

United States of America
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
1120 20th Street, N.W., Ninth Floor
Washington, DC 20036-3419

SECRETARY OF LABOR,

Complainant,

v.

CATERPILLAR, INC.,

Respondent,

UAW, LOCAL 974,

Authorized Employee
Representative.

OSHRC Docket No. 93-3405

DECISION

Before: WEISBERG, Chairman, and GUTTMAN, Commissioner.

BY THE COMMISSION:

Following an August 1993 inspection of Caterpillar, Inc.'s ("Caterpillar") East Peoria, Illinois facility, the Secretary cited Caterpillar for two violations of the machine guarding standard. Administrative Law Judge James Barkley affirmed citation 1 as willful and citation 2, item 1, as serious. He assessed a penalty of \$5,000 for each citation. For the reasons that follow, we affirm citation 1 as willful, and affirm citation 2, item 1, but as repeated. We assess penalties totaling \$22,000.

I. The LVD Press.

A. Facts.

Citation 2, item 1, alleging a violation of 29 C.F.R. § 1910.212(a)(3)(ii),¹ involves a 700-ton LVD hydraulic press (“LVD”), the largest on Caterpillar’s assembly line. The LVD has a ram that descends to press the metal to be worked (stock) on a stationary bed. Depending on the type of die set into the ram, the LVD can shear, bend, or punch holes in metal. When activated, the ram descends at a rapid rate until it reaches a “mute point,” usually not more than one-half inch above the stock. The ram then slows to a coast for “a matter of seconds” or a “split second,” the LVD shifts hydraulic mechanisms, and begins the press cycle. During the press cycle, the ram descends at a slower rate, with all 700 tons of force applied.

A light curtain prevents an employee’s hands or body from being pinched between the bed and the descending ram, the machine’s point of operation. The light curtain consists of an emitter that shoots light beams in front of the LVD’s point of operation and a reflector that bounces the light beams back across the point of operation to the emitter. If the light beam is broken, the LVD shuts down.

The record establishes that employees frequently operated the LVD with the light curtain turned off or disabled. The light curtain could be disabled by placing reflective tape over the emitter or by placing several magnetized reflectors over large portions of the light

¹That standard provides:

§ 1910.212 General requirements for all machines.

....

(3) *Point of operation guarding.*

....

(ii) The point of operation of machines whose operation exposes an employee to injury, shall be guarded. The guarding device shall be in conformity with any appropriate standards therefor, or, in the absence of applicable specific standards, shall be so designed and constructed as to prevent the operator from having any part of his body in the danger zone during the operating cycle.

curtain. Caterpillar permitted the use of one magnetized reflector, approximately one inch high, to allow employees to manipulate bulky pieces of stock without breaking the beam of the curtain. During the inspection, Compliance Officer William Hancock observed a Caterpillar employee operating the LVD with the light curtain turned off.

At issue is whether Caterpillar's violation of 29 C.F.R. § 1910.212(a)(3)(ii), which Caterpillar does not dispute, is repeated within the meaning of section 17(k) of the Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651-678 ("the Act"), based on a 1991 Commission final order for a violation of the same standard at Caterpillar's Mapleton, Illinois Foundry Division. The 1991 citation involved an Iron Crafter ironworker machine that was missing barrier guards designed to protect employees from pinch points. The ironworker can shear metal, punch flat stock, or angle iron. The LVD and the ironworker both have a stationary bed and a ram that descends to create a point of operation hazard, but the iron worker has a series of locations on the machine for performing different types of operations, while the LVD has just one point of operation. The ironworker operates with an instantaneous activation on the shearing mechanism. In contrast, the LVD pauses at the "mute point" before the full force of the press cycle is applied. Caterpillar Corporate Safety Manager James Busche admitted during cross-examination that both machines create a pinch point where the ram descends to the stationary bed.

The judge concluded that the Secretary had not shown that the violation was properly characterized as repeated. He found that "[t]he violation cited here, brake press operators deliberately disabling their machines' safety features is so dissimilar from the 1991 violation, that I cannot find this second violation of the standard demonstrates a need for 'greater than normal incentive[s] to comply with the Act.' *Monitor Construction Co.*, 16 BNA OSHC 1589, 1594, 1994 CCH OSHD ¶ 30,338 (No. 91-1807, 1994)."

B. Discussion.

In order to establish a repeated violation:

[T]he Secretary has the burden of establishing that the violations were substantially similar. *Potlatch Corp.*, 7 BNA OSHC 1061, 1063, 1997 CCH OSHD ¶ 23,294, p. 28,171 (No. 16183, 1979). Where the citations involve the

same standard, the Secretary makes a *prima facie* showing of “substantial similarity” by showing that the prior and present violations are for failure to comply with the same standard. The burden then shifts to the employer to rebut that showing. *Monitor Constr. Co.*, 16 BNA OSHC 1589, 1594, 1993-95 CCH OSHD ¶ 30,338, p. 41,825 (No. 91-1807, 1994). However, where . . . the citations involve different standards, the Secretary must adduce sufficient evidence to show substantial similarity of the violations. *Monitor*, 16 BNA OSHC at 1594, 1993-95 CCH OSHD ¶ at pp. 41,825-26. To meet this burden, the Secretary must show that the two violations involve similar hazards.

GEM Industrial Inc., 17 BNA 1861, 1886, 1996 CCH OSHD ¶ 31,196, p. 43,689 (No. 93-1122, 1996). Where the violations concern the same standard, but that standard is generally worded, the Secretary has the burden of showing that the prior and the present violation are substantially similar in nature. *Edward Joy Co.*, 15 BNA OSHC 2091, 2092, 1991-93 CCH OSHD ¶ 29,938, p. 40,904 (No. 91-1710, 1993); *Hamilton Fixture*, 16 BNA OSHC 1073, 1096, 1993-95 CCH OSHD ¶ 30,034, p. 41,192 (No. 88-1720, 1993) *aff'd without published opinion*, 28 F.3d 1213 (6th Cir. 1994).

We find that the evidence establishes that Caterpillar’s failure to guard the point of operation of the LVD is properly characterized as a repeated violation. The Secretary established, and Caterpillar does not dispute, that there was a final order for a violation of the same standard in existence at the time of the inspection. The ironworker and the LVD utilize slightly different methods to form stock, but as Corporate Safety Manager Busche testified, both machines present a pinch point hazard between a descending ram and a stationary bed. Caterpillar argues that the LVD is used for bending metal and the ironworker is used for punching or shearing metal, and thus are not sufficiently similar to support a repeated violation. Caterpillar does not, however, dispute the similarity of the hazards in this and the 1991 case -- the principal factor to be considered in determining substantial similarity.² *Stone Container Corp.*, 14 BNA OSHC 1757, 1762, 1987-90 CCH OSHD

²Both the judge and Caterpillar cite *Monitor Construction Co.* as authority for holding that the violation was not repeated. However, in *Monitor*, the Commission held that the two violations addressed different hazards. “The hazard posed by the earlier violation (the danger
(continued...)”

¶ 29,604, p. 38,819 (No. 88-310, 1990). We therefore find that whether or not the standard is generally worded the Secretary has met her burden of establishing that the violations are substantially similar and the employer has not rebutted this showing. Accordingly, we find that Caterpillar's failure to comply with section 1910.212(a)(3)(ii) is properly characterized as a repeated violation.

II. The Track Press.

A. Facts.

Citation 1, alleging a violation of 29 C.F.R. § 1910.212(a)(1),³ involved five track press machines. The track press assembles links into what resembles a large bicycle chain. The operator stands facing the press while the left and right sides of the links and a center pin are fed from conveyor belts on both sides of the machine. The links, weighing from 10 to 85 pounds, are placed in the track press on two parallel hubs. The machine's function is to press the links onto the pin and onto the exposed end of the pin on the previously formed

²(...continued)

of falling into a manhole when its cover breaks or shifts) is different from the hazard posed by this violation (the danger of stumbling into a beam trough). 16 BNA OSHC at 1594, 1993-95 CCH OSHD at p. 41,826. The Commission further held that "[t]his difference in the *hazards* underscores the fact that 'unless the employer has previously been made aware that his safety precautions are inadequate, there is no basis for concluding that a subsequent violation indicates the employer requires a greater than normal incentive to comply with the Act.'" *Citing George Hyman Constr. Co.*, 582 F.2d 834, 841 (4th Cir. 1978)(emphasis added).

³That standard provides:

§ 1910.212 General requirements for all machines.

(a) *Machine guarding*.—(1) *Types of guarding*. 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.

link, creating a segment of the chain. A V-shaped vertical protrusion, known as the “V-block,” is situated between the hubs. At the beginning of the press cycle, the V-block is extended up, like a pedestal. The center pin is placed on the V-block. A separate “thrust ring,” which helps seal the connection between the link and the pin, is sometimes loaded onto the exposed portion of the pin after the press cycle is completed.

When the track press is activated, the press table drops a maximum of 2 inches, depending on the size of the link. A right-hand tooling extends, a hold-down block descends (holding the pin in place), and the main ram on the left of the machine travels in, pressing the links onto the pin. The V-block retracts approximately 12½ inches from the operator, pushing away the newly created link, dropping to release the link, and returning to its home position. As the V-block is returning, the table and the V-block rise back up to their original level. The process of the V-block returning is known as “indexing.”

At the time of the inspection, the machine would not begin to press the links unless employees placed their hands on overhead photo-electric dual-hand controls to activate the track press. Employees could remove their hands from the dual-hand controls as soon as the link was pressed and the tooling and the main ram began to retract. Some employees began to load new links onto the hubs during the indexing process. This resulted, the citation alleged, in track presses that were “not guarded to prevent employees from having their hands in the carriage area during the return cycle exposing employees to the hazard of having their hand caught in the machine.” At the time of the hearing, Caterpillar had reprogrammed the dual-hand controls so that employees had to keep both hands on the controls during the entire track press cycle, or the machine would stop.⁴

B. Whether the Judge Erred in Finding Caterpillar in Violation of 29 C.F.R. § 1910.212(a)(1)?

At the hearing, the Secretary argued that the operation of the track press presented three nip or pinch point hazards. In addition to the nip points asserted by the Secretary, the

⁴A video-tape of the track press’s post-abatement operation was admitted into evidence.

Union argued the existence of one additional nip point. The judge found a violation of section 1910.212(a)(1) based on one of the nip points advanced by the Secretary. The Union argues on review that the judge erred in failing to uphold the existence of all the nip points identified at the hearing.⁵

To prove a violation of section 1910.212(a)(1), the Secretary must show that a hazard within the meaning of the standard exists in the employer's workplace. In order to meet this burden, "the Secretary must establish that employees are exposed to a hazard as a result of the manner in which the machine functions and the way it is operated." *Jefferson Smurfit Corp.*, 15 BNA OSHC 1419, 1421, 1991-93 CCH OSHD ¶ 29,551, p. 39,953 (No. 89-0553, 1991).

The judge found a violation of section 1910.212(a)(1) based on the existence of a nip point produced by an opening created by the retreating V-block. As the V-block moves away from the operator, a three inch hole in the table is exposed. The judge found that it was "reasonably predictable that employees might place their hands in the zone of danger to retrieve" material that occasionally fell in the opening. This opening was originally covered by two sliding plates that were damaged during the course of operations, and subsequently removed from all of the machines. At the time of the inspection, this cover had been replaced by an index cover on one of the machines. An index cover is a flexible piece of metal that rolls over the opening as the V-block moves away from the operator.

Although Caterpillar argues that the track press' normal operating procedures do not require it, the record indicates that some employees regularly placed their hands in the machine. Caterpillar Senior Manufacturing Engineer Ted Kaiser admitted that some of the operators were fast enough to load the links while the V-block and table were in motion. The record does not indicate that any employee actually had his or her hands pinched or injured as a result of the opening created, but Caterpillar employees testified that they frequently

⁵The Secretary, though not conceding that the judge was correct in failing to find the existence of all the posited nip points, does not argue this issue on review.

caught their gloves in the moving parts of the track press. Caterpillar assembler Betsy Foutch testified that at times materials fell into the opening, and that she and others she worked with reached into the hole to retrieve them.⁶ Caterpillar Tooling Specialist Larry Taft testified that if the index cover was missing, a pinch point would be created.⁷

Based on our observations of the video-taped operation of the indexing cycle, and the March 27, 1991 report of an employee injury as the table was rising, we find that the track press exerts enough force during the indexing cycle to injure an employee.⁸ The fact that employees' gloves were often pinched by the moving parts of the machine is compelling evidence of the proximity of employees' hands to the nip point created by the retreating V-block. *See Blocksom and Co.*, 11 BNA OSHC 1255, 1983-84 CCH OSHD ¶ 26,452 (No. 76-1897, 1983). Based on the existence of this nip point, we affirm the judge and hold that the Secretary has established a violation of 29 C.F.R. § 1910.212(a)(1).

We also find that, as alleged at the hearing by the Secretary and the Union on review, an operator could catch his or her hands between a link loaded onto a hub and the rising table. If the operator's fingers are positioned under the link, they could be pinched or nipped

⁶Foutch testified that "there was a hole right in front of the V-block that things fell in. And I don't know about you, but myself and most of the people I work with, if they drop something, they grab it and pick it up."

⁷When asked whether this hole was a pinch point, Taft testified that "[i]f the cover wasn't on it, it would be a pinch point. But the covers are intended to be on there at all times."

⁸The accident report indicates that the operator was "pressing chain" and that "[h]e placed thrust ring 6T4971 onto assembly just as machine table was rising to hold parts in place for pressing. His left ring finger was curled under the . . . link and was pinched between the link and table. Hays [the injured employee] has only been on this job for two months." The report was consistent with the testimony of Caterpillar Safety Representative Richard Riddle. Riddle was asked by counsel for the Secretary if the injured employee "had his left finger pinched between the link and the table when the plate is coming up?" Riddle responded, "[t]hat is correct."

Although the March 27, 1997 injury did not occur in the opening created by the retreating V-block, it does demonstrate the power exerted by the track press during the indexing process.

between the now fixed link and the rising table. The compliance officer discovered this nip point after reading the March 27, 1991 injury report.

Caterpillar offered testimony that proper loading procedure dictated that an operator's hands should never be underneath the links. The rising table was designed as an ergonomic aid, allowing employees to slide the links up to the hubs, and "rock" them into position, instead of lifting the links. Caterpillar indicated that the company investigated this possible nip point and found that it should not occur during normal operations. Tooling Specialist Larry Taft suggested that operators were catching their gloves as they "rocked" the link onto the hub when the table was stationary. To alleviate this problem, Caterpillar cut out one-half inch notches from the steel plates located underneath the hubs. However, operators testified that they frequently lifted the links into position.

We find that although the cut-outs may correct the problem of pinched gloves when the table is not in motion, they were designed to provide extra clearance for the operator's hands only when the links are loaded when the table is stationary. Because the one-half inch cut-outs were not designed to protect operators when the track press is indexing, and in light of the fact that the table drops and rises up to two inches during the process, we are unconvinced that this one-half inch of clearance adequately protects an employee's fingers positioned under the link from being pinched. We therefore find that, as shown by the March 27, 1991 injury report, an operator's hands may be injured when pinched between the rising table and a link positioned on the hub.⁹

⁹The Union argues that two additional nip points may arise. The first theoretically arises when a link becomes cocked or dropped during the loading process. The Union speculates that an employee could pinch his or her hands or fingers between this link and the returning V-block. We agree with the judge that the evidence does not establish the existence of this nip point. It is unclear how or if a link could become wedged between the returning V-block and the lowered table.

The Union also alleges that a nip point is created when an operator places a thrust ring on the exposed end of the pin after the links and the pin have been pressed. In order for this pinch point to occur, the hold-down block must still be in place securing the completed link.

(continued...)

C. Whether the Judge Erred in Finding That the Violation Was “Willful?”

A willful violation of the Act is one committed with an “intentional, knowing or voluntary disregard for the requirements of the Act or with plain indifference to employee safety.” *L.E. Myers*, 16 BNA OSHC 1037, 1046, 1993-95 CCH OSHD ¶ 30,016, p. 41,123, 41,132 (quoting *Williams Enterp.*, 13 BNA OSHC 1249, 1256, 1986-87 CCH OSHD ¶ 27,893, p. 36,589 (No. 85-355, 1987)). “It is differentiated from other types of violations by a ‘heightened awareness -- of the illegality of the conduct or conditions -- and by a state of mind -- conscious disregard or plain indifference.’” *General Motors Corp., Electro-Motive Div.*, 14 BNA OSHC 2064, 2068, 1991-93 CCH OSHD ¶ 29,240, p. 39,168 (No. 82-630, 1991) (consolidated). A violation is not willful if an employer had a good faith belief that the violative condition conformed to the requirements of the Act. The test of good faith is an objective one, that is, “whether the employer’s belief concerning the factual matters in question was reasonable under all of the circumstances.” *Morrison-Knudsen Co./Yonkers Contracting Co.*, 16 BNA OSHC 1105, 1124, 1993-95 CCH OSHD ¶ 30,048, p. 41,281 (No. 88-572, 1993).

We find that Caterpillar’s failure to comply with section 1910.212(a)(1) was willful. The record reveals that Caterpillar had a heightened awareness of the nip point problems created by the track presses. The minutes of Caterpillar’s planned maintenance line meetings demonstrate that Caterpillar had knowledge of the hazard, the existence of the nip point created by the missing index covers, as well as the cited standard. Caterpillar Planned

⁹(...continued)

The Union asserts, based in part on language in the March 27, 1991 accident report, that the employee was injured in this manner. It is impossible to ascertain from testimony on the record, or from viewing of the video tape of the press operation, how an operator could have placed his or her hands into the machine while the hold-down bar was in place. Testimony indicated that employees could not place their hands into the machine until the tooling and the main ram retracted. The video taped exhibit indicated that the hold-down bar, the force holding the pin in place to create part of this nip point, retracts at the same time as the main ram and the tooling. We therefore find that there is insufficient evidence to establish the existence of this nip point.

Maintenance Specialist John Lussenhop, who conducted these bi-weekly meetings between Caterpillar and the Union, testified that the minutes of an April 1993 meeting included references to the nip point created by the retreating V-block. He testified that “they” felt that something could be dropped in the hole created by the indexing V-block, or that this gap could create a pinch point. Lussenhop further testified that the minutes of the May 1993 meeting reflected the operators’ concerns that a nip point hazard from the retreating V-block still existed. Minutes of these and other meetings were distributed to various Caterpillar supervisors, some with copies of the machine guarding standard attached. Caterpillar Safety Representative Ridle testified that he received copies of the minutes, even when he was not in attendance. In addition, both Caterpillar Senior Manufacturing Engineer Ted Kaiser and Caterpillar Tooling Specialist Larry Taft were in attendance at the April 1993 meeting when the index covers were discussed. The reprogramming of the dual-hand controls to require that the operators keep both hands on the controls during the entire track press cycle was discussed at the maintenance meeting in March of 1993, but it was not implemented until after the August 1993 OSHA inspection.

Caterpillar also knew that employees frequently ignored the “plan” method of loading links onto the track presses and placed their hands into the track press during the indexing cycle. The March 27, 1991 injury report put Caterpillar on notice of the force exerted by the indexing cycle, and the possibility of injury when an employee’s hands were pinched in the track press. Caterpillar did replace one of the index covers before the inspection, and line maintenance meeting minutes indicated that more covers were ordered. However, Caterpillar was aware that reprogramming the two-hand controls could serve as an alternative to the index covers in March 1993. Caterpillar’s knowledge of the hazard and the applicable standard and its failure to correct the hazard in a timely manner evidences intentional,

knowing or voluntary disregard for the requirements of the Act. We therefore affirm the judge, and classify Caterpillar's violation of 29 C.F.R. § 1910.212(a)(1) as willful.¹⁰

III. Penalty.

Section 17(j) of the Act, 29 U.S.C. § 666(j), provides that the Commission shall assess an appropriate penalty for each violation, giving due consideration to the size of the employer, the gravity of the violation, the good faith of the employer, and the employer's history of previous violations.

A. Repeated Violation of 29 C.F.R. § 1910.212(a)(3)(ii) - LVD Press Brake.

The judge affirmed the violation as serious, and assessed a penalty of \$5,000. He found that: “[t]he gravity of the violation is moderate. The practice of disabling the light curtain was pervasive. Two operators were exposed to the hazard on each of three shifts. CO Hancock testified that failure to use the light curtain could result in amputation of fingers and/or hands. One injury resulted from this violation.” The judge also found that Caterpillar was a large employer, and that there was an “absence of enforcement efforts regarding operators’ use of the light curtains.” Having affirmed the violation as repeated, rather than serious, and considering the moderate gravity of the violation, and the large size of the employer, we find that a penalty of \$12,000 is appropriate.

B. Willful Violation of 29 C.F.R. § 1910.212(a)(1) - Track Press.

The judge affirmed the violation as willful and assessed a \$5,000 penalty. On review, the Secretary requests that her proposed penalty of \$49,000 be affirmed. We find that the gravity of this violation was not high, and the company quickly abated the hazard by reprogramming the two-hand controls; nevertheless, Caterpillar is a very large corporation. Accordingly, we find that a penalty of \$10,000 is appropriate.

¹⁰We have found that the hazard created by a link loaded onto the hub and the rising table is also a nip point. As the Secretary has proven that Caterpillar willfully violated section 1910.212(a)(1) based on the nip point created by the opening exposed by the retreating V-block, we need not address the characterization of the nip point created by a link loaded onto a hub and the rising table.

Accordingly, we:

1) Affirm citation 2, Item 1, alleging a violation of 29 C.F.R. § 1910.212(a)(3)(ii), as repeat, and assess a penalty of \$12,000.

2) Affirm citation 1, alleging a violation of 29 C.F.R. § 1910.212(a)(1), as willful, and assess a penalty of \$10,000.

/s/

Stuart E. Weisberg
Chairman

/s/

Daniel Guttman
Commissioner

Dated: August 6, 1997