



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,
INTERNATIONAL UNION, UAW
Authorized Employee
Representative.

Phone: (202) 606-5100

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OSHRC DOCKET
NO. 94-2587

**NOTICE OF DOCKETING
OF ADMINISTRATIVE LAW JUDGE'S DECISION**

The Administrative Law Judge's Report in the above referenced case was docketed with the Commission on January 17, 1996. The decision of the Judge will become a final order of the Commission on February 16, 1996 unless a Commission member directs review of the decision on or before that date. **ANY PARTY DESIRING REVIEW OF THE JUDGE'S DECISION BY THE COMMISSION MUST FILE A PETITION FOR DISCRETIONARY REVIEW.** Any such petition should be received by the Executive Secretary on or before February 6, 1996 in order to permit sufficient time for its review. See Commission Rule 91, 29 C.F.R. 2200.91.

All further pleadings or communications regarding this case shall be addressed to:

Executive Secretary
Occupational Safety and Health
Review Commission
1120 20th St. N.W., Suite 980
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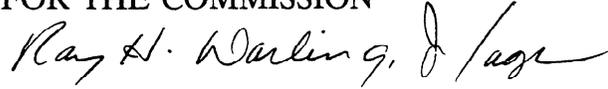
Petitioning parties shall also mail a copy to:

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If a Direction for Review is issued by the Commission, then the Counsel for Regional Trial Litigation will represent the Department of Labor. Any party having questions about review rights may contact the Commission's Executive Secretary or call (202) 606-5400.

FOR THE COMMISSION

A handwritten signature in cursive script, appearing to read "Ray H. Darling, Jr.", written in dark ink.

Date: January 17, 1996

Ray H. Darling, Jr.
Executive Secretary

DOCKET NO. 94-2587

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UNITED STATES OF AMERICA
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

SECRETARY OF LABOR,

Complainant

v.

CATERPILLAR, INC.

Respondent

and

INTERNATIONAL UNION, UAW,

Authorized Employee
Representative

Docket 94-2587

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BEFORE: JOHN H FRYE, III, Judge, OSHRC

DECISION AND ORDER

I. INTRODUCTION

This case involves an action by Robert B. Reich, Secretary of Labor, pursuant to Section 10(c) of the Occupational Safety and Health Act of 1970 (the Act) against Respondent, Caterpillar, Inc., a corporation with a manufacturing and distribution plant located in York, Pennsylvania (the worksite).

Compliance Officer John Womer from the Harrisburg area office of the Occupational Safety and Health Administration ("OSHA") conducted an inspection of the worksite on March 29, 1994. Alleging that the inspection revealed violations of Section 5(a)(2) of the Act, the Secretary issued one serious citation with three items and one willful citation to Respondent on July 27, 1994. This matter was docketed with the Occupational Safety and Health Review Commission on September 8, 1994. The International Union of the United Auto Workers intervened as authorized employee representative on September 29, 1994. The hearing took place on March 20 and 21, 1995, in York. Jurisdiction over the subject matter and the parties has been established.

II. CITATION 2, ITEM 1

This item charges Caterpillar with a willful violation of 29 CFR § 1910.212(a)(1) in respect to the guarding of the point of operation of the so-called flare and cap machine (machine number 3851).¹ The Secretary proposes a \$50,000 penalty for the alleged violation. Caterpillar has corrected the problem which led to the issuance of the citation. It questions whether there was a violation at the time alleged in the citation and, if so, whether that violation was willful.

A. Date of the Alleged Violation

The citation alleges at page 1 (Exhibit G-1):

The violations described in this Citation and Notification of Penalty are alleged to have occurred on or about the day the inspection was made unless otherwise indicated within the description given below.

The violation description alleges:

Inspection Dates: 03/29/94 - 4/05/94 Machine number 3851 was not provided with a guard to keep the operator's hands from the point of operation. The unguarded point of operation resulted in an amputation on February 27, 1994.

¹ Section 1910.212(a)(3)(ii) provides: "The point of operation of machines whose operation exposes an employee to injury, shall be guarded. The guarding device 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."

The Compliance Officer explained that the inspection actually occurred only on the first date given, March 29; he returned to the plant on April 5 to conduct the closing conference with the Parties (Tr. 15-16). Caterpillar maintains that the Compliance Officer further explained that he observed the violation on March 29, 1994 (Tr. 24-25):

Q. Now, what did you see--and you can refer to the video, if you'd like²--what did you see at the plant that did not comply with the standard?

A. The machine had two hand palm buttons on, but could be activated with either button, which allowed the operator to reach over into the point of operation.

Accordingly, Caterpillar argues, it must be assumed that the citation charges Caterpillar with commission of a violation on March 29, 1994, and that the violation consisted of the fact that the flare and cap machine at that time was equipped with a two hand control that was capable of activation by pressing one control only. It is clear that the Compliance Officer so regarded the citation. However, the citation itself clearly refers to an amputation -- occurring on February 27, 1994 -- caused by the absence of guarding to keep the employee's hands out of the point of operation. The

² The questioner refers to the scene depicted on Exhibit G-1, the video taken at 11:04 A.M. See Tr. 17.

citation was issued exactly six months following that date, presumably to avoid the limitation of § 9(c) of the Act. The citation provided Caterpillar with adequate notice that the Secretary alleged that a violation had occurred on February 27, 1994.

B. Facts

The flare and cap machine operates to barrel-flare high pressure hydraulic hose couplings. These couplings range from 0.375 to 2.0 inches in diameter and are in various configurations (Tr. 288). The operator places unflared couplings into a spring-loaded fixture and activates a pneumatically controlled flaring ram that descends and flares it (Tr. 288-289). From 3,000 to 4,000 couplings are flared in a typical eight-hour work period (Tr. 295). The operator sits on a stool facing the machine. The stool sits on a thin sheet of steel atop a raised metal grating (Tr. 110).

1. Mr. Burkey's Accident

In August, 1991, Joseph Burkey was seriously injured while operating this machine.³ He had begun to operate the machine for the

³ Mr. Burkey's accident occurred nine days after Robert Jenkins suffered a fracture to his left index finger while operating the flare and cap machine. This occurred because one of the fingers on the coupling which he had placed into the machine was bent. The ram apparently struck this finger, ejecting the coupling onto Mr. Jenkin's finger. See GX-10.

first time some twenty to thirty minutes before the accident (Tr. 78). When he attempted to remove his hand from the point of operation after placing a coupling in the fixture, his glove caught on the collet, or fingers, of the coupling (Ex. G-3; Tr. 78, 290-91). He did not withdraw his hand quickly enough and, as a result, suffered a substantial tissue loss to his left hand and index finger. He indicated that the machine functioned faster than he had anticipated (Tr. 77-79; Ex. G-3).

2. Caterpillar's Response

Caterpillar reviewed the operation with a view toward making modifications designed to eliminate the risk of further injury. In the course of this review, Caterpillar spoke with Robert Smith, the UAW Safety Committee Chair, and the machine's operators (Tr. 218, 220, 226-28, 280-282, 291). The investigation concluded that the machine did not firmly hold the couplings, thereby tempting the operator to position the coupling with his free hand while activating the ram with his other hand (Tr. 280, 291). Accordingly,

Another accident occurred in August, 1992, when a coupling that was not properly seated in the machine was ejected on being struck by the ram and cut Barry Morthland's chin. Caterpillar installed a plexiglas shield to protect employees from this event. See Tr. 19; GX-11.

the machine was modified by incorporating a spring-loaded device to securely grasp the couplings (Tr. 300).

3. The Timing of Caterpillar's Response

According to Caterpillar, this correction was made over the next several weeks following the Burkey accident (Tr. 292-93, 300). According to the Secretary, these changes had been made before Mr. Burkey's accident. The Secretary relies on Mr. Burkey's testimony:

Q Okay. Now, can you describe to the Judge how you were injured that day?

A Yes. I'd picked a piece up and set it in the machine, into the fingers on the machine. I was wearing a glove and I reached up to pull the handle down. When I went to retrieve my arm, I couldn't pull it back momentarily because the glove had caught on one of the fingers of the collet. And it was -- it's a movement, it's a real quick action. So -- but the piece didn't come back out, so I lost part of my finger.

* * *

Q * * * Can you describe the fixture that you put that piece into?

A Yeah, there was like two black, I guess fingers, everybody's calling them fingers, but a mechanism that you took the collet and snapped them into that attachment, which held there, kept it from being kicked out. You're supposed to take your hand away and pull the lever down.

Q Now, can you tell me, are you sure that the fingers were in place at that time when you were injured in August of '91?

A Yes, absolutely. I remember the snapping of the part and also, if the fingers weren't there when I instantly went to pull my hand back, the part would have come out, with my hand.

It would just -- it used to be just a metal base with a slot cut in it, that you would just slide them in, and I remember my glove being momentarily hung there when I went to pull it back.

Q And if the fingers weren't there, what would have happened?

A Well, if it weren't there, my reaction would have brought the piece and went back out.

Q Out of harm's way?

A Yes.⁴

The Secretary also relies on the testimony of David Meyers, a union member of the safety committee, who recalled that the spring-loaded fingers were put in place prior to Mr. Burkey's injury (Tr. 200-01).

Two of Caterpillar's management officials testified that the changes were made in response to Mr. Burkey's injury, and Caterpillar so informed Mr. Womer during the course of his inspection (Tr. 57-59). Edward Hubbard was commodity manager for the hose coupling area, the area in which Machine 3851 was located, at the time of Mr. Burkey's injury. He testified as follows:

Q And as commodity manager for the hose coupling area in 1991, did you have responsibility for an operation known as the flare and cap operation?

A Yes.

⁴ Tr. 78-79.

Q And specifically machine number 3851 are you familiar with that machine?

A Yes, I am.

Q In 1991 we have evidence here in the record that has been marked as Government Exhibit 3 regarding an injury that was sustained by a Mr. Burkey. Are you familiar with that event?

A Yes, I am.

Q And that injury occurred while Mr. Burkey was working on machine number 3851; is that right?

A Yes.

Q Following Mr. Burkey's injury, what, if any, efforts were made to modify the operation of that particular machine?

A We investigated the accident. It was determined that the accident was primarily caused by the fact that the pieces didn't locate properly in the fixture. We met with all of the appropriate people and came up with a solution where we secured the pieces in the fixture better.

Q And who were the appropriate people that you met with?

A We met with -- we briefly met with the company safety people Phil Groft. We had Charlie Kindig who was the line foreman. We met with Bob Smith who was with the union. We met with some of the operators and some of the technical people like Barry Burley and Mark Warnick.⁵

Charles Kindig has been operations supervisor in the hose coupling assembly area since September, 1990. He prepared the

⁵ Tr. 279-80.

accident report covering Mr. Burkey's injury, and testified that the spring-loaded feature was added as a result of that injury (Tr. 291-93). No party produced documentary evidence relating to the modification.

The evidence relating to the timing of these modifications directly conflicts. Mr. Meyers' testimony may be the weakest because he was testifying concerning his recollections and not from the point of view of one with some official responsibility or some role in the events. However, Mr. Burkey's testimony does not suffer from the same shortcomings. He was personally involved, and his testimony was forthright. Nonetheless, he did acknowledge that he had only twenty to thirty minutes experience with the machine and that it had operated faster than he anticipated. On the other side of the ledger, the record presents no basis on which to question Mr. Hubbard's and Mr. Kindig's account.⁶ Both were forthright, and it must be noted that Mr. Womer acknowledged that this same account was presented to him at the time of the inspection. Given this state of

⁶ The Secretary points to Mr. Kindig's statement, "I don't think these springs were on here yet..." (Tr. 290) as illustrating some doubt on his part. However, Mr. Kindig testified unequivocally that "to his knowledge," the springs were added after Mr. Burkey's accident (Tr. 291).

the record, and given the fact that the Secretary bears the risk of nonpersuasion, I accept Caterpillar's account of these events.

4. Mr. Hoachlander's Accident and Caterpillar's Response

On February 27, 1994, Mr. Hoachlander was severely injured by the ram on this machine (Tr. 109-112). The injury occurred when he sensed that the stool on which he was sitting was about to tip and instinctively grabbed the pneumatic activator of the ram for stability while at the same time passing his hand under the ram (Tr. 111, 118-119). Caterpillar immediately undertook installation of further safety precautions, installing a set of double palm controls while awaiting arrival of double finger controls.⁷ Caterpillar's intent was to create a situation in which the operator was required to use both hands to activate the ram (Tr. 294). According to Mr. Kindig:

... we shut the machine down and we went to double palm buttons to occupy both hands of the operator where no more could he have any instance of getting his hand in the point of operation of the machine.⁸

Caterpillar later learned that because the palm buttons controlled a pneumatic operation, pressing one button could activate

⁷ The inspection occurred after the palm controls were in place, but before the finger controls arrived.

⁸ Tr. 294.

the ram. Apparently, an activation in this manner was not powered.

Again, Mr. Kindig:

Q. Was there ever a time when one could trip the machine with only one button activated?

A. Yes. . . . [W]hen we first put it on, because of the air valve that we had, there was some stored energy in there and after you hit it before you could release it it would kind of drift down, and we had to order a different type of valve and repipe it to get rid of that stored energy.⁹

In short, while Caterpillar may well be correct that the machine as guarded at the time of the inspection was in compliance with the standard, there is no question that, at the time of Mr. Hoachlander's accident, it was not in compliance.¹⁰

5. Proper Characterization of the Violation

The Secretary maintains that this violation is willful:

Respondent's course of conduct of failing to react to repeated serious employee injuries when the technology and ability to abate the hazard existed in the plant, constitutes an indifference to employee safety which the willful designation was created to address and deter. This failure to act by Respondent to protect its employees constitutes the requisite knowing disregard for employee safety necessary to find a willful violation. *Williams Enterprises, Inc.*, 13 BNA OSHC 1249, 1256-59 (No. 85-355, 1987).¹¹

⁹ Tr. 295.

¹⁰ I do not read Caterpillar's brief as arguing to the contrary.

¹¹ Secretary's brief, p. 18.

The Secretary argues that Caterpillar was indifferent to employee safety in that it failed to react to the two employee injuries that occurred in August, 1991.¹² He maintains that Mr. Kindig made three recommendations for corrective action following Mr. Burkey's injury (see GX 3), but that none of these were implemented, nor was any other action taken.

Caterpillar, also relying on *Williams Enterprises, Inc.*, as well as *Kohler Company*, 16 BNA OSHC 1769, 1773 (1994), argues that the Commission holds that a willful violation exists when an employer has knowledge that a condition exists which does not comply with the applicable standard, or is indifferent to the question of compliance -- i.e., the circumstances indicate that the employer would have committed the violation even if he knew it was not in compliance.

Caterpillar points out that there is no indication that anyone in authority deliberately allowed the guarding of the machine to be substandard or was aware that the situation violated the standard during the time covered by the sequence of events presented here.

¹² The Secretary refers to three such injuries at p. 17 of his brief. However, the only reference to the third injury is in a hand-written note which gives no particulars. See GX-15. Consequently, the Secretary has established only two injuries. See note 3, *supra*.

It asserts that it acted in good faith to make the job as safe as possible.

The Secretary has not established that Caterpillar was indifferent to employee safety with regard to this machine. Mr. Kindig indicated that his recommendation concerning training was implemented and that his recommendation concerning automation of the process was under study (Tr. 299). Moreover, I have found that Caterpillar modified the machine following Mr. Burkey's accident in order to address what it perceived to be the cause of that accident. The Secretary has not demonstrated that this violation was willful. While Caterpillar urges (Brief, p. 24) that the violation was other-than-serious, that clearly is not an appropriate classification. I find that Caterpillar was in serious violation of the Act.

Mr. Womer testified that he recommended an unadjusted \$5000 gravity-based penalty based on a high severity, greater probability condition (Tr. 28-30). He also indicated that, were the willful characterization dropped, a ten percent reduction for good faith might be appropriate (Tr. 337). I find that such a reduction is appropriate and assess a \$4500 penalty for this violation.

III Citation 1, Items 1a, b, c

A. Nature of the Case

OSHA cited Caterpillar for alleged violations of 29 CFR §§ 1910.147(c)(1),¹³ (c)(6)(i),¹⁴ and (c)(7)(i).¹⁵ The gist of all three alleged violations was that certain machine operators were not trained, or required, to lock out equipment prior to unjamming it (Ex. G-2; Tr. 38).¹⁶ A \$5,000 penalty is proposed. The amount was based on the Compliance Officer's estimate of the gravity of the alleged violations, with no credit for good faith or prior history (Tr. 38-39).

¹³ "(c) General--(1) Energy Control Program. The employer shall establish a program consisting of energy control procedures, employee training and periodic inspections to ensure that before any employee performs any servicing or maintenance on a machine or equipment where the unexpected energizing, startup or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source and rendered inoperative."

¹⁴ "(6) Periodic Inspection. (i) The employer shall conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and the requirements of this standard are being followed."

¹⁵ "(7) Training and Communication. (i) The employer shall provide training to ensure that the purpose and function of the energy control program is understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees. . . ."

¹⁶The three violations were alleged in the citation to be plant-wide. Counsel amended the citation at the hearing to limit it to "the

B. Facts - Chucker, Slotter, Conveyor

The machines of the chucker-slotter line are known collectively as Cell 512 (Tr. 134, 315-16). Cell 512 machines, slots, and heat-treats high pressure hydraulic hose couplings (Tr. 279, 315) that have been cut to size, chamfered, and roll-marked in a prior operation (see item 2 of Citation 1, discussed below). These are first placed into a parts hopper from which they are moved by a vertical conveyor (a "feed-all" conveyor) to a chute which feeds them into an Acme-Gridley "chucker" where they are machined to the desired dimensions.

From the chucker, the couplings are directed by a chute to a second hopper to be picked up by a second vertical feed-all located two to three feet from the chucker (Tr. 317). There, the couplings are raised ten to twelve feet by baffles within a vertical belt conveyor, aligned, and pneumatically ejected from the top of the conveyor into the feed chute of a slotter machine. The slotter cuts fingers into the sides of the couplings. A robot then retrieves the slotted couplings and conveys them to a heat-treating unit (Tr. 87-89, 132-135, 315-316).

slotter area, including slotter machine and conveyors," and "the track pin area." (Tr. 8-9).

The slotter, the robot and three sides of the second vertical conveyor are enclosed by a fence. Access to the slotter and to the robot is through a gate. The gate is interlocked to the equipment so that, when the gate is opened, power to the slotter, the vertical conveyor, and the robot is interrupted. Power to the equipment also may be shut off at a control panel located between the chucker and the slotter, or at the main control panel (Tr. 100, 128, 134-35, 149, 159, 161-2, 319).

An eight-button restart sequence, requiring approximately 5 minutes to complete, is necessary to restart the equipment after power interruption (Tr. 97-8, 101, 136-37, 319). The control panel where these controls are located is within the cell, about three feet from the second vertical conveyor (Tr. 106, line 14).

The operators of Cell 512 most frequently encounter jam ups within the second vertical conveyor, as parts jam sideways between the conveyor baffles and the sides of the conveyor, or back up behind the pneumatic ejector. To clear these jams, employees are expected to and do use a metal hook or a hammer to free or loosen the parts. Access is gained either at the bottom of the conveyor, through a door near the top of the conveyor, or by removal of the conveyor housing (Tr. 92-93, 100, 126, 128, 138, 151, 163, 318-319). Except when the jam can be corrected by use of the hook on parts jammed in the hopper at the bottom of the vertical conveyor, the conveyor must be and is shut down in order to unjam parts therein (Tr. 319, lines 7-9; see also Tr. 99, 130).

C. Discussion - Chucker, Slotter, Conveyor.

The Secretary maintains that the lockout standard applies in this case because the machines in question could unexpectedly be energized, started up, or could release stored energy while being unjammed, and that unjamming of these machines requires the operators to bypass guards and to place themselves in the danger zones. He points out that unjamming of machines is explicitly covered by 29 C.F.R. § 1910.147, which provides in part:

(b) *Definitions applicable to this section.*

* * *

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 start up of the equipment or the release of hazardous energy. [emphasis in the original]

Caterpillar, on the other hand, points to § 1910.147(a)(2),

which states:

(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 on the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle.

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). [Emphasis in original.]

A close reading indicates that the standard is intended to require employers to "prevent unexpected energization, start-up or release of stored energy"¹⁷ during "servicing and maintenance of machines and equipment in which the *unexpected* energization or start-up . . . , or release of stored energy could cause injury to employees".¹⁸ "Servicing and maintenance" encompasses "unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the *unexpected* energization or start up of the equipment of the equipment or release of hazardous energy".¹⁹

Section 1910.147(a)(2)(ii) states that the standard does not apply to servicing and maintenance which takes place during normal production. These activities remain subject to the machine guarding standards stated in Subpart O of Part 1910 unless they require the removal of a guard or the exposure of the employee to the machine's point of operation. The interplay between the lock-out standard and the machine guarding standard indicates that, in general, the former applies to work done on the machine when it is shut down and the latter to work done on it while it is in operation.

¹⁷ § 1910.147(a)(3)(i).

¹⁸ § 1910.147(a)(1)(i) [emphasis in original].

¹⁹ § 1910.147(b) [emphasis in original].

There is no dispute that the machines in question were not locked out when the operators unjammed them. It appears that unjamming is regarded by Caterpillar as a part of the normal operation of the machines in question,²⁰ thus placing it within the terms of § 1910.147(a)(2)(ii). Caterpillar bears the burden of establishing that § 1910.147(a)(2)(ii) is applicable. In *Secretary v. Westvaco Corp.*, 16 OSHC 1374, 1377 (Rev. Comm. 1993), the Commission held that, in order to come within § 1910.147(a)(2)(ii), a Respondent must show that the operations in question are first, minor; second, take place during normal production operations; and third, that effective alternative protection is afforded the employee.

In taking this view, the Commission relied on the test stated in the "Note: *Exception to paragraph (a)(2)(ii).*"²¹ The so-called "exception" states that servicing which takes place during normal production is not subject to the lock-out standard if it is

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).

²⁰ See Caterpillar's brief, pp. 8, 10.

²¹ Emphasis in original.

In making specific reference to Subpart O, this provision reiterates the basic interrelationship of the lock-out and machine guarding standards: lock-out applies when machines are shut down, machine guarding when they are running.

There appears to be no dispute that the unjamming is minor and performed during normal production operations. Thus the question to be decided is whether, under the circumstances demonstrated in this record, the machine guarding standard or lock-out standard applied. The first inquiry in answering this question is whether the machines in question were running or shut down when the unjamming occurred.

If running, the question then becomes whether the terms of paragraph (a)(2)(ii) operated to make the lock-out standard nonetheless applicable, thus requiring Caterpillar to shut down and lock-out the machines prior to unjamming them. Those terms would require that action if, in the course of unjamming the machines, an employee was required to remove a guard or expose him or herself to the point of operation, unless Caterpillar can demonstrate that the unjamming is "... (1) minor, (2) take[s] place during normal production operations, and that (3) effective alternative protection [in the context of the machine guarding standard] is provided." *Westvaco*, 16 OSHC at 1378.

If the machines are shut down and "... the Secretary shows that unexpected energizing, start-up or release of stored energy could occur and cause injury," the lock-out standard applies. *General Motors Corp.*, 17 OSHC at 1219.

In this case, the Secretary demonstrated that the chucker, slotter, and conveyor were sometimes operating when unjammed.²² The testimony indicates that the employees sometimes used a so-called chip hook or other tool to unjam these machines while they were running.²³ However, the testimony does not indicate that any guards were removed or employees exposed to the point of operation when the unjamming took place while these machines were operating.²⁴ Thus the Secretary has not shown that the lock-out standard was applicable in this circumstance. Had he done so, it would have become Caterpillar's burden to show that the unjamming during operation was undertaken under safeguards substantially equivalent to those set out in subpart O and therefore fell under the exception to § 1910.147(a)(2)(ii), or to comply with the lock-out standard.

²² See Secretary's brief, pp. 21-22.

²³ The Secretary takes the position that the chip hook, if caught in one of these machines, might drag the employee into the point of operation. However, it seems more likely that, if that happened, the employee would let go of the chip hook.

²⁴ See Tr. 82-85, 88-90, 99, 125, 128-29, 161-62.

The Secretary did show that an employee was exposed to two unexpected or unanticipated releases of energy while unjamming two machines which were shut down. In the first instance, the employee, Mr. Keller, was attempting to unjam a broken spring on one of two feeding mechanisms on the chucker with a length of pipe. He described the result:

... and I mean, it hit me in the chest. I had a black and blue mark. Threw me back against the fence, where the conveyor area is,²⁵

In the second instance, Mr. Keller was unjamming the conveyor:

A When this feed all here, there was two pieces stuck up at the kicker and I was standing on the arm that kicks the piece into the slotter. The electric was shut off and we always thought that killed all the power. But evidently this thing was run by air, and I knocked this piece out, this arm indexed in and I had my foot there and it hit my right foot.

Q And what happened?

A I couldn't get it out until -- I was yelling up at the guy at the next machine to come down and he pulled the arm back so I could get my foot out.

Q Okay. Did you miss any time from work?

²⁵ Tr. 155. Although Mr. Keller does not specifically say so, I presume that the chucker was shut down at the time, because the nature of the machine's operation would appear to require it. See GX 1. However, if the machine were operating at the time, the fact that the machine ejected the pipe with which Mr. Keller was working would appear to require the conclusion that Mr. Keller had exposed himself to the point of operation, thereby bringing the lock-out standard into play.

A They sent me to Memorial Hospital that day for -- they checked it over and it was just badly bruised.²⁶

Both of these events exposed Mr. Keller to injury from the *unexpected or unanticipated* energization or release of stored energy. While he may have deviated from authorized procedures, any deviations appear to be reasonably predictable, given the lack of any training on the proper servicing of these machines. The Secretary has made out a violation of 29 CFR §§ 1910.147(c)(1), (c)(6)(i), and (c)(7)(i) with respect to these two events.

The Secretary has not made out a violation with respect to any other aspects of the chucker, slotter, and conveyor operations.²⁷ As noted above, the evidence does not show whether guards were bypassed or employees exposed to the point of operation when the unjamming occurred during machine operation. In other instances of unjamming

²⁶ Tr. 156. Apparently both the electric power must be shut off and the air drained from the pneumatic system to fully neutralize the conveyor. See Tr. 323.

²⁷ The Secretary takes the position that the possibility that employees could be exposed to hose couplings spilling from the door located at the top of the conveyor (see Tr. 91-92, 130, 150) also presents a lock-out problem. However, this seems clearly an operational problem. There is no showing that this event would be unexpected or unanticipated, nor does it appear that it involves an employee bypassing a guard or placing him or herself in the point of operation of the conveyor. According to Caterpillar, it may be avoided by beginning to clear the jam at the bottom of the conveyor, thus permitting the couplings at the top to fall back through the conveyor. See Tr. 318-20.

with the machines shut down, Caterpillar correctly points out that reactivation of the slotter and conveyor requires activation of eight controls, a process that takes five minutes, more or less, to complete at a panel located three feet from the unjamming work. Thus unexpected or unanticipated energization of these machines is not plausible. There was no showing that the chucker might be restarted without the operator's knowledge.

E. Facts - Buffer

Machine Number 4235 - buffer - of the track pin line is within a unit known as Cell 621 (Tr. 33). The Cell is used to produce track pins which are from 1.5 to over 2.5 inches in diameter and from 9 to 14 inches long (Tr. 303). The buffer is designed to receive zinc-phosphate coated pins and buff the coating at the ends of the pins. A robot delivers the unbuffered pins to the buffer. The pins then roll down an inclined chute from the front of the machine to a point 2.5 feet within the machine where they are pneumatically raised, picked up by clamps, and presented to the buffing device. After being buffed, the pins are released by the clamps and allowed to roll down a second inclined chute back to the front of the machine for retrieval by the robot (Tr. 302, 304-5).

The buffer has two modes of operation; automatic and manual²⁸ (Tr. 307). In manual mode, each of its movements is individually controlled (Tr. 307). This feature makes it possible to unjam the equipment efficiently, but by remote control and therefore without posing any risk of harm to the operator²⁹ (Tr. 307, 310). In addition, a broomstick and a length of two by four are available for use in levering a jammed part out of the equipment, if necessary (Tr. 309).

A fence encloses the buffer and the area within which the robot maneuvers. The access gate is interlocked to the robot controls such that power to the robot is disconnected (the robot is in "E-stop" mode) while the gate is opened (Tr. 304-305). The operator works outside the fence except when required to unjam the buffer. He is not allowed to work within the enclosure with the gate closed (Tr. 304-305).

The Secretary presented evidence that an employee suffered a finger tip amputation while attempting to unjam a pin from the area of the buffer's point of operation, about 2.5 feet within the buffer

²⁸ The machine is equipped with three signal lights, yellow, red and blue. The yellow light signals that the machine is in automatic mode; the red light signals a jam-up; and the blue light signals manual mode.

²⁹ Jammed pins cannot be retrieved if the machine is totally deenergized (Tr. 310).

(Ex. G-5). No witnesses to the accident were called to testify. The only evidence presented was the accident report, and the testimony of Greg Rzeplinski, the Senior Manufacturing and Systems Engineer who had overseen the installation of Cell 621 and other parts of the track pin line and who described the features of that Cell (Tr. 302-303). The evidence indicated that the injured employee had attempted to free a jammed pin by hand and without first placing the machine into manual mode (Ex. G-5). The Compliance Officer stated only his conclusion that "the unit" should have been locked out (Tr. 72). He did not elaborate on the comment. No rebuttal was offered in response to Mr. Rzeplinski's testimony to the effect that the buffer must be in manual mode (not locked out) in order to unjam parts from the buffer.

There is no question that the buffer must be running in manual mode in order to be unjammed. Moreover, there appears to be no question that an operator may be expected to reach into the machine while it is in manual mode in order to dislodge a jammed track pin (Tr. 308-09, 312-13). However, while the buffer is in manual mode, the operator controls each of its individual functions. Thus, there is no danger that he may be subjected to the unexpected or unanticipated initiation of any function. Caterpillar has

demonstrated that unjamming is undertaken with effective alternative protection in the context of the machine guarding standard as required by the exception to § 1910.147(a)(2)(ii) and the *Westvaco* decision.³⁰

F. Penalty

The Secretary has made out a violation of the standard with regard to the two instances in which Mr. Keller was injured while unjamming machines which were shut down. Caterpillar urges that any violation of the lock-out standard should be regarded as other-than-serious. Ignoring Mr. Keller's experience with the chucker, and explaining away his experience with the conveyor, it takes the position that, despite the routine need to unjam these machines, no injuries have resulted. Further, it argues that the Secretary did not show that there is any likelihood of serious injury as a result

³⁰ Cf. 29 C.F.R. § 1910.212(a)(3)(ii):

The point of operation of machines whose operation exposes an employee to injury, [sic] shall be guarded. The guarding device ... 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.

The facts presented are also similar to those in *General Motors*, where the Commission concluded that the fact that a machine could not be activated unexpectedly if proper procedures were followed dictated the conclusion that an injured employee had not followed those procedures and that a violation of the lock-out standard was not shown. See 17 OSHC at 1221-22.

of its failure to include these operations in the lock-out program.³¹ However, both of these incidents involved potentially serious, if not serious injuries. Consequently Caterpillar's position must be rejected.

The Secretary seeks a \$5,000 penalty. I find that this should be adjusted downward by ten percent for good faith, and assess a \$4,500 penalty.

IV. Citation 1, Item 2

This item alleges a violation of 29 CFR § 1910.212(a)(1).³² The condition cited was an opening measuring eighteen by twenty-four inches in the shell housing of an Acme-Gridley Chucking machine (No. 1810) located in the vicinity of the chucker-slotter line discussed above (Tr. 40, 323-5).³³ Mr. Womer happened to observe this opening while he was conducting his inspection of the flare and cap machine (Tr. 20).

³¹ See Caterpillar's brief, pp 10-11.

³² "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 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."

³³ This is not the same machine as the chucker located on the chucker-slotter line.

This machine cuts lengths of stock tubing that will eventually become high pressure hydraulic hose couplings to size. It also chamfers the inside and outside diameter of the tubing (Tr. 82-83, 324).³⁴ The machine functions as a lathe, automatically applied to the tubing parts, which are held by the six rotating spindles (Tr. 324-25).

Parts are loaded through a chute located at the top of the machine, and are ejected by mechanical action (Tr. 325). At no time during the operation is the operator required to place his hands or other body parts past the plane of the cited opening, or into the operating machinery (Tr. 41, 325). The operator uses a hand tool to clear chips away from the tooling (Tr. 331, 40-41, 83-84). In doing so, the operator's hand remains from fourteen to eighteen inches from the moving parts (Tr. 82-84) although the hook at the end of the hand tool may approach to within six inches of the spindles (Tr. 84).

The Secretary argues that the guarding standard covers the Acme-Gridley chucker. He views the hazards as follows:

³⁴ The parts as produced on this machine are further machined by the Acme-Gridley chucker which is part of Cell 512, discussed above.

1. As part of their duties, operators reach in with hooks to dislodge jammed parts and to clear shavings while the chucker is running. The hook comes within six inches of the moving parts (Tr. 84). The hook, if caught in the moving parts, could draw the operator's hand into the spindles resulting in serious hand injuries (Tr. 85).

2. When the machine indexes the cross slide comes within two inches of the operator (Tr. 85-86).

3. Couplings ejected into the chute designed to receive them may fly out past the operator (Tr. 86).

In his brief, the Secretary maintains that a designed guard was removed from its intended function and that a limit switch on the guard, designed to shut the machine off when the guard was opened, was bypassed by tying the switch back. The Secretary cites GX 1 at 11:35 A.M. on 3/29/94 and Tr. 19-22 for this proposition. The guard, a door which covered the opening in question, was found lying along side the chucker (Tr. 20-21). The operator, Mr. Burkey, was unaware of the guard's existence despite many years experience operating this machine (Tr. 82).

The Secretary's position with regard to the guard is not supported by the record. Mr. Womer's testimony to which the

Secretary cites is generalized and, although it is not entirely clear, does not relate to attributes of the machine in question which he observed. Nor does the videotape (GX 1) show a switch, let alone one tied back.

The Commission's decision in *Jefferson Smurfit Corp.*, 15 BNA OSHC 1419, 1421-22 (No. 89-0553, 1991), states that a violation of 29 C.F.R. §1910.212(a)(1) exists when employees are exposed to the point of operation of a machine. In the instant case, the Secretary failed to show that the chucker operator is required to expose himself or herself to the point of operation in order to keep the chucker functioning. Therefore, the citation is vacated.

V. Citation 1, Item 3

Citation 1, Item 3 should read
29 C.F.R. 1910.242(b):

The citation states:



29 C.F.R. 29 CFR § 1910.212(a)(1): Compressed air used for cleaning was not reduced to less than 30 p.s.i.:

(a) Hose Coupling Area, Machine #512 - Air used for cleaning was greater than 100 p.s.i.

The cited condition was an air gun located on the chucker which is part of Cell 512, the chucker-slotter line described above (Ex. G-1; Tr. 23). Air guns are used by machine operators to clean metal chips and dirt from within their machines (Tr. 23, 124, 330). The

evidence also suggests that the guns may be used by employees to clean their clothing (Tr. 124, 180). The gun in question was one of some 1,200 in the plant (Tr. 44). The Secretary proposes a penalty of \$2000.

The safety problem posed by air guns which did not meet the 30 p.s.i. standard had been raised by the union in the Union-Management Safety Committee in the summer of 1993 (Tr. 170). That committee investigated the types of guns available, and identified and shop tested one that would meet the 30 p.s.i. standard while effectively cleaning the machinery. The shop testing was completed in either December, 1993, or January, 1994, the gun approved, and between 1,200 and 1,500 ordered; the change-over to the new gun had not been completed at the time of the inspection (Tr. 45, 183-86; see GX 9). During the period that the committee was evaluating air guns, there was some effort made by shop foremen to modify the existing guns to bring them within the 30 p.s.i. limitation (Tr. 182-83).

The Compliance officer did not measure the air pressure emitted by this gun, because his monitor was malfunctioning that day (Tr. 44). He assumed that the pressure was "well over 100 p.s.i." based on information given him on system air pressure (Tr. 44). The tip was a shop-made extension with a 45° bend, designed to deliver full

line pressure to places within the machine in order to effectively and thoroughly remove chips and debris (Tr. 141-142, 330).

There is no question that the gun originally had been designed to use a tip that would regulate the pressure to 30 p.s.i., or that at the time of the inspection, the tip found on this particular gun was not so designed. Caterpillar recognizes that, under current Commission rulings, prompt abatement after a substandard condition has been identified by a citation will not cancel the violation for citation purposes. *Gannett Rochester Newspaper Corp.*, 9 BNA OSHC 1590, 1595 (1981); *Whirlpool Corporation*, 8 BNA OSHC 2248, 2249 (1980). It also acknowledges the unreviewed opinions of Judge Blythe in *Fairbanks Well Service, Inc.*, 5 BNA OSHC 1873, 1874 (1977), and of Judge Donegan in *Concrete Technology Corporation*, 5 BNA OSHC 1751 (1977), holding that efforts to correct a known violative condition undertaken, but not completed, prior to an inspection relate to penalty as an element of good faith, and negate the existence of a repeat violation, but do not negate the violation. Nevertheless, Caterpillar submits that no violation should be found because:

1. Efforts to replace the air guns were nearing completion at the time of the inspection and were complete when the citation was issued.

2. These efforts were a jointly undertaken by management and the Union.

3. There is no evidence that it would have been possible to replace the guns earlier; the Act requires no more than what is possible and practicable.

4. As a policy matter the citation should be dismissed, because it would be counterproductive of the aims of the Act to penalize an employer who was in the process of correcting the violative condition.

5. Given the lack of any history of injuries arising from use of guns delivering greater than 30 p.s.i., any violation was other-than-serious for which no penalty should be assessed.³⁵

The Secretary established that serious injuries to the eyes and skin, resulting from the imbedding of debris or chips propelled by the guns in the course of cleaning the machinery, and embolisms, resulting from the direct application of air pressure from the gun to the skin, are possible (Tr. 176, 188, 225). Thus Caterpillar's

³⁵ See Caterpillar's brief, pp. 17-18.

argument that the violation was other-than-serious must fail. Given the fact of the violation and the serious nature of potential injuries resulting from it, the citation must be affirmed. However, Caterpillar's approach to the problem posed by the air guns illustrates a responsible use of the Union-Management Safety Committee process, one which should be encouraged. Accordingly, I find that an appropriate penalty for this violation is \$20.

VI. Conclusions of Law

A. Respondent is an employer engaged in a business affecting commerce within the meaning of section 3(5) of the Occupational Safety and Health Act of 1970, as amended, 29 U.S.C. § 652(5) ("the Act").

B. Jurisdiction of this proceeding is conferred upon the Occupational Safety and Health Review Commission by section 10(c) of the Act, 29 U.S.C. § 659(c).

Citation 1, Item 1a, 1b, and 1c.

C. Respondent was in serious violation of the standards set out at 29 CFR §§ 1910.147(c)(1), (c)(6)(i), and (c)(7)(i). A penalty of \$4500 is appropriate.

Citation 1, Item 2.

D. Respondent was not in violation of the standard set out at 29 CFR § 1910.212(a)(1).

Citation 1, Item 3.

E. Respondent was in serious violation of the standard set out at 29 C.F.R. § 29 CFR § 1910.212(a)(1). A penalty of \$20 is appropriate.

Citation 2, Item 1

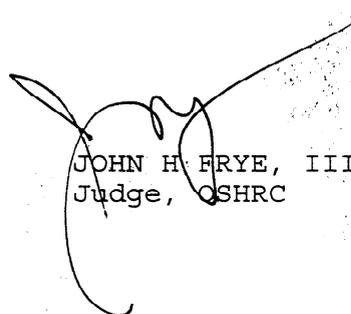
F. Respondent was in serious violation of the standards set out at 29 C.F.R. § 1910.212(a)(1). A penalty of \$4500 is appropriate.

VII. ORDER

1. Citation 1, Item 1a, 1b, 1c, and 3, and Citation 2 are affirmed as serious violations of the Act.

3. A total civil penalty of \$9020 is assessed.

It is so ORDERED.



JOHN H. FRYE, III
Judge, OSHRC

Dated: **DEC 19 1995**
Washington, D.C.