

---

SECRETARY OF LABOR,  
Complainant,  
v.  
DREXEL CHEMICAL CO.,  
Respondent.

---

OSHRC Docket No. 94-1460

### ***DECISION***

Before: WEISBERG, Chairman; MONTOYA and GUTTMAN, Commissioners.

BY THE COMMISSION:

The issue in this case is whether Administrative Law Judge Ken S. Welsch erred by affirming various violations of the Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651 - 678 (“the Act”), involving permit-required confined spaces, lockout/tagout provisions, and the storage of material. Having reviewed the record, we vacate the citations for violations of 29 C.F.R. §§ 1910.146(c)(1) and (c)(2), and we affirm the citations for violations of 29 C.F.R. §§ 1910.146(c)(4), 147(c)(4)(ii), and 176(b).<sup>1</sup>

#### **I. Permit-Required Confined Spaces**

##### **A. Alleged Violation of 29 C.F.R. § 1910.146(c)(1)**

During a routine inspection of Drexel Chemical Company’s manufacturing plant in Cordele, Georgia, Occupational Safety and Health Administration (“OSHA”) Compliance Officer David Baker noticed that the plant contained several permit-required confined spaces

---

<sup>1</sup>Because we have resolved these issues on the basis of the record before us, we deny Respondent’s motion for oral argument.

(“permit spaces”).<sup>2</sup> Baker concluded from his inspection that Drexel did not conduct a satisfactory evaluation of its workplace pursuant to 29 C.F.R. § 1910.146(c)(1), which states that “[t]he employer shall evaluate the workplace to determine if any spaces are permit-required confined spaces.” The Secretary subsequently cited Drexel for a violation of 29 C.F.R. § 1910.146(c)(1).

Michael Shankle, Drexel’s corporate regulatory manager, testified at the hearing that he had made the determination prior to the effective date of the standard that Drexel’s plant contained permit spaces that were covered by the standard. Shankle stated that he had been to the Cordele plant many times and was familiar with its physical layout, equipment, and chemical processes and that he made this evaluation based on his knowledge of the plant. Shankle stated that “the only way you could write this program is by evaluating the site, because you first have to determine do you fall under the regulation.” This testimony was supported by a memorandum dated March 16, 1993, from Shankle to Drexel’s plant

---

<sup>2</sup> **§ 1910.146 Permit-required confined spaces.**

(b) *Definitions.*

.....

*Confined space* means a space that:

- (1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- (2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and
- (3) Is not designated for continuous employee occupancy.

.....

*Permit-required confined space* (permit space) means a confined space that has one or more of the following characteristics:

- (1) Contains or has a potential to contain a hazardous atmosphere;
- (2) Contains a material that has the potential for engulfing an entrant;
- (3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
- (4) Contains any other recognized serious safety or health hazard.

managers and safety officers stating that “[o]n April 15, 1993, OSHA’s final rule on regulating confined space entry takes effect. This ruling will effect [sic] Drexel’s operations since our employees routinely enter confined spaces (eg: tanks, vessels, reactors, bins, blenders, dust collectors, etc.).”

As an initial matter, we agree with the Secretary that the evaluation under paragraph (c)(1) requires the identification of all permit spaces in a workplace. In reaching this conclusion, we look to the language in the preamble, which we have held is “the best and most authoritative statement of the Secretary’s legislative intent.” *American Sterilizer Co.*, 15 BNA OSHC 1476, 1478, 1991-93 CCH OSHD ¶ 29,575 at p. 40,016 (No. 86-1179, 1992); *Phelps Dodge Corp.* 11 BNA OSHC 1441, 1444, 1983-84 CCH OSHD ¶ 26,552, pp. 33,920-21 (No. 80-3203, 1983), *aff’d*, 725 F.2d 1237, 1240 (9th Cir. 1984). The language in the preamble relating to § 1910.146(c)(1) states that “workspaces that meet the definition of permit space need to be identified at the time the final rule goes into effect.” 58 Fed. Reg. 4481 (1993). OSHA reasoned that the “initial survey will facilitate employers’ efforts to develop and implement appropriate measures so that a protective permit space program is in place when entry operations are initiated.” *Id.*

In addition to the language in the preamble, the structure of the standard logically requires that the initial evaluation identify each permit space in a workplace. Such identification would facilitate compliance with the subsequent provisions of the regulation, including paragraph (c)(2), which requires the employer to warn employees of the existence and danger of the permit spaces, and paragraph (c)(4), which requires a written entry procedure for permit spaces.

Although we conclude that 29 C.F.R. § 1910.146(c)(1) does require the identification of all permit spaces in a workplace, we find that the Secretary has not established a violation in this case. The Secretary alleges that Drexel did not conduct the type of specific evaluation required by the standard because it did not physically inspect the plant for permit spaces and because it failed to include batch hoppers and mixing vats in the list of permit spaces in its

written program. However, Drexel's regulatory manager based his evaluation of the plant upon his knowledge of the equipment and machines, and the record indicates that he had the information necessary to determine which spaces in the plant were permit spaces and was qualified to make such determinations. Drexel's failure to specify the vats and hoppers in its written program may result in an incomplete written program, but it does not follow that an initial evaluation was not conducted. We do not find the evaluation by a qualified person who was familiar with the plant to have been so deficient as to constitute a failure to evaluate.

Our conclusion is in accordance with an instruction published after the inspection in this case which suggests that an employer may satisfy the requirements of paragraph (c)(1) without documenting the evaluation or conducting a physical inspection of the workplace. OSHA Instruction CPL 2.100, Application of the Permit-Required Confined Spaces Standards ("CPL"), dated May 5, 1995, states that the evaluation under § 1910.146(c)(1) does not need to be documented as long as the employer can explain how the evaluation was conducted and describe the results.<sup>3</sup> The CPL also states that the initial evaluation does not necessarily require a specific physical survey of each space if the determination can be made through existing records and knowledge of the spaces in the workplace, provided that this information is adequate. Accordingly, we vacate the item alleging a violation of 29 C.F.R. § 1910.146(c)(1).

#### **B. Alleged Violation of 29 C.F.R. § 1910.146(c)(2)**

---

<sup>3</sup>We note that the CPL is not binding on the Secretary; however, we have relied on CPLs to support an interpretation of a standard in the past. *See, e.g., EBBA Iron, Inc.*, 17 BNA OSHC 1051, 1052, 1993-95 CCH OSHD ¶ 30,685, p.42,585 (No. 92-3189, 1995); *Price Chopper Supermarkets*, 15 BNA OSHC 1518, 1520 n.3, 1991-93 CCH OSHD ¶ 29,608, p. 40,083 n.3 (No. 90-0552, 1992).

The Secretary cited Drexel for violating 29 C.F.R. § 1910.146(c)(2)<sup>4</sup> because it did not have posted danger signs identifying the permit-required confined spaces at the plant. The record indicates that the majority of permit spaces at the plant are tanks and that an employee must remove approximately thirty bolts and a manhole cover in order to enter any one of them. Shankle testified that “it takes maintenance to even open [the dust collectors] up to get in,” and that all of the permit spaces in the plant are difficult to access because they have small openings and require a ladder to enter. Emory Tucker, the present plant manager at Drexel’s Cordele plant, testified that an employee could not inadvertently enter a permit-required confined space. For example, he testified that the dust collectors are situated on raised platforms and storage tanks are suspended “above the platform about almost head-high.” In addition, Tucker testified that the plant maintains a list of qualified employees who are the only ones authorized to enter permit spaces, and that permit spaces were discussed with employees at safety meetings.

Section 1910.146(c)(2) requires employers to inform their employees of the existence and location of, and the dangers posed by, permit-required confined spaces. The preamble to the standard states that employers could achieve this goal by using the most cost-effective method available, including training and restricting access to permit spaces with tools and

---

<sup>4</sup>The standard provides:

**§ 1910.146 Permit-required confined spaces.**

(c) *General Requirements.* . . .

. . . .

(2) If the workplace contains permit spaces, the employer shall inform exposed employees, by posting danger signs or by any other equally effective means, of the existence and location of and the danger posed by the permit spaces.

keys. 58 Fed. Reg. 4481 (1993). Mandatory posting of signs was explicitly rejected in the final rule.<sup>5</sup> The preamble states, however, that “general training in the OSHA standard cannot be expected to adequately inform employees of the location of permit spaces in the workplace” and it emphasizes that the standard places the burden of identifying permit spaces on the employer, not the employee. 58 Fed. Reg. 4483.

We find that the Secretary failed to establish a violation. The record indicates that access to permit spaces in Drexel’s plant is restricted and that Drexel’s employees received permit space training. Although Tucker did not provide details of the training in his testimony, the provision of adequate training was not rebutted and we are therefore unable to conclude, as the Secretary argues, that the training was too generalized and insufficient to supplant danger signs. This unrebutted testimony, in conjunction with the workers’ very limited access to the permit spaces, supports a finding that the Secretary failed to establish that Drexel’s employees were not adequately informed of the existence of permit spaces at the plant. Accordingly, we vacate this item.

### **C. Alleged Violation of 29 C.F.R. § 1910.146(c)(4)**

Drexel was also issued a citation alleging a violation of 29 C.F.R. § 1910.146(c)(4),<sup>6</sup> based on the compliance officer’s examination of its written permit space program. At issue is whether the Secretary proved that Drexel’s program did not comply with the standard’s

---

<sup>5</sup>Proposed paragraph (c)(4) would have required all permit spaces to be posted with signs indicating what hazards were present and that only authorized entrants could enter. This language was not incorporated into the final rule.

<sup>6</sup>The standard provides:

**§ 1910.146 Permit-required confined spaces.**

(c) *General Requirements*. . . .

. . . .

(4) If the employer decides that its employees will enter permit spaces, the employer shall develop and implement a written permit space program that complies with this section. The written program shall be available for inspection by employees and their authorized representatives.

requirements. The required elements of the written permit-required confined space program are detailed in section 1910.146(d), which provides, in part:

(d) *Permit-required confined space program* (permit space program). Under the permit space program required by paragraph (c)(4) of this section, the employer shall:  
 (1) Implement the measures necessary to prevent unauthorized entry;

....

(3) Develop and implement the means, procedures, and practices necessary for safe permit space entry operations, including, but not limited to the following:

(I) Specifying acceptable entry conditions;

(ii) Isolating the permit space;

(iii) Purging, inerting, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards;

....

(v) Verifying that conditions in the permit space are acceptable for entry throughout the duration of the authorized entry.

....

(8) Designate the persons who are to have active roles (as, for example, authorized entrants, attendants, entry supervisors, or persons who test or monitor the atmosphere in a permit space) in entry operations, identify the duties of each such employee, and provide each such employee with the training required by paragraph (g) of this section;

(9) Develop and implement procedures for summoning rescue and emergency services, for rescuing entrants from permit spaces, for providing necessary emergency services to rescued employees, and for preventing unauthorized personnel from attempting a rescue;

(10) Develop and implement a system for the preparation, issuance, use, and cancellation of entry permits as required by this section;

....

Drexel's program consisted only of a two-page memorandum dated March 16, 1993 from Shankle to plant managers and safety officers informing them of the new OSHA regulation regarding permit spaces, a summary of its requirements, a sample entry permit, and a copy of Keller's Industrial Safety Report entitled "Confined Spaces Final Rule: Your New Requirements Under OSHA Section 1910.146." Drexel did not develop a permit space entry program specific to the permit spaces at its Cordele plant.

We find that the Secretary has established that Drexel's written permit space program is inadequate. Not only does it not identify the particular permit spaces at the plant or set forth specific procedures for entry into those spaces, it also does not differentiate between the different types of permit spaces found within its plant. For example, Drexel's written program fails to identify: the potential hazard posed by each type of space;<sup>7</sup> acceptable entry conditions for each type of permit space; appropriate protective equipment necessary to enter a space;<sup>8</sup> which retrieval method is appropriate for the different permit spaces; which rescue technique would be most effective for each type of space;<sup>9</sup> and which lockout procedure, if applicable, should be used for each type of permit space.<sup>10</sup>

In the preamble to the standard, OSHA described the written plan as "a reference for guidance and direction to supervisors and employees alike." 58 Fed. Reg. 4484 (1993). Drexel's permit program is not sufficient to serve this purpose. We recognize that an employer may have the same permit space procedure for spaces with similar characteristics, however, the permit program must also include those spaces that are not similar in terms of configuration, access, and hazards. The permit spaces at Drexel's plant are not sufficiently similar to justify the same procedure, as evidenced by Shankle's testimony that some spaces at the plant have mechanical hazards and others do not, and the plant manager's testimony

---

<sup>7</sup>Drexel's program merely states that "Confined spaces must be tested for any hazards prior to entry, (oxygen level, flammable gasses, L.E.L., toxic air contaminants). Detection meter is necessary." (emphasis in original).

<sup>8</sup>Drexel's program states that "The attendant or supervisor in charge is responsible for assuring that proper personnel protective equipment is worn and properly used by the entrants (eg: tyvek suits, rubber gloves, rubber boot, safety goggles, respirators, forced air respirators, etc.)."

<sup>9</sup>Drexel's program states generally that "Retrieval systems or methods (eg: harness, wristlets, etc.) are to be used in areas that rescue efforts would be hampered without these aids."

<sup>10</sup>Drexel's program states that "All mechanical devices are to be properly locked out, blanked or disconnected to assure that all hazards are isolated. (eg: pumps, agitators, valves, lines, etc.)."

that the mixing vessels contain different materials. Moreover, even if, as Drexel contends, all the permit spaces were similar for purposes of a written program, its program would still be deficient due to its generic nature.

Under section 17(j) of the Act, 29 U.S.C. § 666(j), we determine an appropriate penalty by considering the size of employer's business, the gravity of the violation, the good faith of the employer, and its history of violations. In his decision, the judge grouped the penalties for 29 C.F.R. §§ 1910.146 (c)(1), (c)(2), and (c)(4), and assessed a \$1000 penalty. Because we have vacated the citations for §§ 1910.146 (c)(1) and (c)(2), but find the gravity of the § 1910.146(c)(4) violation to be high, we find that a penalty of \$750 is appropriate. Accordingly, we affirm the item alleging a violation of 29 C.F.R. § 1910.146(c)(4) and assess a penalty of \$750.

## **II. LOCKOUT/TAGOUT PROCEDURES**

### **Alleged Violation of 29 C.F.R. § 1910.147(c)(4)(ii)**

At issue here is whether Drexel had an energy control procedure in place as required by section 1910.147(c)(4)(ii). The standard provides that:

The procedures shall clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy, and the means to enforce compliance, including, but not limited to, the following:

- (A) A specific statement of the intended use of the procedure;
- (B) Specific procedural steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy;
- (C) Specific procedural steps for the placement, removal and transfer of lockout devices or tagout devices and the responsibility for them; and
- (D) Specific requirements for testing a machine or equipment to determine and verify the effectiveness of lockout devices, tagout devices, and other energy control measures.

Drexel's procedure appears to derive from Appendix A to §1910.147, an illustration of a typical minimal lockout procedure. For this form procedure to be effective, the employer must fill in a number of blanks, including the names of affected employees, the types and magnitudes of energy, the hazards, the methods to control the energy, the types and locations

of machine or equipment operating controls, the types and locations of energy isolating devices, the types of stored energy and methods to dissipate or restrain energy, and the method of verifying the isolation of the equipment. Drexel failed to fill in any of this information. For example, Drexel's program states generically that:

....

3. If the machine or equipment is operating, SHUT IT DOWN by the normal stopping procedure (depress stop button, open switch, close valve, etc.)

4. Deactivate the energy isolating device(s) so that the equipment is isolated from the energy source(s).

5. Lock out the energy isolating device with assigned individual locks. Also remove any fuses if an electrical disconnect is involved.

6. Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.

....

The procedures submitted by Drexel fall far short of the standard's requirements. They provide no information about Drexel's machines that would enable an employee to lock out a machine safely. For example, Appendix A clearly indicates that in order for element 4 to be effective, the types and locations of machine or equipment operating controls must be identified. Drexel did not provide this information, or any of the other required information. Under Drexel's lockout procedure, the employee is not informed of the type and magnitude of the energy, the method to control the energy, the shut down procedure, the energy isolating device and method, and the method to dissipate stored or residual energy. Because the purpose of the lockout procedure is to guide an employee through the lockout process, these general procedures are not acceptable.

Even if the program were otherwise adequate we would reject Drexel's contention that its program covers all the machines and equipment in its plant. In proposing the rule, OSHA noted that machines that are similar, using the same type and magnitude of energy

and the same types of controls, can be covered with a single procedure. 53 Fed. Reg. 15,509 (1988). That is not the case here. In addition to electrically driven machines, Tucker testified that the plant has an airmill, driven by an air compressor, and that its lockout procedure involves fitting a device over the air valve to prevent air from going into the mill. That procedure differs from the single switch lockout of the electrically driven machines. Because the standard requires the lockout procedures for each type of machine to be specifically defined, and because there are different types of machines at the plant, Drexel must have more than one lockout procedure.

We also reject Drexel's broad contention that all the machines in the plant come within the exception to the cited regulation in section 1910.147(c)(4).<sup>11</sup> Compliance Officer Baker testified that some of the machines at Drexel's plant did not meet the requirements of the exception. He testified that there is a potential for stored or residual energy after

---

<sup>11</sup>The exception is as follows:

**§ 1910.147 The control of hazardous energy (lockout/tagout).**

(c) *General* -

....

(4) *Energy control procedure.*

....

NOTE: *Exception:* An employer need not document the required procedure for a particular machine or equipment, when all of the following elements exist: (1) The machine or equipment has no potential for stored or residual energy or reaccumulation of stored energy after shut down which could endanger employees; (2) the machine or equipment has a single energy source which can be readily identified and isolated; (3) the isolation and locking out of that energy source will completely deenergize and deactivate the machine or equipment; (4) the machine or equipment is isolated from that energy source and locked out during servicing or maintenance; (5) a single lockout device will achieve a locked-out condition; (6) the lockout device is under the exclusive control of the authorized employee performing the servicing or maintenance; (7) the servicing or maintenance does not create hazards for other employees; and (8) the employer, in utilizing this exception, has had no accidents involving the unexpected activation or reenergization of the machine or equipment during servicing or maintenance.

shutdown in the hoppers and mills, that not all equipment had a single energy source, and that some of the mills and hoppers were too large for one person to control all energy sources during servicing or maintenance. Drexel did not introduce evidence to support its claim that all of its machines and equipment met the elements of the exception.

Accordingly, we affirm the item alleging a violation of 29 C.F.R. § 1910.147(c)(4)(ii). Since neither party disputes the \$700 penalty assessed by the judge, we see no reason to disturb it.

### III. STORAGE OF BOXES

#### Alleged Violation of 29 C.F.R. § 1910.176(b)

The Secretary also alleged that Drexel violated 29 C.F.R. § 1910.176(b)<sup>12</sup> by storing boxes in a hazardous manner. At issue here is whether the boxes were in storage within the meaning of section 1910.176(b), and if they were, whether the Secretary proved employee exposure. The record indicates that tiers of boxes, approximately 20 feet high, located near a loading dock, were not properly stacked and were bulging and leaning. Compliance Officer Baker testified that he was told that the boxes were placed there because there was no other room in the warehouse and that Drexel was in the process of building a new warehouse. Baker saw an employee sweeping the area around the boxes and other employees walking within 10 feet of the boxes. Tucker, the plant manager, testified that the boxes were temporarily held in a “staging area” after being unloaded from a truck. Zebulon Scott, a forklift operator, testified that the boxes are stacked in the staging area until they are transported to the back of the warehouse for storage when all the trucks are unloaded.

---

<sup>12</sup>The standard provides that:

**§ 1910.176 Handling materials -- general.**

....

(b) *Secure storage.* Storage of material shall not create a hazard. Bags, containers, bundles, etc., stored in tiers shall be stacked, blocked, interlocked and limited in height so that they are stable and secure against sliding or collapse.

We find that the standard is applicable in this situation because the boxes were in fact stored in the “staging area” while awaiting further transport. The record does not establish how long the boxes were in this location, but it does indicate that the employee who unloaded the trucks and stacked the boxes had finished those jobs and was sweeping the floor when Baker noticed the boxes stacked in an unsafe manner. While there may be an amount of time so short that materials would not be considered stored, the length of time at issue here exceeds any *de minimis* period that may exist under the standard. We further find that Drexel’s employees were exposed to the hazard. The evidence is undisputed that employees, including the one who swept the floor, were in the area of the boxes. Therefore, we affirm the item alleging a violation of 29 C.F.R. § 1910.176(b). Since Drexel does not dispute the penalty, we affirm the \$1,050 penalty assessed by the judge.

### Order

Accordingly, the citation items alleging violations of 29 C.F.R. §§ 1910.146 (c)(1) and (c)(2) are vacated. The citation items alleging violations of 29 C.F.R. §§ 1910.146(c)(4), 147(c)(4)(ii), and 176(b) are affirmed, and a total penalty of \$2,500 is assessed.

/s/ \_\_\_\_\_  
Stuart E. Weisberg  
Chairman

/s/ \_\_\_\_\_

Daniel Guttman  
Commissioner

/s/  
\_\_\_\_\_  
Velma Montoya  
Commissioner

Dated: March 3, 1997