooting an actuator?

Wilson: No, it does not.

Q. Is that for the same reason?

Wilson: For the same reason. There's no hazardous energy source that's going to hurt anyone by disconnecting a quarter-inch instrument airline that's shooting out a very low pressure.

Q. Is it possible to remove the actuator from the bracket without disassembling the valve?

Wilson: Yes, there is. That's -- yes.

Q. Okay. Would that be your expectation?

Wilson: That's what we expected March 4th.

(Tr. 131).

Jacobs followed the LOTO procedure that AkzoNobel had developed and documented. It trained its employees in the LOTO procedure. It utilized the LOTO procedure when its employees engaged in activities that involved line breaks in the process equipment. In the instant case, Jacobs did not anticipate its employee would initiate a line break. The task assigned to the employee did not require the employee to cause a line break. Thus, Jacobs was unaware that the LOTO procedure would need to be utilized.

Therefore, the Court concludes that the Secretary has failed to establish Jacobs had actual or constructive knowledge that its employee would have access to the release of hazardous chemical energy. Accordingly, the Court concluded that Item 2b must be VACATED.

**Items 3 and 4: Alleged Serious Violations of 29 CFR §§ 1910.119(j)(2) and (3)**

In Item 3 of the Citation the Secretary alleges that Jacobs violated 29 CFR §§ 1910.119(j)(2) because it “did not establish and implement written procedures for maintaining

the on-going integrity of critical components of the process piping[.]” (Compl., Ex. A, p. 9.) More specifically, the Secretary alleges that Jacobs “did not establish and implement written procedures for the non-routine task of separating the valve and actuator to repair the valves in the piping of the BEM Settlers.” (*Id.*) According to the Secretary this occurred when Jacobs “did not provide written procedures to guide the maintenance technician in repairing the valves in the decant piping from the T-8-2 Settler on/around March 4, 2013.” (*Id.*)

In Item 4 of the Citation the Secretary alleges that Jacobs violated 29 CFR § 1910.119(j)(3) because it “did not train each employee involved in maintaining the on-going integrity of process equipment in the procedures applicable to the employee’s job tasks to ensure that the employee can perform the job tasks in a safe manner[.]” (*Id.* at 10.) More specifically, the Secretary alleges that Jacobs “did not train maintenance technicians in procedures required to safely troubleshoot and repair the decant valves in the BEM Settler area of the AkzoNobel facility in LaPorte, Texas.” (*Id.*) Again, according to the Secretary this most recently occurred “on/around March 4, 2013, when Work Order # 153530 was assigned and executed to repair valves that were hung up in the decant piping from the T-802 settler.” (*Id.*)

#### *Cited Subsections*

Subsections 1910.119(j)(2) and (3) provide:

(2) *Written procedures.* The employer shall establish and implement written procedures to maintain the on-going integrity of process equipment.

(3) *Training for process maintenance activities.* The employer shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

29 CFR § 1910.119(j)(2) and (3).

*Applicability of Sections 1910.119(j)(2) and (3)*

In addition to arguing it is not required to comply with the PSM standard except for those subsections in paragraph (h) that specifically apply to contract employers, Jacobs contends the actuator, bracket, and bolts at issue are not part of the process equipment and, therefore, sections 1910.119(j)(2) and (3) do not apply to the conditions cited in Items 3 and 4. (*See e.g.* Resp't's' Br., p. 26.) As set out under Item 2a, the Court concludes that Jacobs was required to comply with the PSM standard in general. Nonetheless, the Court must still determine whether the cited standard applies to the actuator, bracket, and bolts at issue.

Section 1910.119(j)(1) provides that paragraphs (j)(2) through (j)(6) of the PSM standard apply to the following process equipment:

- (i) Pressure vessels and storage tanks;
  - (ii) Piping systems (including piping components such as valves);
  - (iii) Relief and vent systems and devices;
  - (iv) Emergency shutdown systems;
  - (v) Controls (including monitoring devices and sensors, alarms, and interlocks)
- and,
- (vi) Pumps.

29 CFR § 1910.119(j)(1). The preamble to the Final Rule also indicates that “[t]he Agency believes that there is certain equipment, critical to process safety, that is common to all processes. . . . [I]f an employer deems additional equipment to be critical to a particular process, that employer should consider that equipment to be covered by this paragraph and treat it accordingly.” *57 Fed. Reg.* at 6389.

Jacobs argues that “to establish the applicability of subparagraphs (j)(2) and (j)(3), it is necessary for the Secretary to establish that the actuator is on the enumerated list of process equipment identified in paragraph (j)(1).” (Resp't's' Br., p. 26.) Jacobs also asserts that “the

“RO2 and actuator at issue are not process-containing equipment and are, therefore, not subject to the mechanical integrity program of Akzo” and therefore “[n]either component qualifies as covered process equipment under 1910.119(j)(1).” (Jacobs Br., p. 5.) The Secretary contends the components are part of the process equipment (ii) “[p]iping systems (including piping components such as valves)” and (v) “[c]ontrols (including monitoring devices and sensors, alarms, and interlocks).” The Secretary argues that “all pieces of equipment that [[redacted]] worked on—RO-2 switch, actuator, bracket, bolts, and valves—constitute process equipment because they are part of the piping systems and controls.” (Compl’t’s Br., p. 29). The Court agrees with the Secretary.

AkzoNobel’s safety manager Wilson testified AkzoNobel considers the actuator to be part of the process. Wilson stated that, in general, AkzoNobel assumes the entire facility is subject to the PSM standard. He stated, “[i]nternally, we treat our whole site as covered by PSM. Even though we have a few processes that aren't covered by PSM, we think it's a good safety management practice. It's a good way to make sure things don't get mixed. So even if the process is not covered by PSM, we go ahead and treat it as if it would.” (Tr. 66).

Wilson also testified AkzoNobel classifies the components at issue as part of the process equipment (Tr. 50). He stated that he considers the actuator and the mounting bracket to be classified as critical equipment (Tr. 127, 137). Wilson acknowledged that if the actuator alone broke, it would not result in a loss of containment (Tr. 136-137), but he believes the BEM settlers as a whole are process equipment because settler tanks have “got flammable chemicals in there greater than 10,000 pounds and you've also got the reactive chemicals in the BEM.” (Tr. 67).

The Court qualified Tony Cornwell, Jacob's proffered expert, as an expert in chemical engineering and process safety management, including process safety management (Ex. R-11; Tr. 405) in accordance with F.R.Evid. 702. It is Cornwell's opinion that section 1910.119(j) does not apply to the actuator "as the actuator operates a valve that is not required to limit the uncontrolled release of a highly hazardous chemical and thus no written procedure is required to be developed under 1910.119(j)(2) for replacing this actuator. This interpretation is typical within the industry." (Ex. R-11, p.4). Cornwell also opined that section 1910.119(j)(3) does not apply to troubleshooting the actuator "because an actuator is not the type of equipment identified in" section 1910.119(j)(1) (*Id.*). In his opinion, [redacted] "was properly trained, per the typical industry practice, to isolate and test the plunger on the RO2 valve before isolating and testing the actuator. Neither of these external components is considered within industry practice to be part of the equipment addressed under 1910.119(j)." (*Id.*)

James Johnstone, the Secretary's expert, disagreed. He cited the American Petroleum Institute (API) 570, *Piping Inspection Code: In-service Inspection, Rating, Repair, and Alteration of Piping Systems* (Ex. C-48) and API 553, *Refinery Valves and Accessories for Control and Safety Instrumented Systems* (Ex. C-46). Ronald Wilson testified that API sets "standards that are generally accepted in the industry." (Ex. C-52, p. 146). Johnstone quoted from API 570's definition of *pressure boundary*:

The portion of the piping that contains the pressure retaining piping elements joined or assembled into pressure tight fluid-containing systems. Pressure boundary components included pipe, tubing, fittings, flanges, gaskets, bolting, valves, and other such as expansion joints and flexible joints.

(Ex. C-48, p. 11). According to Johnstone,

In this case, the bolts in the bonnet of the valve would be included inside of the pressure boundary as they help to contain the pressure. Therefore, these bolts are

process equipment as defined by API 570. These same bolts also held the bracket, between the Tuflin valve and the XAct actuator, to the Tuflin valve. The bolts in the bonnet were removed by the technician causing the release of hazardous materials.

(Ex. C-51, p. 3).

Johnstone also quoted from API 553, which defines *control valve* as consisting “of two major subassemblies: a valve body and an actuator,” (Ex. C-46, p. 8), and opined, “The API’s definition of a control valve includes the valve body, actuator and the bracket as XV-454 [the old style valve] was designed.” (Ex. C-51, p. 4). Johnstone concluded,

In summary, the standard (1910.119(j)) requires that the mechanical integrity shall apply to process equipment including: piping systems (including piping components such as valves), emergency shutdown systems, and controls. The Tuflin valve, XAct actuator and the mounting bracket comprising XV-454 are subject to this requirement for two reasons: 1) the XV-454 assembly (including the valve, mounting bracket and actuator) is integral to the process at the facility and 2) the XV-454 assembly is part of the safety system needed to close the valve in the event of fire.

(*Id.*).

Cornwell disputes Johnstone’s characterization of the actuator. According to Cornwell,

[T]he actuator is not required for mechanical integrity. The actuator is required for operability. So the operability of this valve could fail and there's no risk of loss of containment. . . . Again it goes to operability versus safety. There's nothing about this valve, whether it goes wide open or fully closed, there's nothing about this valve that can lead to -- unless the valve itself fails, the pressure boundary of the valve body, but as far as the operability of the valve, there's nothing about that that's going to lead to a release of a high hazardous chemical.

(Tr. 556-557).

The Court concludes that Jacobs’s focus on the actuator as the component to which sections 1910.119(j)(2) and (3) apply is too narrow. The Citation did not allege the actuator alone was part of the process equipment. Rather, the Citation alleged that Jacobs failed to have

written procedures and failed to provide training to maintain the on-going integrity of process equipment with regard to “separating the valve and actuator to repair the valves in the piping of the BEM Settlers.” It is undisputed that the old style of mounting the actuator to the valve is to use a bracket which is bolted to the valve bonnet. The same bolts that hold the bonnet and valve body together also connect the actuator to the valve (Tr. 80-86). Once the valve bonnet is removed, the BEM mixture is released from the BEM settler. According to API 570, the pressure boundary includes bolting. Here, [redacted] removed the bolts that attached the bracket to the valve bonnet. Their removal resulted in the catastrophic release of the BEM mixture. The Court therefore concludes that sections 1910.119(j)(2) and (3) apply to the bracket and bolts used to mount the actuator to the valve bonnet. Thus, the Court concludes that the cited standard applies to the cited condition.

#### *Compliance with the Terms of the Standard*

It is undisputed Jacobs did not “establish and implement written procedures to maintain the on-going integrity of” the components used to mount the actuator to the valve in the old style. Thomas Pettus, Jacobs’s site manager at the La Porte facility, admitted that Jacobs did not have a written procedure for the T-802 BEM settler because Jacobs is “not responsible for developing those work procedures for those pieces of equipment. That equipment's owned by the owner of the facility, and it would be their responsibility to develop those.” (Tr. 371). As discussed under Item 2a, the Court concludes that it is also Jacobs’s responsibility to comply with the cited subsections of the PSM standard.

Acheson testified that the old style method of mounting the actuator to the valve involved “an unusual bracket. . . From my recollection, that’s probably the third one that I’ve

encountered in 11 years.” (Tr. 307). [redacted] testified he was not adequately trained to troubleshoot the actuator mounted in the old style.

Q. At any time prior to you beginning your work task on March the 4th, did anybody give you any documents about the actuator or the valve?

[redacted]: No.

Q. Did you discuss the configuration of the valve, whether it was old style, new style, anything along those lines?

[redacted]: No.

Q. Were there any documents given to you about the settler tank?

[redacted]: No.

Q. Was there any discussion or documents given to you about the proper procedures to follow when you're troubleshooting an actuator?

[redacted]: No.

Q. Was there any discussion about the type of assembly that this actuator had on this valve?

[redacted]: No.

Q. How it was mounted?

[redacted]: No.

Q. Was there any instruction given to you about do's and don'ts regarding this particular -- the particular valves that you were going to work on?

[redacted]: No.

Q. For instance, did anybody tell you that certain bolts connected the bracket to the valve so, you know, you can't loosen or take those off?

[redacted]: No.

(Tr. 213-214).

The Court concludes that the Secretary has established Jacobs failed to comply with the terms of sections 1910.119(j) (2) and (3). Jacobs did not establish and implement written procedures to maintain the on-going integrity of process equipment and it did not train its employees involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

*Employee Access to the Violative Condition*

Jacob's failure to comply with the terms of the cited subsections of the PSM standard regarding the T-802 BEM Settler exposed [redacted] to the hazard of the release of stored chemical energy on March 4, 2013. The BEM mixture splashed on [redacted], causing 1<sup>st</sup> and 2<sup>nd</sup> degree burns to his face, wrists, and neck (Tr. 229-231). Therefore, the Court concludes that the Secretary has established employee access to the violative condition.

*Employer Knowledge*

Jacobs was aware that no written procedures existed for the task assigned to [redacted].

Jacobs's site manager Pettus testified:

Q. As a former maintenance training coordinator, were you surprised that AkzoNobel did not have written maintenance procedures?

Pettus: Yes.

Q. How long have you been aware that AkzoNobel doesn't have written maintenance procedures?

Pettus: Since the day I started.

(Tr. 383).

Pettus had been the site manager of the AkzoNobel site for several years prior to the March 4, 2013 incident and had been aware that Jacobs' employees performed maintenance tasks

without written maintenance procedures. (Tr. 360, 383). Jacobs was aware that [redacted] was scheduled to perform the work on March 4, 2013 since the work was provided to him by his Atcheson, who signed off on the required ISPA. (Tr. at 282, 332–333).

Therefore, the Court concludes that the Secretary has established Jacobs had actual knowledge that it had not established and implemented written procedures to maintain the on-going integrity of the process equipment associated with the T-802 BEM settler and that it did not train its employees involved in maintaining the on-going integrity of that process.

Jacobs contends any violations the Court finds are the result of employee misconduct on the part of [redacted]. “To establish the unpreventable employee misconduct defense, an employer must show that it established a work rule to prevent the violation; adequately communicated the rule to its employees, including supervisors; took reasonable steps to discover violations of the rule; and effectively enforced the rule.” *Schuler-Haas Electric Corp.*, 21 BNA OSHC 1489, 1494 (No. 03-0322, 2006). Given the cited subsections at issue, Jacobs’s defense necessarily must fail.

The first element of the defense the employer must show is that it established a work rule designed to prevent the violation. Here, the violations were not having a written procedure for the T-802 BEM settler and not training its employees in maintaining the on-going integrity of that equipment. [redacted]’s actions in purportedly going outside the scope of his work assignment have no bearing on Jacobs’s compliance with the cited standards. Even if there had not been the loss of containment that gave rise to this proceeding, Jacobs still failed to establish and implement the required written procedure and failed to provide the required training. Therefore, the Court finds no merit in Jacobs’s employee misconduct defense. Thus, the Court

concludes that the Secretary has established that Jacobs violated sections 1910.119(j)(2) and (3). Therefore, the Court concludes that Items 3 and 4 must be AFFIRMED.

#### *Classification*

The Secretary classified these items as serious. As indicated in footnote 6 *supra*, under section 17(k) of the Act, a violation is serious “if there is a substantial probability that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use, in such place of employment *unless the employer did not, and could not with the exercise of reasonable diligence, know of the presence of the violation.*” (Emphasis added.) 29 U.S.C. § 666(k). Here, as indicated *supra*, Jacobs did not establish and implement written procedures to maintain the on-going integrity of process equipment and it did not train [redacted] in an overview of that process and its hazards and in the procedures applicable to [redacted]’s job tasks to assure that he could perform the job tasks in a safe manner. Jacobs’s failure to have written procedures on the troubleshooting task assigned to [redacted] was instrumental in the incident that occurred on March 4, 2103, the fire at the Battleground site, and the serious injury suffered by [redacted] (Tr. at 229 – 230, 383). Therefore the Court concludes that Items 3 and 4 were properly classified as serious.

#### **Item 5: Alleged Serious Violation of 29 CFR § 1910.132(d)(1)(i)**

The Secretary asserts in Item 5 of the Citation that Jacobs violated 29 CFR §1910.132(d)(1)(i) because it “did not select and have each affected employee use the types of [PPE] that would protect the affected employee(s) from the hazards identified in the hazard assessment[.]” (Compl., Ex. A, p. 11.) More specifically, the Secretary argues that “[o]n/around

March 4, 2013, [Jacobs] did not require the technician working on components of the decant piping in the BEM Settler area of the AkzoNobel facility in La Porte, Texas, to use the required PPE identified on the AkzoNobel's MSDS to protect against the hazards of Magala BEM 20% in Heptane.” (*Id.*)

*Cited Subsection*

Section 1910.132(d)(1)(i) mandates that “[t]he employer shall assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE). If such hazards are present, or likely to be present, the employer shall: (i) Select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment[.]” 29 CFR §1910.132(d)(1)(i).

*Applicability of Section 1910.132(d)(1)(i)*

Section 1910.132(a) provides:

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.

29 CFR §1910.132(a). Here, [redacted] was working in an area where he possible could encounter hazards of processes or environment. Jacobs does not dispute the applicability of section 1910.132(d)(1)(i) to the cited conditions, but contends [redacted] was wearing the appropriate PPE for the task assigned. The Court concludes that the Secretary has established section 1910.132(d)(1)(i) applies to the cited condition.

### *Compliance with the Terms of the Standard*

The Secretary contends Jacobs violated the cited standard because [redacted] “wore no protective equipment such as an aluminized suit and/or category II PPE required for potential exposure to BEM.” (Compl’t’s Br., p. 41). Jacobs argues the Secretary did not cite the company for failing to make a hazard assessment, but rather, cited it because he disagrees with Jacob’s hazard assessment. The Court agrees with Jacobs.

Jacobs works with AkzoNobel to assess the hazards of different areas of the facility (Tr. 346). Prior to starting on an assigned task, Jacobs’s employees fill out an individual safety plan of action (ISPA), in which they detail the assigned tasks and assess the hazard. The second page of the ISPA is a checklist of categories including required permits and required PPE, with subcategories for eye, hand, foot, and respiratory protection, as well as for special clothing. The supervisor assigning the task signs off on the ISPA after reviewing it. (Ex. R-4). [redacted] completed an ISPA for the task of removing the actuator on March 4, 2013. Supervisor Acheson also signed the ISPA (Ex. R-6).

Thus, the Court agrees with Jacobs that Item 5 questions the adequacy of the PPE used by [redacted], not the lack of a hazard assessment. OSHA cited Jacobs for a violation of section 1910.132(d)(1)(i) because the employee was not wearing the PPE OSHA believed should be worn. OSHA’s disagreement with the result of an employer’s hazard assessment is not a basis for a finding that no assessment was conducted. Therefore, the Court concludes that Item 5 must be VACATED.

#### **IV. PENALTY DETERMINATION**

Under section 17(j) of the Act, the Commission must give “due consideration to the appropriateness of the penalty with respect to the size of the business of the employer being charged, the gravity of the violation, the good faith of the employer, and the history of previous violations.” 29 U.S.C. § 666(j). The principal factor in a penalty determination is gravity, which “is based on the number of employees exposed, duration of exposure, likelihood of injuries, and precautions against injuries.” *Siemens Energy and Automation, Inc.*, 20 BNA OSHC 2196, 2201 (No. 00-1052, 2005).

Jacobs employs more than 60,000 employees (Tr. 529–530). Jacobs has a history of violations ( Ex. C-3; Tr. 530). The Secretary did not establish Jacobs demonstrated anything less than good faith in this proceeding. The gravity of Items 3 and 4 is high. Jacobs’s violation of sections 1910.119(j)(2) and (3) resulted in an employee assigned to troubleshoot a piece of equipment for which he lacked complete information. As a result, the employee inadvertently engaged in line breaking without having taken the appropriate precautionary measures, resulting in a catastrophic loss of containment of a hazardous chemical. The loss of containment resulted in serious injuries to the employee and extensive property damage to the La Porte facility. The Court concludes that an appropriate penalty is \$7,000.00 for Item 3 and \$7,000.00 for Item 4 of the Citation.

## **V. 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. Accordingly,

## VI. ORDER

### IT IS HEREBY ORDERED THAT:

Item 2a of the Citation, alleging a serious violation of § 1910.119(f)(4), is **VACATED** and no penalty is assessed;

Item 2b of the Citation, alleging a serious violation of § 1910.147(c)(4), is **VACATED** and no penalty is assessed;

Item 3 of the Citation, alleging a serious violation of § 1910.119(j)(2), is **AFFIRMED** and a penalty of \$7,000.00 is assessed;

Items 4 of the Citation, alleging a serious violation of § 1910.119(j)(3), is **AFFIRMED** and a penalty of \$7,000.00 is assessed; and

Item 5 of the Citation, alleging a serious violation of § 1910.132(d)(1)(i), is **VACATED** and no penalty is assessed.

**SO ORDERED THIS 5<sup>th</sup> day of February, 2015.**

/s/  
**JOHN B. GATTO, Judge**  
U.S. Occupational Safety And  
Health Review Commission