



United States of America  
**OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION**  
1924 Building - Room 2R90, 100 Alabama Street, S.W.  
Atlanta, Georgia 30303-3104

Secretary of Labor,  
Complainant

v.

Swisslog Logistics, Inc., and Wal-Mart Stores  
East, L.P. d/b/a Distribution Center 7019,  
Respondent.

OSHRC Docket Nos.: 17-0777 & 17-0784

Appearances:

Jeremy K. Fisher, Esq.  
Office of the Solicitor, U.S. Department of Labor, Atlanta, Georgia  
For Complainant

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Ogletree, Deakins, Nash, Smoak & Stewart, P.C., Milwaukee, Wisconsin  
For Respondent – Swisslog Logistics, P.C.

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For Respondent – Walmart Stores East, LP. d/b/a Distribution Center 7019, Inc.

Before: Administrative Law Judge Sharon D. Calhoun

### **DECISION AND ORDER**

On October 18, 2016, an employee of Swisslog Logistics, Inc., (Swisslog) sustained a serious leg injury when he was struck by an automated trolley while working at a facility owned and operated by Wal-Mart Stores East, L.P. d/b/a Distribution Center 7019 (Wal-Mart). A compliance safety and health officer (CSHO) of the Occupational Safety and Health Administration investigated the incident and recommended citations be issued to Swisslog and Wal-Mart. On April 13, 2017, the Secretary issued Citations and Notifications of Penalty to Swisslog and Wal-Mart. The Secretary charged each employer with a willful violation of 29 C.F.R. § 1910.147(c)(4)(i) of the Lockout/Tagout (LOTO) standard, for failing to utilize documented procedures for the control of potential hazardous energy.<sup>1</sup> The Secretary proposes a penalty of \$126,749.00 for each respondent.

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<sup>1</sup>The Secretary issued two one-item Citations to Wal-Mart. Item 1 of Citation No. 1 alleged a serious violation of § 5(a)(1). After the hearing, the Secretary and Wal-Mart filed a joint notice with the Court stating the Secretary was

Swisslog and Wal-Mart timely contested the Citations. The cases were consolidated for hearing, which the Court held March 21 and 22, 2018, in Montgomery, Alabama. The parties have filed briefs (Swisslog and Wal-Mart's brief is consolidated). Swisslog and Wal-Mart argue the cited standard does not apply to the cited condition, and the standard was not violated in any event. They also dispute the characterization of the violation, if affirmed, as willful.

For the reasons discussed below, the Court **VACATES** Item 1 of the relevant Citations issued to Swisslog and Wal-Mart.

### **JURISDICTION AND COVERAGE**

Swisslog and Wal-Mart timely contested the Citations on May 3 and May 4, 2017, respectively. The parties stipulate the Commission has jurisdiction over this action and Swisslog and Wal-Mart are covered businesses under the Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651-678 (Act) (*Joint Prehearing Statement*, ¶¶ V.a, & V.b; Tr. 26). Based on the stipulations and the record evidence, the Court finds the Commission has jurisdiction over this proceeding under § 10(c) of the Act and Swisslog and Wal-Mart are covered employers under § 3(5) of the Act.

### **STIPUATIONS**

In their *Joint Prehearing Statement*, the parties stipulated the following:

- a. Beginning on or around July 2016, employees of Respondent Swisslog Logistics, Inc. began a project to upgrade components of an Electrified Monorail System ("EMS") in use at Respondent Wal-Mart Stores East, LP's worksite in Brundidge, Alabama.
- b. On October 18, 2016, an employee of Respondent Swisslog Logistics, Inc. suffered an injury involving one of the automated trolleys within the EMS.
- c. Following the accident, Respondent Swisslog Logistics, Inc. conducted an audit of the EMS.

(*Joint Prehearing Statement*, ¶ IV)

At the hearing, the parties also stipulated to the following, read into the record by the Secretary's counsel:

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withdrawing Item 1 of Citation No. 1. *See Order Approving Partial Settlement Agreement*, dated July 5, 2018. The Secretary cites respondents for willfully violating the standard at issue, 29 C.F.R. § 1910.147(c)(4)(i), in Item 1 of Citation No. 1 issued to Swisslog and in Item 1 of Citation No. 2 issued to Wal-Mart.

The parties have stipulated that on October 18, 2016, Mr. Thomas Fowler, maintenance operations manager for Respondent Walmart Stores, provided a statement in response to an injury to [Employee #1] in which Mr. Fowler stated: "When I arrived [Employee #1] called me over and said you have to get rid of that reset." And that Mr. Fowler further stated: "I went to go into the loop and saw it was not in access speed. I accessed the loop and found what appeared to be the accident area." The parties further stipulate that on December 8, 2016, Mr. Fowler provided a statement to the Occupational Safety and Health Administration Compliance Officer that in response to a question regarding what happened during [Employee #1 's] injury, Mr. Fowler stated: "I found light curtains muted. The loop was in full speed."

(Tr. 475-76)

## **BACKGROUND**

### *Overview*

Wal-Mart's Distribution Center in Brundige, Alabama, supplies grocery items to Wal-Mart stores in the region. The three-level facility receives full pallets of merchandise from manufacturers. Wal-Mart employees break down the full pallets into smaller quantities to ship to individual stores. The third floor of the facility houses the Electrified Monorail System (EMS), at issue here. Swisslog designs, develops, and installs automated logistics systems. It installed the EMS at Wal-Mart's Brundige facility in 2002. The EMS became operational in 2003. As a contractor to Wal-Mart, Swisslog maintains and updates the EMS as needed (Tr. 59, 314-15).

The EMS consists in part of an automated trolley system operated on a monorail. Three loops, called Loop 1, Loop 2, and Loop 3, span approximately 100 yards. The trolleys do not maintain a continuous position in any one loop but may move from one loop to another. Trolleys exit via "switch points" or "switches" in the track. A computer system monitors the movement of the trolleys (Exhs. J-8 & R-8; Tr. 59-65).

In addition to the EMS, the third floor of the Brundige facility contains storage and retrieval machines (referred to as "cranes") and conveyors. The facility receives pallets on the first floor. Wal-Mart employees move the pallets by forklift to the conveyor system, which raises them to the third floor on vertical lifts. Once on the third floor, the conveyor system comes to a dead-end position called a "pick-up point." One of the EMS's thirty trolleys will receive an assignment to retrieve the pallet. The number of trolleys running in the system varies depending on several factors, including whether any trolleys are sidelined for maintenance. The trolleys are approximately 4 or 5 feet wide and can carry pallets weighing up to 3,000 pounds.

The track they run on is 3 to 4 inches wide. The EMS is run seven days a week, twenty-four hours a day (Exh. J-9: Tr. 61-65, 72, 88).

The trolleys operate at two different speeds: full-speed and access speed. Employee witnesses testified they would have to jog to keep up with a trolley moving at full-speed but could walk to keep up with a trolley moving at access speed. The weight of a pallet could slow the speed of the trolley. Before the upgrade project, each trolley was equipped with a mechanical safety bumper mounted to the front of the car. The bumpers were tensioned with two cables connected to a contact block that allowed electricity to flow through. If anything came in contact with the bumper, it pushed it in, releasing the tension on the cables and breaking the connection. The trolley was then in fault mode (Tr. 85-86, 438, 100).

#### *Access to the EMS*

The EMS was surrounded by a fence with gaps to accommodate conveyor entry points. The conveyor entry points were equipped with safety guards in the form of light curtains designed to allow 48-inch by 40-inch pallets to enter the system without tripping the light curtains. Light curtains were also installed at the switch points between the trolley loops and were designed to allow entry by trolleys without tripping the light curtains. If a person attempted to cross through a light curtain, the curtain would trip. Tripping a light curtain in this manner would stop the trolleys in that section (Tr. 75-77). The EMS was also equipped with access doors designed to be opened with a key. Once the key was turned, a light on the door would turn green and the trolleys in the associated loop would slow to access speed (Exhs. J-5 & C-23; Tr. 105, 112-113).

Wal-Mart's written procedure required employees to use the access doors to the EMS. Exhibit J-5 is titled *Monorail Access Procedure (Type I MDC)*. It lists sixteen steps for employees to follow when entering the monorail access area "[t]o make sure the material handling equipment (MHE) in the monorail access area is placed in a Stop or Manual Mode to allow Maintenance personnel to perform routine housekeeping and respond to system errors." *Id.* The Monorail Access Procedure was posted on the access doors on the third level (Tr. 100, 200, 275).

The first step of the procedure is "Request permission form the SPOC [Single Point of Control] operator to enter the Monorail Access Area." (Exh. J-5) The SPOC operator is responsible for monitoring the system and sits in an office overlooking the third floor (Tr. 112).

The SPOC operator monitors the "movement of the cranes, conveyor belts, the monorail system, the moving of the induct stations" and other functions, typically by observing a computer monitor (Tr. 268).

The succeeding steps require an employee seeking access to the EMS to insert the monorail request key into the access request switch located on the control panel; turn the key switch to the on position and release it; verify that the ok for access green light turns solid green and the MHE in the loop is operating at the access speed (slow); remove the key; unlock the access door to the monorail access area using the door key; open the access door and enter the area; remove the key from the doors and hold onto it while accessing the monorail access area and post name badge in the designated posting area; close the door within 10 seconds; perform required work in monorail access area; verify that all personnel have exited the monorail access area; open the access door and exit from the monorail access area; close the door within 10 seconds; insert the monorail request key into the reset switch, turn the key and release; verify the monorail loop resumes operation at normal (high) speed; and notify the SPOC operator that there are no personnel in the monorail access area and the MHE is returned to normal operation (Exh. J-5).

Wal-Mart and Swisslog employees entering the EMS did not, however, comply with Wal-Mart's rigorous procedure. Employees for both companies entered the EMS by crossing over fixed conveyors at various points (Tr. 81). The light curtains in the area had been disabled, so employees crossing through them had no effect on system operation (Tr. 85). Employees had placed pieces of cardboard over the light curtains between Loops 1 and 2 and in the entry to Loop 3, resulting in the light curtains being "in a muted state." (Tr. 135) Employees could walk from one loop to another without tripping a light curtain, even though the different loops might have trolleys running at either access or full-speed mode (Tr. at 135). Employee #1 stated that "in Loop 3, you could mute those photocells by placing cardboard over them. That would allow you to go through the gate without shutting off. Like if there [were] parts that had to be toted in through that gate, then the Wal-Mart guys would mute those light curtains, so we could use the gate. But as soon as that was over with, they would un-mute them and then we couldn't use the gate again." (Tr. 114-15) This method of entry was a daily occurrence for Swisslog and Wal-Mart employees (Tr. 91-92). Supervisory employees for both Swisslog and Wal-Mart were aware their employees were entering the EMS through the disabled light curtains (and entered

that way themselves) and were aware trolleys continued to run at full speed when the EMS was accessed in this manner (Tr. 253-254).

### *Resets*

The Brundidge facility had been outfitted with multiple reset switches for the EMS system (Tr. 121). Aside from the main control panel, reset buttons had been installed inside the SPOC office, under the desk, and at Crane 11, which was located on the first level and had no visual overview of the EMS (Tr. 121). These reset buttons were not included in the original system design (Tr. 122). Pressing a reset button would clear all soft faults in all loops of the system. Once a trolley's soft fault had been reset, it would resume movement at the same speed at which it was previously engaged (Tr. 289).

When the EMS was operational, trolleys would often experience faults that would stop the movement of the trolley (Tr. 99). Faults occurred frequently within the system, every few minutes, with faults occurring with more frequency as a side effect of the upgrade project (Tr. 362). A pallet extending wider than a trolley carrying it would create an "overhang" error, and plastic wrap that had loosened and covered a trolley's photocell could cause a fault (Tr. 92). A bumper release - meaning that one of the trolley's safety bumpers had been actuated - would also trigger a fault (Tr. 92). A "soft fault" could be remedied by a "soft reset," which could be performed in one of two ways (Tr. 92). An employee could either enter the loop where the affected trolley was located and press a trolley-mounted reset button or access a main panel outside of Loop 2 and reset the fault using a key switch (Tr. 92-93). This second method attempted to clear whatever soft fault had occurred within the system (Tr. 94). A successful reset would result in the trolley moving once again (Tr. 99). Unless the fault required a "long period of work," faults were reset on the actual loop in order to not "hinder the entire operation." (Tr. 96)

Trolleys could also experience "hard faults." These faults would require the trolley to be disconnected from power and de-energized using a control panel on the trolley (Tr. 95). If a fault could not be cleared remotely, an employee would enter the system and attempt to correct it and would utilize LOTO if the problem required it (Tr. 347-48). Each loop featured a cabinet that would allow lockout, and Loop 2 featured a control panel that would allow lockout for all three loops (Tr. 119).

### *Swisslog 's Upgrade of the EMS*

In July of 2016, Swisslog employees "began a project to upgrade components of" the EMS at the Brundige facility (Tr. 25). "[T]he actual components on the trolley were being one-hundred percent replaced. And then all the mechanical components were being removed and replaced." (Tr. 83) Swisslog employees performed the retrofitting on a separate spur of the rail system while the trolleys were powered down. The employees used LOTO procedures for this work. Ten to fifteen Swisslog employees worked on the project. At any given time during the upgrade, one to eight employees could be onsite at the facility (Tr. 119-120, 340, 347).

The upgrade included replacing the mechanical bumpers on the trolleys with new technology involving non-mechanical presence-sensing bumpers. Each trolley had a control package on it that controlled the movement of that trolley. An overall control system coordinated the movement of all thirty trolleys and the switches (Tr. 313-15).

### *October 18, 2016, Accident*

On October 18, 2016, Swisslog employees were reprogramming trolleys that had been placed on a spur coming out of the tray building, near a switch that would allow the reprogrammed trolleys to enter Loop 3 (Tr. 122-23). Employee #1, the injured employee, explained that the plan, which "was based on non-hindrance to production, was to program the trolleys, release one at a time, make sure the trolley performed the way it needed to be before we would proceed to another trolley." (Tr. 123) Employee #1 was testing a trolley that had been assigned to pick up a pallet inside of Loop 3. He had used a control panel to isolate the trolley's movement to the loop. While it was in motion, Employee #1 noticed that Trolley #9, which had not yet been reprogrammed, was flashing the error code "07," which indicates a communication fault. He walked over to observe the rail underneath the trolley (Tr. 125-26). He explained what next occurred.

So as I was trying to get a visual on that, the trolley reset. I heard the motor release the brake. So once a trolley stops, a brake holds it closed. Once it gives the command signal to run, the brake opens. At this point, my reaction was to hit the bumper on the front of that trolley to stop it. But as I hit the bumper, the trolley wasn't stopping. There was a fixed conveyor right there and my instinct was to turn and not only hit the bumper but try to get out of the way. And I couldn't get out of the way. It caught my left leg in the conveyor section between the trolley and the conveyor. The inside thigh of my left leg was blown open and something penetrated my calf muscle.

(Tr. 126-27)

Employee #1 extricated himself and retreated behind the EMS fence. As he was sitting outside the fence, the SPOC operator came over and told Employee #1 he had reset the system remotely and apologized to him (Tr. 127). The SPOC operator explained the resetting. .

I was watching the monorail and calling out errors to the maintenance guys. And I had one maintenance guy going to Loop 2. And at the time when he was clearing the error there, I had another error came up in Loop 1. And at that time, I hit the reset button to try to clear the error in Loop 1. And when I hit the reset button and then a little bit afterwards I heard somebody just yell. And they said [Employee #1] had got hurt.

(Tr. 271-72)

CSHO David Tisdale conducted an inspection of the EMS at the Brundige facility following the accident. Upon his recommendations, the Secretary issued the Citations to Swisslog and Wal-Mart now at issue.

## ANALYSIS

### **Item 1: Alleged Willful Violation of § 1910.147(c)(4)(i)**

The alleged violation descriptions for Item 1 issued to Swisslog and to Wal-Mart are identical. Item 1 of the Citations at issue alleges:

Electrified Monorail System; On or about October 18, 2016, and at all times prior thereto, where documented procedures were not utilized for the control of potential hazardous energy, employees were exposed to caught-between, struck-by, and crush hazards, in that; the employees were required to enter the electrified monorail system with energized operating trolleys to perform servicing and maintenance activities, such as but not limited to, equipment and to reset machinery.

Section 1910.147(c)(4)(i) provides:

Procedures shall be developed, documented and utilized for the control of potentially hazardous energy when employees are engaged in the activities covered by this section.

Note: *Exception:* The 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.

### *The Secretary 's Burden of Proof*

To establish a violation, "the Secretary must show by a preponderance of the evidence that: (1) the cited standard applies; (2) there was a failure to comply with the cited standard; (3) employees had access to the violative condition; and (4) the cited employer either knew or could have known of the condition with the exercise of reasonable diligence." *Astra Pharma. Prods.*, 9 BNA OSHC 2126, 2129 (No. 78-6247, 1981), *aff'd in relevant part*, 681 F.2d 169 (1st Cir. 1982).

In their consolidated brief, Swisslog and Wal-Mart do not dispute the Secretary established employee access to or employer knowledge of the alleged violative condition. The most contentious issue is that of applicability of the standard.

### **Application of LOTO standard**

#### *LOTO Scope*

Section 1910.147(a)(1)(i) establishes 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 harm employees. This standard establishes minimum performance requirements for the control of such hazardous energy.

The Commission has described the core principles of the LOTO standard,

The LOTO standard, which became effective January 2, 1990, was promulgated to prevent industrial accidents during servicing of machines that remain in an operational mode, are turned off but connected to a power source, retain stored energy, or are reactivated by another worker unaware that servicing is in progress. Control of Hazardous Energy Sources (Lockout/Tagout): Final Rule ("Lockout/Tagout I"), 54 Fed. Reg. 36,644 (Sept. 1, 1989); Control of Hazardous Energy (Lockout/Tagout): Final Rule; Suspension of Effective Date ("Lockout/Tagout II"), 54 Fed. Reg. 46,610, (Nov. 6, 1989). In general, the LOTO standard requires an employer to establish a program that includes employee training, use of energy control procedures, and periodic inspections designed to prevent employee exposure to the unexpected energization of equipment during servicing and maintenance operations, and dovetails with the

requirements for the safe operation of machines during production, as prescribed by 29 C.F.R. Part 1910, subpart O.

*Gen. Motors Corp.*, 22 BNA OSHC 1019, 1022 (No. 91-2843E, 2007) (consolidated).

#### *Unexpected Start Up*

The LOTO applies to "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 harm employees." The Secretary concedes the clearing of most trolley faults on the EMS required the system and the individual trolleys to be energized; therefore, no *unexpected* energization could occur. He argues, however, that the second alternative, the unexpected start up of machines or equipment, describes the hazard posed by the trolleys. "The evidence in the record establishes conclusively that the trolleys were subject to unexpected movement as a matter of their normal functionality, and that this movement could occur when employees were physically attempting to clear faults on that trolley." (Secretary's brief, p. 18) The Secretary contends Wal-Mart exacerbated the hazard of unexpected trolley start ups by installing several extra reset buttons in the facility. Pressing a reset button would clear all soft faults in all loops of the system. Once a trolley's soft fault had been reset, it would resume at the same speed at which it was previously engaged (Tr. 289). Respondents contend employees working near the EMS knew the trolleys were energized and could start up at any time, either to perform an assignment or in response to activation of one of the reset buttons.

There is an inherent contradiction in the Secretary's assertion the trolleys "were subject to unexpected movement as a matter of their normal functionality." It is undisputed the trolleys started and stopped throughout the day as they transported pallets--that is their purpose, the reason for their existence (Tr. 532). Employee #1 testified he was able to predict when a trolley would start and stop.

The trolleys can go into a sleep mode. That means that there are no pallets in transit in the system. They will come to a designated point on the rail and they would just go into sleep mode. That doesn't mean that they power down or—it just means they are just stopping. They are waiting on some kind of pallet to come in transit.

You know, if you're in the system and you understand how it works and you see a pallet comes out on a crane, you know, two aisles over, you know that a trolley is going to pick that assignment up within the next few minutes to go and get that pallet. When it's got a pallet on it, you know it's going to go to a conveyor and stop and unload the pallet. And once it unloads it, it will take back off.

(Tr. 153-54)

A SPOC operator testified that when a trolley's brakes release, they make "a metallic click-click" that provides a warning to employees in the area that the trolley is about to start up (Tr. 264). Employee #1 testified he "heard the motor release the brake" on the trolley that injured him (Tr. 126). The Court of Appeals for the Sixth Circuit emphasized the word *unexpected* was significant in determining whether the LOTO standard applies to a given condition.

An interpretation that ignores the import of the word is plainly unreasonable when one considers that the rule repeats the word "unexpected" throughout the standard and twice emphasizes it by placing it in italics. [T]he plain language of the lockout standard unambiguously renders the rule inapplicable where an employee is alerted or warned that the machine being serviced is about to activate. In such a situation, "energization" of the machine cannot be said to be "unexpected" since the employee knows in advance that machine startup is imminent and can safely evacuate the area. The standard is meant to apply where a service employee is endangered by a machine that can start up without the employee's foreknowledge. In the context of the regulation, use of the word "unexpected" connotes an element of surprise, and there can be no surprise when a machine is designed and constructed so that it cannot start up without giving a servicing employee notice of what is about to happen.

*Reich v. Gen. Motors Corp.*, 89 F.3d 313, 315-16 (6th Cir. 1996).

Here, the employees working in the EMS area were aware the trolleys stopped and started throughout the day on a regular basis. They heard a metallic click when the brake released, indicating the trolley was about to start up. The Secretary's conclusion that employees in the EMS area "were exposed to unexpected start up of equipment, both as a natural function of the trolleys and as a consequence of the facility's installation of 'extra' reset buttons" is not supported by the evidence (Secretary's brief, pp. 20-21). Starting up numerous times daily is the "natural function" of the trolleys and is, therefore, not unexpected.

The Secretary contends the metallic click that sounded before the trolleys started up was insufficient to give notice to employees working in the area.

Not only does Respondent's theory [that the sound of the brake release alerted employees the trolley was starting up] base itself around the presumption that employees within the EMS, conducting other duties in the midst of a production environment, are always capable of hearing and reacting to a brake release, but its efficacy as a safety measure is not supported by the evidence. Specifically, [Employee #1] informed OSHA that prior to his accident "I heard the brake release on the old trolley," and yet he was still unable to escape injury (C-7).

(Secretary's brief, p. 18, n. 3)

The Court rejects this argument. It is the Secretary who is making a presumption without supporting evidence. Employee witnesses testified without contradiction they heard the metallic click of the brake release prior to a trolley starting up. There is no evidence in the record employees were incapable of hearing the sound while “conducting other duties in the midst of a production environment.”

The Secretary finds it significant Employee #1 stated he heard the brake release “and yet was still unable to escape injury.” But the LOTO standard is not applicable to situations where the energization or start up of equipment is expected, yet an employee is injured anyway. Employee #1 was not injured because he was taken unawares by the start up of Trolley #9. He approached the trolley because it was flashing an error code. As he was looking at the trolley, he heard the motor release the brake. Employee #1 expected the trolley to start up and chose not to step away from the trolley, but to interact with it. “At this point, my reaction was to hit the bumper on the front of that trolley to stop it. But as I hit the bumper, the trolley wasn’t stopping.” (Tr. 126) What was unexpected by Employee #1 was not the start up of the trolley, but its failure to stop when he hit the bumper. The failure of the bumper to function properly was the immediate cause of the accident, not the start up of the trolley. “[T]here can be no surprise when a machine is designed and constructed so that it cannot start up without giving a servicing employee notice of what is about to happen.” *Gen. Motors Corp.*, 89 F.3d at 316. If the energization or start up is not unexpected, the standard does not apply. Such is the case here.

The Secretary’s argument the installation of the extra reset buttons increased the likelihood of unexpected start ups of the trolleys does not advance his case.<sup>2</sup> The start up of a trolley is either unexpected or it is not. Here, Swisslog and Wal-Mart employees knew the trolleys were energized and could start up at any moment, in response either to a work assignment or to the activation of one of the reset buttons. The fact the start ups may have been more frequent because of the reset buttons does not transform the start ups from expected (the

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<sup>2</sup> At the hearing, the Secretary’s counsel tried to establish a reset might result in multiple trolleys starting up at the same time. Employee #1 responded that was not the case.

Q.: And does that mean that you have to keep track of every trolley's movement while you're working within the system?

Employee #1: No, sir. The lead trolley is the one that, I mean, if it set still then everything behind it is going to back up. Other trolleys can't travel around it.  
(Tr. 178)

“natural function of the trolleys”) to unexpected. If anything, the increased instances of start ups because of activation of reset buttons would make trolley start ups less surprising.

The Court finds the Secretary failed to establish § 1910.147(c)(4)(i) applies to the cited condition. The LOTO standard applies to *unexpected* energization or start up of machines and equipment. The start up of the trolleys was expected for two reasons: (1) The trolleys in the EMS routinely started up and stopped twenty-four hours a day, seven days a week, in performance of the tasks they were designed to do. Employees working in and around the EMS were aware this was the way the trolleys functioned; and (2) prior to starting up, the brakes of the trolleys released, resulting in a metallic click that alerted nearby employees the trolley was about to start up. The Secretary has failed to establish the cited standard applies to the cited condition, and thus cannot prove Swisslog and Wal-Mart violated § 1910.147(c)(4)(i).

#### *Bypassing Guards*

The parties made additional arguments regarding the applicability of § 1910.147(c)(4)(i). Assuming the Secretary had established the start up of the trolleys was unexpected, the Court would find he failed to establish applicability under the exceptions to the LOTO standard.

If, contrary to the Court’s conclusion above, the start up of the trolleys were found to be unexpected, Swisslog and Wal-Mart contend the LOTO standard is still inapplicable because it does not apply to normal production operations unless the work presents a hazard not encountered as part of normal production.

Section 1910.147(a)(2) provides:

This standard applies to the control of energy during servicing and/or maintenance of machines and equipment.

(ii) Normal production operations are not covered by this standard (See Subpart O of this Part). Servicing and/or maintenance which takes place during normal production operations is covered by this standard only if:

(A) An employee is required to remove or bypass a guard or other safety device; or

(B) An employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle.

Section 1910.147(b) provides these relevant definitions:

*Normal production operations.* The utilization of a machine or equipment to perform its intended production function.

*Servicing and/or maintenance.* 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.

The Secretary does not dispute the work being performed by Swisslog and Wal-Mart employees was done during normal production operations, as CSHO Tisdale conceded (Tr. 531). The Secretary argues, however, the employees were required to bypass a guard, bringing the work activity within the exception specified in § 1910.147(a)(2)(ii)(A) (“Servicing and/or maintenance which takes place during normal production operations is covered by this standard only if . . . [a]n employee is required to remove or bypass a guard or other safety device[.]”). The Secretary’s theory is “the fencing around the EMS system can be logically classified as a ‘guard or other safety device,’” and since employees had to pass through the fence to access the EMS, they were bypassing a guard (Secretary’s brief, p. 21). The Court disagrees with the Secretary’s theory.

The Commission has noted the LOTO standard “dovetails with the requirements for the safe operation of machines during production, as prescribed by 29 C.F.R. Part 1910, subpart O.” *Gen. Motors Corp.*, 22 BNA OSHC at 1022. Section 1910.212 of *Subpart O—Machinery and Machine Guarding*, addresses general requirements for all machines. Section § 1910.212(a)(1) addresses types of guarding. Sections 1910.212(a)(1) and (2) provide:

- (1) One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks. Examples of guarding methods are-barrier guards, two-hand tripping devices, electronic safety devices, etc.
- (2) Guards shall be affixed to the machine where possible and secured elsewhere if for any reason attachment to the machine is not possible. The guard shall be such that it does not offer an accident hazard in itself.

The examples of types of guarding listed in § 1910.212(a) and the requirement the guards “shall be affixed to the machine where possible” demonstrate the guards contemplated by Subpart O (and therefore, the LOTO standard, with which it “dovetails”) are of a different order

than that of the fence enclosing the EMS. The witnesses testifying at the hearing understood the type of guard contemplated by § 1910.147(a)(ii)(2)(A) was more localized than a fence enclosing the general area and were specific to each individual machine. Employee witnesses testified they were not required to remove guards to work on the trolleys (Tr. 152, 234). CSHO Tisdale agreed the employees were not required to bypass a guard to perform their duties.

Q. You agree with me that no employee of Swisslog or Walmart who was doing maintenance or servicing activities within the EMS had to remove a guard; would you not?

CSHO Tisdale: Not that I am aware of.

(Tr. 513)

The Court determines Swisslog and Wal-Mart employees were not bypassing a guard when they passed through the fence enclosing the EMS.<sup>3</sup>

#### *Danger Zone*

The Secretary also argues the entire EMS was a danger zone within the meaning of § 1910.147(a)(2)(B) (“Servicing and/or maintenance which takes place during normal production operations is covered by this standard only if . . . [a]n employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle.”). The Secretary contends the entire EMS inside the fence is an associated danger zone, so that the LOTO standard applies when an employee crosses from the outside of the fence to the EMS. Once an employee is inside the fence, he is exposed to the dangers associated with the moving trolleys.

The AVDs of Item 1 of the Citations at issue allege employees of each company were exposed to “caught-between, struck-by, and crush hazards” because they “were required to enter the [EMS] with energized operating trolleys to perform servicing and maintenance activities.” The definition of the zone of danger found in § 1910.147(a)(2)(B) is, however, more narrow than generalized zone of danger posited by the Secretary. The first half of § 1910.147(a)(2)(B) does

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<sup>3</sup>The Secretary also asserts, “[R]equiring employees to enter the system by entering through the muted light curtains frustrated a key component of the system’s security measures and resulted in employees necessarily ‘bypassing’ a safety device.” (Secretary’s brief, p. 23) This misstates the record. Neither Swisslog nor Wal-Mart “required” its employees to mute the photocells that controlled the light curtains. The employees undertook this action to save time. Because neither employer required its employees to bypass the light curtains, the exception to the LOTO standard does not apply.

not apply to the condition at issue—no “area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation)” existed regarding the trolleys. Trolley #9 had been at rest and then started up when the SPOC operator activated the reset button. There was no work “actually performed upon the material being processed.” The Secretary relies on the second half of the sentence: “or where an associated danger zone exists during a machine operating cycle” to define the zone of danger. The Secretary contends the entire EMS is a danger zone when trolleys are in operation (and they operate continuously). But *associated* must have some meaning within the context of the standard. Otherwise the second half of the sentence logically would read: “or where a danger zone exists during a machine operating cycle.” The disjunction in the standard is not between the zone of danger of a point of operation *or* a generalized danger zone, but between the zone of danger of a point of operation *or* where a zone of danger *associated with the previously referenced point of operation* exists during a machine operating cycle.

Here, the Secretary has not identified an area on a trolley “where work is actually performed upon the material being processed (point of operation)” and where an employee “is required to place any part of his or her body.” Therefore, he cannot identify a zone of danger associated with the point of operation required in the first part of the sentence. Section 1910.147(a)(2)(B) brings the LOTO standard to bear only in narrowly defined circumstances. Those circumstances are not present in the case at issue. The Secretary has failed to establish the EMS is a danger zone within the meaning of § 1910.147(a)(2)(B).

#### *Minor Servicing Exception*

Swisslog and Wal-Mart contend they meet the minor servicing exception to the LOTO standard.

Note: *Exception to paragraph (a)(2)(ii)*: Minor tool changes and adjustments, and other minor servicing activities, which take place during normal production operations, are not covered by this standard if they are routine, repetitive, and integral to the use of the equipment for production, provided that the work is performed using alternative measures which provide effective protection (See Subpart O of this Part).

As the parties claiming the exception, Swisslog and Wal-Mart bear the burden of proving they qualify for it. *Kaspar Wire Works*, 18 BNA OSHC 2178, 2194 (No. 90- 2775, 2000). The Secretary concedes the work activity at issue meets the first half of the exception (Secretary’s brief, p. 24) (“The clearing of faults would seem to be ‘routine, repetitive, and integral to the use

of the equipment for production,' and thus the minor servicing exception would apply.'"). He disputes, however, Respondents' claims their employees cleared faults using alternative measures which provided effective protection.

Swisslog and Wal-Mart argue they provided alternative measures to provide effective protection by equipping the trolleys with safety bumpers and e-stops, painting a yellow line around the loops indicating where employees should not step, and training employees in how to work safely around the EMS (Respondent's brief, p. 20). The Secretary claims the alternative measures provided by the employers were inadequate because Wal-Mart's access procedure was routinely violated and the safety bumpers on the trolleys could malfunction.

The Court agrees with the Secretary that, if the LOTO standard were applicable, Swisslog and Wal-Mart could not avail themselves of the minor servicing exception because they could not establish the work was performed using alternative measures which provided effective protection. It is undisputed Swisslog and Wal-Mart employees routinely muted the photocells of the light curtains so they could enter the EMS without using the *Monorail Access Procedure*. Employees stopped using the prescribed safety procedure because it slowed production to do so.

Q.: So is it fair to say that at a certain point in this project, you stopped using this procedure; is that right?

Employee #1: Yes, sir.

Q.: And someone from Walmart asked you to stop using this procedure?

Employee #1: Yes, sir. The recovery time from when you lose power was tremendous to the operation.

(Tr. 115)

Accessing the EMS by disabling the light curtains resulted in trolleys continuing at full speed instead of access speed. The purpose of reducing the speed of the trolleys when employees were inside the EMS was to allow more time for the employees to react if they were in the path of a moving trolley (Tr. 212-213).

Q.: You also testified that the response time to a trolley moving towards you is going to be longer if it's moving at access speed than if it's moving at full speed. Do you remember that?

Employee #1: Yes, sir.

(Tr. 164-65)

Although the speed of the trolley that struck Employee #1 was not a factor in the occurrence of his injury (because he approached Trolley #9 in response to its flashing fault code), his injury is evidence the mechanical bumpers can malfunction. Respondents fault Employee #1 for standing on the yellow line that purportedly employees were trained not to step on. Employee #1 testified, however, he needed to stand there to perform the testing on the trolley he had reprogrammed (Tr. 184). Supervisory employees for both Swisslog and Wal-Mart were aware their employees were entering the EMS through the disabled light curtains (and entered that way themselves) and were aware trolleys continued to run at full speed when the EMS was accessed in this manner (Tr. 253-254). Because the alternative measures implemented by Swisslog and Wal-Mart were routinely ignored by their employees, they did not provide effective protection.

### **CONCLUSION**

It is apparent something went wrong at Wal-Mart's facility on October 18, 2016, when a Swisslog employee was seriously injured. The fact of the injury is not enough, however, to establish Swisslog and Wal-Mart violated the cited standard. For a section of the LOTO standard to apply, the Secretary must establish the fundamental fact that the energization or start up at issue was unexpected. He failed to do so here. Swisslog and Wal-Mart also established their employees were engaged in normal production operations not covered by the LOTO standard. For these reasons, the Court **VACATES** the respective Items 1 of the Citations issued to them by the Secretary.

### **FINDINGS OF FACT AND CONCLUSIONS OF LAW**

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Fed. R. Civ. P. 52(a).

### **ORDER**

Based on the foregoing decision, it is hereby **ORDERED**:

1. Item 1 of Citation No. 1 issued to Swisslog and Item 1 of Citation No. 2 issued to Wal-Mart, alleging willful violations of § 1910.147(c)(4)(i), are **VACATED** and no penalty is assessed, and

2. Item 1 of Citation No. 1 issued to Wal-Mart, alleging a serious violation of § 5(a)(1), is **WITHDRAWN**, as set forth in the *Order Approving Partial Settlement Agreement*, dated July 5, 2018.

SO ORDERED.

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

Date: December 13, 2018

**SHARON D. CALHOUN**  
Administrative Law Judge