



from the unexpected energizing of the *entire* machine.<sup>3</sup> At the time of the inspection, the employee, whose job title is “the helper,” was making adjustments to the slotter section between production runs. The Secretary does not dispute that the low level of energy that the helper uses in making these adjustments does not pose a hazard. Westvaco argues that the standard does not apply because the helper’s adjustments come within the specific exception to the lockout/tagout standard found at the end of 29 C.F.R. § 1910.147(a)(2)(ii).

Review Commission Administrative Law Judge Edwin G. Salyers concluded that Westvaco did not prove that it comes under the exception. He affirmed the citation item<sup>4</sup> and characterized it as serious. He assessed a penalty of \$560, as OSHA had proposed. The issues before the Commission are: (1) whether the judge erred in concluding that

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<sup>2</sup>(...continued)

The definition of “lockout device” in that same section provided at the time of the inspection and citation as follows:

A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment.

Although it does not affect this case, that definition was amended in 55 Fed. Reg. 38,685 (1990).

<sup>3</sup>The record in this case concerns only lockout as a means of controlling hazardous energy. However, as its name implies, the lockout/tagout standard permits employers to control hazardous energy by using a tagout system in certain circumstances. Under 29 C.F.R. § 1910.147(c)(2)(i), an employer shall use a tagout system “[i]f an energy isolating device is not capable of being locked out.” If an energy isolating device *is* capable of being locked out, the employer must use lockout “unless the employer can demonstrate that the utilization of a tagout system will provide full employee protection as set forth in paragraph (c)(3) of this section.” 29 C.F.R. § 1910.147(c)(2)(ii). See 29 C.F.R. § 1910.147(c)(3)(i) and (ii).

<sup>4</sup>The judge noted that, in response to challenges to the lockout/tagout standard filed by labor and industry, the D.C. Circuit remanded the case to OSHA to further consider certain aspects of the standard’s promulgation. *International Union, United Automobile, Aerospace and Agricultural Implement Workers of America, UAW v. OSHA*, 938 F.2d 1310 (D.C. Cir. 1991). The judge correctly stated that the court decision has no effect on the outcome of the present case because, in its subsequent order on September 16, 1991, the D.C. Circuit refused to stay application of the standard during the remand period.

Since the judge’s decision was issued, the Secretary published his “Supplemental Statement of Reasons” in response to the court’s remand order. 58 Fed. Reg. 16,612-23 (March 30, 1992). On May 27, 1993, an industry party filed a motion with the D.C. Circuit seeking vacation of the standard or suspension of enforcement. *National Association of Manufacturers v. Reich*, Docket Nos. 89-1559, 89-1657, & 90-1553. 23 BNA OSHR 4-5 (June 2, 1993). On June 17, 1993, the Secretary filed a response with the court in which he defended his rulemaking and asked the court to dismiss the motion. 23 BNA OSHR 86-67 (June 23, 1993).

Westvaco did not establish that the helper's adjustments fall under the exception in the standard; (2) whether Westvaco proved that compliance was infeasible; and (3) whether the judge properly characterized the violation as serious.

## I. *Background*

### A. *Facts*

Westvaco manufactures corrugated paperboard containers at its plant in Eaton, Ohio. The printer/slotter machine prints on, scores, and slots sheets of corrugated paperboard that can then be folded into trays for holding cans. Two Westvaco employees work at the machine, the operator and the helper. During a production run, the helper feeds sheets of corrugated paperboard into the machine. The machine moves the sheets to the "printing section," where graphics of one color are printed at the first print station, and, if required, graphics of another color are printed at the second station. Then, at the "slotter section" sheets move through a series of upper and lower shaft heads fitted with corresponding knives and slots that cut them into smaller sheets, inscribe scoring lines, and cut slots on the sides of the sheets. After the sheets have moved through the machine, the operator inspects the finished product at the stacking area.

Because each order for cartons from Westvaco's customers is unique in terms of printed matter and size, adjustments to both the printer section and the slotter section must be made for each order. The typical order ranges from 10,000 to 100,000 trays. The machine completes an order for 10,000 trays in approximately two hours. Because the average number of orders run per day is three or four, and adjustments to the slotter and printer sections are necessary before each order, adjustments are made three or four times a day. The adjustments, which take between 15 and 45 minutes to complete, are made by the operator and the helper between production runs. The operator adjusts the printer section, while the helper adjusts the slotter section.

Before the helper adjusts the slotter section, he activates the twist lock stop at the feed (opposite) end of the machine, presses one of the two mushroom stop buttons located at each side of the slotting section, and then raises the "layboy arms" used in transporting

the corrugated sheets.<sup>5</sup> The helper then adjusts the shaft heads in the slotting section by positioning the six knife heads on each upper shaft, and their corresponding slotted heads on the lower shaft. The helper uses a T-wrench, or Allen wrench, to work in between the shafts and adjust the heads about one-eighth to three-sixteenths of an inch to meet customer specifications. Each time an adjustment to a head is made, the helper must visually determine whether the slot and knife are lined up properly by activating the jog control button, which causes the heads to move at a slow speed.

In order to provide an opening for access to the area where he will change the ink and printing plates, the operator separates the machine by sliding the printer section, which moves on rails, away from the slotter section.<sup>6</sup> When the machine is separated, the slotter section is disconnected from the printer, and the flow of energy to both sections is cut off *except* for a small amount of power that allows the helper to jog the heads at a slow speed at the slotter section and permits the ink at the printing section to continually circulate to keep it from drying out.

#### B. Main Contentions of the Parties

According to the Secretary, Westvaco violated section 1910.147(c) because the helper was making adjustments to the slotter section of the printer/slotter machine, where unexpected energizing of the entire machine could occur, without the protection of an energy control program that would isolate the machine and thereby render it inoperative. More specifically, the Secretary bases the alleged violation on Westvaco's failure to lockout the slotting section while the helper made his adjustments.

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<sup>5</sup>This is the procedure that the helper followed at the time of the OSHA compliance officer's complaint investigation; it represents the cited condition. After that investigation, a hinged barrier guard was installed that covers the slotter section. When the helper raises this barrier guard to reach the area requiring adjustments, the metal on the guard is detected by a sensing device that activates another stop control, which is on the same circuit as the stop buttons. According to the Secretary's expert witness, William Murphy, whose qualifications are discussed later, see *infra* note 15, this guard is not "interlocked" because there is no electrical device that actually locks the guard in place.

<sup>6</sup>After the compliance officer's investigation, Westvaco installed a key-operated switch at the location where the machine separates. After separating the machine, the operator maintains exclusive control of the key until the machine is once again together.

Westvaco claims that it was not required to provide an energy control program to protect the helper because it is covered by the exception to the requirements of the lockout/tagout standard at the end of 29 C.F.R. § 1910.147(a)(2)(ii), which provides:

(ii) Normal production operations are not covered by this standard . . . . 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 . . . where work is actually performed upon the material being processed . . . 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 [“Machinery and Machine Guarding”] of this part).

(Emphasis added).

## II. *Did Westvaco Prove that the Helper’s Adjustments Fall Within the Exception?*

The party claiming the benefit of an exception bears the burden of proving that it comes within that exception. *E.g., Falcon Steel Co.*, 16 BNA OSHC 1179, 1181, 1993 CCH OSHD ¶ 30,059, p. 41,329 (No. 89-2883, 1993) (consolidated); *Dover Elevator Co.*, 15 BNA OSHC 1378, 1381, 1991 CCH OSHD ¶ 29,524, p. 39,849 (No. 88-2642, 1991).

### A. *What the Exception Requires*

According to the Secretary, “the lockout/tagout standard excepts from coverage certain types of *minor* servicing during *normal production operations* so long as the employee is adequately protected from the hazard by *effective alternative means*.” Under the language of the exception, the types of minor servicing excepted are “routine, repetitive, and integral to the use of the equipment for production.” These characteristics are not in dispute in this case.

Westvaco does not agree with the Secretary’s reading of the exception’s requirements quoted above. Its interpretation would substantially reduce what must be proven to come

under the exception. It argues that “there are two exceptions to the lockout requirements that govern this case,” citing 53 Fed. Reg. 15,498 (1988)(preamble to proposed rule)<sup>7</sup> and 54 Fed. Reg. 36,661-62 (1989)(preamble to final rule).<sup>8</sup> However, there is nothing in the record to support this claim. We have reviewed the referenced pages of the preambles to the proposed rule and final rule and conclude that the language Westvaco relies on does not describe a separate exception, but rather different aspects of the rationale for what became a single exception at the end of section 1910.147(a)(2)(ii). Westvaco also claims that, according to its reading of the preamble at 55 Fed. Reg. 38,679, amending 54 Fed. Reg. 36,662, servicing and maintenance activities are divided into two categories, which Westvaco describes as:

- (1) those that must be performed with the machine locked out . . . and (2) those minor servicing activities that can be performed when the machine is not

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<sup>7</sup>The preamble to the proposed rule, 53 Fed. Reg. 15,498 (1988), reads as follows:

The Agency recognizes that there are certain servicing operations which, by their very nature, must take place without deenergization, such as the testing of energized equipment or processes. Additionally, certain normal production operations, which are not intended for coverage by this standard, such as repetitive minor adjustments, can sometimes safely be done w[ith]out the machine, equipment or process being deenergized and locked out and/or tagged out, with the use of specific control devices, work practices, employee training and other measures.

The proposed rule designated as 29 C.F.R. § 1910.147(a)(2)(iii)(B) provided:

Servicing . . . which takes place during normal production operations, such as . . . making minor adjustments . . . are not covered by the standard, if it is necessary to perform such servicing . . . with the machine . . . energized, and if such servicing . . . is performed using alternative measures which the employer can demonstrate will provide effective protection.

<sup>8</sup>In the preamble to the final standard, 54 Fed. Reg. 36,661 (1989), OSHA recognized that “the proposed provision was not clear enough” concerning the types of operations meeting, or not meeting, the exception and the criteria to be applied in each situation. The preamble clarified that:

Minor tool adjustments and changes or other minor servicing activities performed during normal production operations, are not covered by lockout or tagout requirements if the activities are routine, repetitive and integral to the production operation, provided that there is an alternative means being used . . . which will provide effective protection to employees.

54 Fed. Reg. 66,661-62. OSHA also noted the problems that arose from the proposed rule’s requirement that the employer demonstrate that it was necessary to perform the operation with the machine energized. After recognizing that “some servicing operations must be performed with the power on,” OSHA did not deem it necessary in the final exception to require that demonstration by the employer. 54 Fed. Reg. 36,661.

locked out as long as the employee doing the work is protected by either control switches under his/her exclusive control, local disconnects, interlocked barrier guards or other alternative protective measures.

Westvaco's category (1) consists of the requirement in the proposed exception that was deemed unnecessary in the final exception. See *supra* notes 7 and 8. While Westvaco's category (2) purports to present the exception at issue, in that it refers to the requirements that the servicing be "minor" and that effective alternative protection be used, this assertion ignores the remaining element of the exception, the requirement that the servicing must be done "during normal production operations."<sup>9</sup> Westvaco also contends that "[t]he real question in this case is whether Westvaco utilizes an alternative procedure to lockout that prevents unintended activation of the machine when the helper is in a machine danger zone." We agree with Westvaco that a showing that effective alternative protection is provided is necessary to meet the exception. However, it is but one of three elements that must be proven to satisfy the exception.

Having found no support for Westvaco's view of the exception, we must agree with the Secretary's reading of the exception. Therefore, we conclude that, in order to show that the helper's adjustments come within the exception, Westvaco has the burden of proving that the helper's adjustments are (1) minor, (2) take place during normal production operations, and that (3) effective alternative protection is provided.

*B. Did Westvaco Prove that the Adjustments Were Made "During Normal Production Operations"?*

To determine whether Westvaco has met its burden of proving that the helper's adjustments come within the exception, we first consider whether it established that the helper's adjustments to the slotter section "take place during normal production operations."

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<sup>9</sup>The sentence in the preamble to the amendments to the final rule at 55 Fed. Reg. 38,679, upon which Westvaco particularly relies for its category (2), specifically recognizes this requirement: "Safeguarding for minor servicing *during normal production operations* may include, for example, interlocked barrier guards, local disconnects or control switches which are under the exclusive control of the employee performing the minor servicing . . . ." (emphasis added).

*Judge's Decision*

In his decision, the judge noted that “normal production operations” is defined in 29 C.F.R. § 1910.147(b) as “[t]he utilization of a machine or equipment to perform its intended production function.” Finding this definition rather vague, he focused on the definition of “setting up” in 29 C.F.R. § 1910.147(b), which reads: “[a]ny work performed to prepare a machine or equipment to perform its normal production operation.” The judge noted that “setting up” is listed as an activity under the definition of “servicing and/or maintenance” in section 1910.147(b),<sup>10</sup> and that servicing and maintenance activities are expressly covered by the lockout standard, under 29 C.F.R. § 1910.147(a)(2)(i). He stated that, based on the plain meaning of the exception and these definitions, “work performed on the machine while the machine is not being operated to actually produce its product is either servicing or maintenance.” The judge further stated that

work that is performed *before* the normal production operation in order to *prepare* the machine for production is a specific service activity, called setting up. Setting up does not occur during normal production operations. Therefore, setting up cannot, by definition, fall within the exception to § 1910.147(a)(2)(ii).

(Emphases added).

He concluded that the helper’s adjustments come under the definition of “setting up” because they “were made to customize each individual order; the adjustments prepared, or set up, the machine for the next order, or production operation.” He relied on the preamble at 55 Fed. Reg. 38,680 (1990), amending the final rule’s preamble at 54 Fed. Reg. 36,667 (1989) to read:

Anything that is done to prepare a machine or equipment to perform its normal production operation, such as changing a machine part (e.g., changing

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<sup>10</sup>“Servicing and/or maintenance” is defined in section 1910.147(b) as:

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

(First emphasis added).

the blade of a power saw), is not considered utilization of a machine or equipment and is classified as servicing or maintenance rather than normal production operations.

The judge stated that “[h]aving determined that the helper’s adjustments fall within the definition of ‘setting up,’ a service activity that is not a part of normal production operation[s], it is concluded that the helper’s adjustments are not covered by the exception . . . .”

#### *Westvaco’s Arguments*

Westvaco contends that the judge erred in interpreting the standard when he held that the exception could not apply to activity that he characterized as setting up, and that the exception applies only to servicing that is performed while the machine is actually making a product.<sup>11</sup> It maintains that “[a]ny type of servicing, including set up, could fall within” the exception as long as the exception’s other criteria are met. It argues that, contrary to the judge’s narrow interpretation, the language in the exception “focuses on the nature of the work being performed, not on the moment in time when the work occurs.” Westvaco asserts that the helper’s adjustments affect the size of the product and “are made when production moves from one customer order to another.” It likens the helper’s adjustments to “chang[ing] the speed of the machine by adjusting belt drives or other components which are normally guarded” or “adjust[ing] the movement of a long-bed milling machine worktable,” which are recognized in the amended preamble as meeting the exception where effective alternative safeguarding is provided. 55 Fed. Reg. 38,680 (1990), amending 54 Fed. Reg. 36,666 (1989). Westvaco argues that machine speed changes and worktable adjustments are activities that could be performed either between orders, like the helper’s adjustments, or while a particular order is running.

Thomas Seagraves, Westvaco’s production manager, testified that the production cycle consists of the time it takes to make the adjustments to the slotter and printer sections

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<sup>11</sup>Westvaco does not discuss separately each of the three elements of the exception at issue (whether the adjustments are minor, made during normal production operations, and whether effective alternative protection was provided). Rather it presents most of its contentions by combining its discussion of all three factors in the exception at issue in this case, and sometimes including factors not in dispute (whether the adjustments are routine, repetitive, and integral to the use of the machine).

together with the time to actually process the order through the press. Westvaco asserts, as Seagraves testified, that the inclusion of the adjustments in the normal production operations is underscored by the fact that the adjustments are performed by production employees, not maintenance personnel.

#### *Discussion*

The judge found that the helper's adjustments of the shaft heads to accommodate each customer's specifications in anticipation of the next production run is "setting up," or, as defined in the standard, "work performed to *prepare* a machine or equipment to perform its normal production operation." (emphasis added). We agree with this determination. We reject Westvaco's claim that this element of the exception focuses only on the nature of the work being performed and not on the moment in time when the work occurs. While the nature of the work is important to consider, in this case the fact that the work is done *prior to* production runs is critical in determining if the adjustments are made during normal production operations.

The plain meaning of the word "prepare" as it is used to define "setting up" in section 1910.147(b) includes the idea of activity *before* some event. One dictionary defines "prepare" as "to make ready beforehand for some purpose." *Webster's Third New International Dictionary* 1790 (1986 unabridged). Under this definition, the helper's adjustments to the shaft heads are clearly done to "prepare" the printer/slotter machine for normal production operations.

Furthermore, adjustments made to *prepare* for normal production operations cannot, at the same point in time, be adjustments that are made "*during* normal production operations." (emphasis added). Work performed "during" is defined as work "at some point in the course of." *Id.* at 703. Such work occurs at a different time than adjustments made "beforehand," or while setting up. Based on this definitional distinction, we reject Westvaco's argument that the judge erred in finding that the exception cannot apply to setting up.<sup>12</sup> Therefore, we conclude that because the helper's adjustments constituted

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<sup>12</sup>The judge further suggested, in reliance on the quoted portion of the preamble at 55 Fed. Reg. 38,680, that setting up automatically falls outside the exception because it is "servicing," a type of activity to which the  
(continued...)

“setting up,” they cannot, based on the standard’s definition of that term, be considered to take place “during normal production operations.”<sup>13</sup> See, e.g., *Globe Industries, Inc.*, 10 BNA OSHC 1596, 1598, 1982 CCH OSHD ¶ 26,048, p. 32,718 (No. 77-4313, 1982) (Commission should give reasonable, common-sense interpretations to standards), and cases cited therein. In light of this disposition, we need not reach Westvaco’s argument concerning the judge’s further finding that the exception applies only to work performed on the machine while the machine is actually making its product.

To prove that its case comes within the exception, the employer must show that the adjustments are minor *and* made during normal production operations, *and* that effective alternative protection is provided. In light of our determination above that Westvaco failed to prove that the helper’s adjustments were made during normal production operations, we conclude that Westvaco has not proven that its case falls within the exception at the end of section 1910.147(a)(2)(ii). Therefore, we need not reach the other factors in dispute, whether the adjustments are “minor” and whether they are made “using alternative measures which provide effective protection.”

Based on the above, we conclude that Westvaco has failed to prove that the helper’s adjustments fall within the exception at the end of section 1910.147(a)(2)(ii). Accordingly, we find that the cited standard, section 1910.147(c)(1) applies, and that, as Westvaco acknowledges, its terms were not met because the slotter section was not locked out.

### III. *Did Westvaco Prove the Infeasibility Defense?*

To prove the affirmative defense of infeasibility, the employer must show that “(1) literal compliance with the terms of the cited standard was infeasible under the existing

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<sup>12</sup>(...continued)

standard applies. We agree with Westvaco that this reasoning is inappropriate. While it is true that the lockout/tagout standard is generally applicable to servicing and maintenance, not to normal production operations, what is at issue here is an *exception* to the standard’s general applicability provisions. The exception provision at issue here recognizes that there are certain types of servicing that must be done during normal production operations, and, for those activities, the standard does not apply if the other requirements of the exception are established.

<sup>13</sup>We note that our ruling here is limited to the definitional distinction that prevents an activity that qualifies as “setting up” from also being an activity that takes place “during normal production operations.” Other types of “servicing and/or maintenance” work listed in that term’s definition, see *supra* note 10, such as “unjammings of machines,” could, depending on their respective definitions, be done during normal production operations.

circumstances and (2) an alternative protective measure was used or there was no feasible alternative measure.”<sup>14</sup> *Mosser Constr. Co.*, 15 BNA OSHC 1408, 1416, 1992 CCH OSHD ¶ 29,546, p. 39,907 (No. 89-1027, 1991), *citing Seibel Modern Mfg. & Welding Corp.*, 15 BNA OSHC 1218, 1226, 1228, 1991 CCH OSHD ¶ 29,442, pp. 39,682 & 39,685 (No. 88-821, 1991).

Westvaco generally contends that compliance would not be feasible because energy was required to jog the heads in the slotter section and to keep the ink circulating in the printer section. However, as discussed above, the Secretary does not contend that the energy required for the jog mode posed a hazard to the helper, or that the energy required for ink circulation posed a hazard to the operator. Rather, the Secretary asserts that the energy against which the helper needs protection is the energization of the *entire* machine.

Westvaco also argues that it would be infeasible to implement the abatement measures suggested by the Secretary’s witnesses compliance officer Jack Peterson, who conducted the complaint investigation, and expert William Murphy, the Area Director for the OSHA Cincinnati Office, who conducted the discovery inspection.

William Murphy, who was qualified by the judge as an expert in the lockout/tagout field,<sup>15</sup> testified that Westvaco could abate the violative condition by installing a hasp and

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<sup>14</sup>An affirmative defense ordinarily must be initially pleaded by the employer in its answer, according to Rule 36(b) of the Commission’s Rules of Procedure, 29 C.F.R. § 2200.36(b). Westvaco did not specifically raise the particular affirmative defense of infeasibility in its answer. However, the Secretary does not take issue with its inclusion as an issue in the direction for review. Because the issue has been briefed by the parties, we will consider it. *See generally Bill C. Carroll Co.*, 7 BNA OSHC 1806, 1810, 1979 CCH OSHD ¶ 23,940, pp. 29,032-33 (No. 76-2748, 1979) (Secretary on notice about unpreventable employee misconduct contention). *See* Rule 107 of the Commission’s Rules of Procedure, 29 C.F.R. § 2200.107.

<sup>15</sup>Murphy had been Area Director of the OSHA Cincinnati Office since 1979. He testified as follows concerning his background and experience in lockout. He had worked as an OSHA compliance officer from 1973 until 1977, when he became a supervisor of compliance officers. Prior to his OSHA jobs, he worked on machines that performed the same functions as the printer/slotter machine at issue here. At OSHA Murphy developed a sheet on lockout policy under section 5(a)(1) of the Act, 29 U.S.C. § 654, the general duty clause, that was used by his own as well as other OSHA offices within OSHA’s Region V. He also conducted numerous training sessions and seminars on lockout for such organizations as the National Safety Council and the General Motors UAW Training Center. He also had been an instructor in machine guarding, including lockout, at OSHA’s training institute in Illinois. When the draft lockout/tagout standard was issued, he provided comments on it for his own office, which were submitted as the Region’s comments. In those comments, he focused on the exception at issue here, when minor adjustments take place during normal  
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small lock on the slotter gear at the point where the machine separates. He stated that, with the hasp installed, the machine could not be accidentally closed up once the separation had been accomplished.

Westvaco's production manager Seagraves acknowledged in his testimony that installation of the hasp and lock would "prevent the drive train from activating itself." However, he expressed the view that "clos[ing] one section of the press onto the other with this bulky item in between" could possibly break the gears. When asked on cross-examination about his testimony that the hasp and lock would wreck the gears, Seagraves responded that "we've had discussions about it. We have not gone to the extent of putting that particular type of guard on the machine."

The judge found that Murphy's suggestion was "both simple and expedient." He determined that there was "nothing in the record that would preclude" use of the small lock and hasp on the slotter gear to protect the helper.

Although Seagraves speculated that the gears could be wrecked if the machine were closed with the hasp and lock between the sections, this would seem to occur only if the sections were accidentally pushed back together. Without further explanation, Seagraves' speculation does not rebut Murphy's testimony that the hasp and lock would be a feasible means to abate in compliance with the standard.<sup>16</sup> We therefore agree with the judge and conclude that, based on the testimony above, Westvaco has not proven by a preponderance of the evidence that Murphy's suggested abatement measure would be infeasible.

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<sup>15</sup>(...continued)  
production operations.

After the Secretary moved at the hearing to have Murphy qualified as an expert, Westvaco's counsel conducted a short *voir dire*, during which Murphy stated that the lockout cases in which he had been previously qualified as an expert were brought under section 5(a)(1) because they preceded the issuance of the standard at section 1910.147. Westvaco did not object to having Murphy certified as a lockout expert.

<sup>16</sup>As noted above, following the compliance officer's investigation, the basis for the citation item at issue here, Westvaco installed a key-operated switch at the separation point of the printer/slotter machine. See *supra* note 6. Murphy observed that switch during his discovery inspection, noting that the operator kept the key after separating the machine. He opined that, although it would not technically satisfy the standard, Westvaco could provide the helper with effective alternative protection from the hazard of unexpected energization under these changed conditions by entrusting the key to the exclusive control of the helper, who generally takes more time to make his adjustments than the operator.

In addition to Murphy, the compliance officer offered testimony concerning a suggested means of abatement. However, because we find that Westvaco has not established that Murphy's suggestion was infeasible, we need not reach Westvaco's argument that the separate disconnect feature proposed by the compliance officer was infeasible. Nor do we need to consider whether Westvaco established the second element of the defense, that it provided an alternative protective measure.

Having concluded that Westvaco failed to prove that at least one of the suggested means of abatement was infeasible, we determine that Westvaco has not proven the affirmative defense. We therefore find that Westvaco violated section 1910.147(c)(1).

#### IV. *Was the Violation Properly Characterized as Serious?*

The judge rejected Westvaco's claim that, if a violation were found, it should be characterized as *de minimis*. He stated that such a characterization is proper only where there is a negligible relationship to safety and health and abatement would be inappropriate.

The judge stated that the helper was left unprotected while making his adjustments to the shaft heads, and his hands were in the immediate area of the slotting, scoring, and trim knives. Finding that the helper faced the hazard of his hands being crushed or amputated, the judge determined that the violation had more than a negligible relationship to safety; he classified it as serious.

Westvaco argues that the judge erred in characterizing the violation as serious, thereby rejecting its argument that the violation was *de minimis*.

A *de minimis* violation is one having no direct or immediate relationship to employee safety, where "the hazard is so trifling that an abatement order would not significantly promote the objectives of the Act." *Dover Elevator Co.*, 15 BNA OSHC at 1382, 1991 CCH OSHD at p. 39,850. Here the hazard is not a trifling one. The unexpected energization of the machine could injure the helper, even causing amputation. Because an abatement order would eliminate this hazard, we conclude that the violation is not *de minimis*. We also conclude that the judge properly characterized the violation as serious under section 17(k) of the Act, 29 U.S.C. § 666(k), because there is a substantial probability that serious physical harm could result if unexpected energization occurred.

## V. Order

For the reasons stated above, we conclude that Westvaco committed a serious violation of the lockout/tagout standard at section 1910.147(c)(1). Having considered the penalty factors in section 17(j) of the Act, 29 U.S.C. § 666(j), we find the penalty of \$560 proposed by OSHA and assessed by the judge to be appropriate. We therefore assess a penalty of \$560 for the violation of section 1910.147(c)(1).

It is so ordered.



Edwin G. Foulke, Jr.  
Chairman



Velma Montoya  
Commissioner

Dated: September 14, 1993



Docket No. 90-1341

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Atlanta, GA 30309-3119



UNITED STATES OF AMERICA  
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION  
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WASHINGTON D.C. 20006-1246

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SECRETARY OF LABOR  
Complainant,  
v.  
WESTVACO  
Respondent.

OSHRC DOCKET  
NO. 90-1341

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 April 3, 1992. The decision of the Judge will become a final order of the Commission on May 4, 1992 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 April 23, 1992 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  
1825 K St. N.W., Room 401  
Washington, D.C. 20006-1246

Petitioning parties shall also mail a copy to:

Daniel J. Mick, Esq.  
Counsel for Regional Trial Litigation  
Office of the Solicitor, U.S. DOL  
Room S4004  
200 Constitution Avenue, N.W.  
Washington, D.C. 20210

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) 634-7950.

FOR THE COMMISSION

*Ray H. Darling, Jr.*  
Ray H. Darling, Jr.  
Executive Secretary

Date: April 3, 1992

DOCKET NO. 90-1341

NOTICE IS GIVEN TO THE FOLLOWING:

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Administrative Law Judge  
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Review Commission  
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standard, § 1910.147, which became effective on January 2, 1990. This appears to be a case of first impression for interpretation of the new standard by the Commission.<sup>1</sup>

### Background

Westvaco manufactures corrugated shipping cartons at its Eaton, Ohio, facility (Tr. 167). On February 14, 1990, OSHA compliance officer Jack Peterson conducted an inspection of Westvaco's plant pursuant to a formal employee complaint regarding excessive noise at the facility. The complaint was later determined to be without merit (Tr. 28).

During the course of his inspection, Peterson asked Westvaco representatives if the company had a lockout procedure (Tr. 31). Peterson reviewed a document presented to him, entitled "Guidelines For Applicability and Use of Lockout/Tagout Procedures" (Exh. C-3). Peterson concluded that the document was not a lockout/tagout program, but rather an instruction outlining the elements of such a program for a manufacturing plant (Tr. 32-33). Peterson expanded the scope of his inspection to include Westvaco's lockout program as it was actually applied (Tr. 35-36).

The Westvaco plant's production operations are divided into two sections. The first section is the corrugator section, which produces solid sheets of multi-layer paper. The second section is the converting operation (Tr. 167-168).

One of the machines used in the converting operation is a 35-inch printer/slotter machine (Exhs. C-4, R-2; Tr. 37, 169), which is the central focus of this case. The machine comprises four sections: a feed table, two print stations, and a slotting/scoring section (Exh. R-2). The machine converts corrugated paperboard into corrugated cartons and boxes, according to customer specifications (Tr. 168). The machine prints graphics on the corrugated paperboard and then feeds the printed, corrugated paperboard through a series of shafts that have slotting, scoring and trim knives (Tr. 171-172). Two employees, an operator and a helper, operate the machine (Tr. 179-180).

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<sup>1</sup> The parties have called to the attention of this court *International Union, United Automobile, Aerospace and Agricultural Implement Workers of America v. OSHA*, No. 89-1559 (D. C. Cir. July 12, 1991)[slip opinion], wherein the lockout/tagout standard was remanded to OSHA for reconsideration of certain aspects of the standard's promulgation. In a subsequent order, dated September 16, 1991; however, the Circuit refused to stay application of the lockout/tagout standard during the remand procedures. This case has no present effect upon the outcome of the instant action.

The slotting/scoring section of the machine contains two sets of shafts. Each shaft has a number of heads. The first set of shafts contains the heads that perform the cutting and scoring operation. The second set of shafts contains the heads that perform the slotting operation (Exhs. R-9, R-10; Tr. 200-201). At issue in this case is the method used by Westvaco to adjust the position of the heads on the shafts.

Approximately every two hours, three or four times a shift, a customer order is completed on the machine. Every order is unique; therefore, adjustments must be made for each new order to the slotting, scoring and trim knives (Tr. 181). The adjustments take from 15 to 45 minutes to complete (Tr. 195). The adjustments are initiated when the last sheet of an order runs through the machine (Tr. 181).

Peterson observed adjustments being made on the machine at the end of an order (Tr. 37). The employees removed and added cutting components and made other adjustments to the slotting, scoring, and trim knives. The employees' hands were in the immediate area of the knives. The adjustments took between 15 and 30 minutes to complete (Tr. 38-39).

The on/off switch for the machine is located at its in-feed section (printer section), approximately twelve feet from the slotting/scoring section. The employee cannot see the on/off switch while he is working at the slotting/scoring section (Exh. C-8; Tr. 50-51). A push button control circuit is located on either side of the slotting/scoring section (Exhs. C-4, C-5).

When the machine is ready for adjustment, the helper activates the stop button on the control panel at the printer section. The helper then moves to the slotting/scoring section, where he activates at least one of the red stop controls located at that section. He proceeds to raise the conveyor transport arms to gain access to the slotting/scoring section (Tr. 181, 184).

The helper must position six heads on each shaft. Each head has a matching head on the shaft below, which also has to be relocated and properly positioned (Tr. 187). Power is required each time an adjustment is made because the helper must visually verify that the slot and knife are lined up properly (Tr. 202-203). The machine cannot be de-energized because of the need for power to "jog" the heads to visually verify their positions. The

machine also needs power to allow the inking systems to function properly, continually circulating the ink so it does not dry up within the system (Tr. 215).

While an order is being run, the operator is located at the machine's stacking area, 20 to 30 feet away from the press (Tr. 180). When the customer order is complete, the operator finishes his paperwork and goes to an area where the machine splits. He uses a switch to open the machine. During an order change, the operator is responsible for changing the inking system and the printing plates, and relocating the pull collars if necessary (Tr. 188). The operator's work at the split in the machine usually takes about a third of the time required for the helper's adjustments in the slotting/scoring section (Tr. 216). At the time of Peterson's inspection, the practice was not to split the machine during the initial adjustments made to the slotter by the helper. Peterson observed the helper making adjustments in the slotting system before the machine was split (Tr. 54,56). Subsequent to the issuance of the citation, Westvaco installed a barrier cage guard. The guard was on the same circuitry as the stop buttons (Tr. 129-130).

#### The Lockout/Tagout Standard

29 C.F.R. § 1910.147(c)(1) provides:

The employer shall establish a program consisting of an energy control procedure and employee training to ensure that before any employee performs any servicing or maintenance on a machine or equipment when the unexpected energizing, start up or release of stored energy could occur and cause injury, the machine or equipment shall be isolated, and rendered inoperative, in accordance with paragraph (c)(4) of this section.<sup>2</sup>

The Secretary contends that Westvaco was in serious violation of this standard. Westvaco does not dispute that at the time of the inspection, the machine was not locked out while the helper adjusted the machine's shaft heads (Tr. 225).

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<sup>2</sup> This standard was amended slightly after Westvaco received the citation for the alleged violation. The new standard reads: "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, start up or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source, and rendered inoperative."

It must first be determined whether the cited standard applies to the conditions existing at the time of the inspection. *Astra Pharmaceutical Products, Inc.*, 9 BNA OSHC 2126, 1981 CCH OSHD ¶ 25,258 (No. 78-6247, 1979), *aff'd sub nom.*, *Astra Pharmaceutical v. OSHRC*, 681 F.2d 69 (1st Cir. 1982).

29 C.F.R. § 1910.147(a)(2) provides in pertinent part:

(i) 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.

Westvaco seeks refuge in an exception to the above-cited 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).

In order to meet the requirements of this exception, Westvaco must show that (1) the adjustments made to the shaft heads were minor, (2) the adjustments were made during normal production operations, and (3) alternative measures were used to protect the helper during the adjustments. Westvaco contends that all three of these requirements have been met, while the Secretary contends that Westvaco met none of them.

The second element will be addressed first, because it is the easiest to resolve and is thus the quickest way to show that the helper's adjustments do not fall within the ambit of the exception.

The exception mandates that the adjustments “*take place during normal production operations.*” The standard defines normal production operations, at § 1910.147(b), as: “The utilization of a machine or equipment to perform its intended production function.” This definition by itself is rather vague. Its limits come into better focus when reference is made to the definition of “setting up,” which is *not* a production operation: “Any work performed to prepare a machine or equipment to perform its normal production operation.” Setting up is one of the activities included in the “servicing and/or maintenance” definition. The activities listed in that definition are expressly covered by the lockout standard, as stated in § 1910.147(a)(i).

The plain meaning of the exception, read in conjunction with the definitions, is that work performed on the machine while the machine is not being operated to actually produce its product is either servicing or maintenance. Furthermore, work that is performed before the normal production operation in order to prepare the machine for production is a specific service activity, called setting up. Setting up does not occur during normal production operations. Therefore, setting up cannot, by definition, fall within the exception to § 1910.147(a)(2)(ii).

Applying the standard to the facts at issue, it is determined that the helper was setting up when he made the adjustments to the shaft heads. The adjustments were made to customize each individual order; the adjustments prepared, or set up, the machine for the next order, or production operation.

Reference to the amended preamble of the lockout standard bolsters this interpretation of the standard:

Anything that is done to prepare a machine or equipment to perform its normal production operation, such as changing a machine part (*e.g.*, changing the blade of a power saw), is not considered utilization of a machine or equipment and is classified as servicing or maintenance rather than normal production operations.’

Federal Register 38,680 amending 54 Federal Register 36,667. Changing a saw blade is analogous to adjusting heads to score and slot corrugated paperboard in a different configuration.

Westvaco argues in its reply brief that, “[t]his passage has no bearing on the minor servicing exception. The words of the passage, as amended, particularly when read in context, are referring to the distinction between ‘normal production operations’ and ‘servicing or maintenance.’ That distinction is not relevant to this case because the minor servicing exception carves out a class of servicing activities that do not have to be performed under full lockout requirements” (Westvaco’s Reply Brief, p. 4). It is unclear what Westvaco means by this. The distinction between “normal production operations” and “servicing and/or maintenance” is critical to the minor servicing exception. The exception expressly does not apply if the minor servicing does not take place during normal production operations.

Having determined that the helper’s adjustments fall within the definition of “setting up,” a service activity that is not a part of normal production operation, it is concluded that the helper’s adjustments are not covered by the exception to paragraph (a)(2)(i).

The other two elements of the exception as applied to this case will be briefly addressed. The first element requires that the adjustments be “minor.” Westvaco and the Secretary hold differing opinions as to what constitutes “minor.”

The Secretary contends that the adjustments made by the helper are not minor, primarily because of the time factor. Adjustments take from 15 to 45 minutes. The Secretary asserts that this is *prima facie* evidence that the adjustments are major.

Westvaco points out that nothing in the standard or its preamble mentions time as a factor in the determination of what is “minor” (Tr. 79-83). The company focuses not on the amount of time required to make the adjustments, but the actual activity involved in making the adjustments. Each adjustment consists of loosening, moving, and tightening a head. The adjustments are made by unskilled production personnel. Recourse to the dictionary reveals that “minor” is “[l]esser or smaller in amount, extent, or size.” *American Heritage Dictionary*, 800 (2nd Ed. 1982). Although this definition is rather vague, it does support Westvaco’s argument in that it omits any reference to time. It is not necessary, however, to decide the issue of whether the adjustments are minor.

The third element requires that the company provide an alternative means of protection to employees working on a machine that is not locked out. Westvaco had two

stop buttons on the front of the machine and one on the rear. All three buttons were on the same circuitry. This system is not an energy isolating device as defined by § 1910.147(b). There was no redundancy in the system; if one button failed, all three would fail (Tr. 131-134).<sup>3</sup> Westvaco failed to provide adequate alternative protection to locking out.

Westvaco did not have a lockout program in place for the printer/slotter machine. The adjustments made to the heads between production runs did not fall within the exception to § 1910.147(d)(2)(ii). Therefore, Westvaco was in violation of the standard.

#### The Violation Was Serious

Westvaco argues that even if it was in violation of the standard, the violation should be classified as *de minimis*. “A violation is properly characterized as *de minimis* where it has only a negligible relationship to safety and health and where it is thus inappropriate to require that the violation be abated or to assess a penalty.” *National Rolling Mills Company*, 4 BNA OSHC 1719, 1720, 1976 CCH OSHD ¶ 21,114 (No. 7987, 1976).

Westvaco’s violation of § 1910.147(C)(1) left the helper unprotected while making adjustments to the shaft heads of the machine. The helper’s hands were in the immediate area of the slotting, scoring, and trim knives (Tr. 38-39). The hazard to the employee was possible crushing or amputation of his hands. The violation has more than a negligible relationship to safety and will be classified as serious.

#### Methods of Abatement

The Secretary proposed two methods of abatement. Peterson recommended that Westvaco lock out the machine at its slotter section, while still maintaining ink circulation and “jog” energy (Tr. 71-73).

William Murphy, the Area Director for Cincinnati’s OSHA office, suggested another method of abatement. Murphy suggested that the printer and slotter section be separated at the beginning of each set up. This court has found nothing in the record that would preclude this arrangement. Westvaco could then install a small lock and clasp on the slotter gear. The machine could still jog the heads of the slotter section while preventing an

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<sup>3</sup> This conclusion is based upon the testimony of Area Director William Murphy, who has had extensive training and experience in the lockout/tagout field and was considered a credible witness.

inadvertent activation, since the slotter gear would be unable to fully engage with the printer section (Tr. 142). Murphy's suggestion for abatement is both simple and expedient. With the printer and slotter sections separated, the helper would retain possession of the key while he is working on the heads. Use of this method would render it physically impossible for the helper to work in the danger area of the heads and activate the machine at the same time (Tr. 144).

#### Penalty

Under section 17(j) of the Act, the Commission is required to find and give due consideration to the size of the employer's business, the gravity of the offense, the good faith of the employer, and the history of previous violations in determining the appropriate penalty.

Upon due consideration of the relevant factors, it is determined that a penalty of \$560.00 is appropriate.

#### FINDINGS OF FACT AND CONCLUSIONS OF LAW

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Federal Rule of Civil Procedure 52(a).

#### ORDER

Based upon the foregoing decision, it is hereby ORDERED that:

1. Item 1 of the citation is affirmed and a penalty of \$560.00 is assessed, and
2. Item 2 of the citation is affirmed and a penalty of \$350.00 is assessed, in accordance with the partial settlement agreement.

  
EDWIN G. SALYERS  
Judge



from the unexpected energizing of the *entire* machine.<sup>3</sup> At the time of the inspection, the employee, whose job title is “the helper,” was making adjustments to the slotter section between production runs. The Secretary does not dispute that the low level of energy that the helper uses in making these adjustments does not pose a hazard. Westvaco argues that the standard does not apply because the helper’s adjustments come within the specific exception to the lockout/tagout standard found at the end of 29 C.F.R. § 1910.147(a)(2)(ii).

Review Commission Administrative Law Judge Edwin G. Salyers concluded that Westvaco did not prove that it comes under the exception. He affirmed the citation item<sup>4</sup> and characterized it as serious. He assessed a penalty of \$560, as OSHA had proposed. The issues before the Commission are: (1) whether the judge erred in concluding that

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<sup>2</sup>(...continued)

The definition of “lockout device” in that same section provided at the time of the inspection and citation as follows:

A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment.

Although it does not affect this case, that definition was amended in 55 Fed. Reg. 38,685 (1990).

<sup>3</sup>The record in this case concerns only lockout as a means of controlling hazardous energy. However, as its name implies, the lockout/tagout standard permits employers to control hazardous energy by using a tagout system in certain circumstances. Under 29 C.F.R. § 1910.147(c)(2)(i), an employer shall use a tagout system “[i]f an energy isolating device is not capable of being locked out.” If an energy isolating device *is* capable of being locked out, the employer must use lockout “unless the employer can demonstrate that the utilization of a tagout system will provide full employee protection as set forth in paragraph (c)(3) of this section.” 29 C.F.R. § 1910.147(c)(2)(ii). See 29 C.F.R. § 1910.147(c)(3)(i) and (ii).

<sup>4</sup>The judge noted that, in response to challenges to the lockout/tagout standard filed by labor and industry, the D.C. Circuit remanded the case to OSHA to further consider certain aspects of the standard’s promulgation. *International Union, United Automobile, Aerospace and Agricultural Implement Workers of America, UAW v. OSHA*, 938 F.2d 1310 (D.C. Cir. 1991). The judge correctly stated that the court decision has no effect on the outcome of the present case because, in its subsequent order on September 16, 1991, the D.C. Circuit refused to stay application of the standard during the remand period.

Since the judge’s decision was issued, the Secretary published his “Supplemental Statement of Reasons” in response to the court’s remand order. 58 Fed. Reg. 16,612-23 (March 30, 1992). On May 27, 1993, an industry party filed a motion with the D.C. Circuit seeking vacation of the standard or suspension of enforcement. *National Association of Manufacturers v. Reich*, Docket Nos. 89-1559, 89-1657, & 90-1553. 23 BNA OSHR 4-5 (June 2, 1993). On June 17, 1993, the Secretary filed a response with the court in which he defended his rulemaking and asked the court to dismiss the motion. 23 BNA OSHR 86-67 (June 23, 1993).

Westvaco did not establish that the helper's adjustments fall under the exception in the standard; (2) whether Westvaco proved that compliance was infeasible; and (3) whether the judge properly characterized the violation as serious.

## I. *Background*

### A. *Facts*

Westvaco manufactures corrugated paperboard containers at its plant in Eaton, Ohio. The printer/slotter machine prints on, scores, and slots sheets of corrugated paperboard that can then be folded into trays for holding cans. Two Westvaco employees work at the machine, the operator and the helper. During a production run, the helper feeds sheets of corrugated paperboard into the machine. The machine moves the sheets to the "printing section," where graphics of one color are printed at the first print station, and, if required, graphics of another color are printed at the second station. Then, at the "slotter section" sheets move through a series of upper and lower shaft heads fitted with corresponding knives and slots that cut them into smaller sheets, inscribe scoring lines, and cut slots on the sides of the sheets. After the sheets have moved through the machine, the operator inspects the finished product at the stacking area.

Because each order for cartons from Westvaco's customers is unique in terms of printed matter and size, adjustments to both the printer section and the slotter section must be made for each order. The typical order ranges from 10,000 to 100,000 trays. The machine completes an order for 10,000 trays in approximately two hours. Because the average number of orders run per day is three or four, and adjustments to the slotter and printer sections are necessary before each order, adjustments are made three or four times a day. The adjustments, which take between 15 and 45 minutes to complete, are made by the operator and the helper between production runs. The operator adjusts the printer section, while the helper adjusts the slotter section.

Before the helper adjusts the slotter section, he activates the twist lock stop at the feed (opposite) end of the machine, presses one of the two mushroom stop buttons located at each side of the slotting section, and then raises the "layboy arms" used in transporting

the corrugated sheets.<sup>5</sup> The helper then adjusts the shaft heads in the slotting section by positioning the six knife heads on each upper shaft, and their corresponding slotted heads on the lower shaft. The helper uses a T-wrench, or Allen wrench, to work in between the shafts and adjust the heads about one-eighth to three-sixteenths of an inch to meet customer specifications. Each time an adjustment to a head is made, the helper must visually determine whether the slot and knife are lined up properly by activating the jog control button, which causes the heads to move at a slow speed.

In order to provide an opening for access to the area where he will change the ink and printing plates, the operator separates the machine by sliding the printer section, which moves on rails, away from the slotter section.<sup>6</sup> When the machine is separated, the slotter section is disconnected from the printer, and the flow of energy to both sections is cut off *except* for a small amount of power that allows the helper to jog the heads at a slow speed at the slotter section and permits the ink at the printing section to continually circulate to keep it from drying out.

#### B. Main Contentions of the Parties

According to the Secretary, Westvaco violated section 1910.147(c) because the helper was making adjustments to the slotter section of the printer/slotter machine, where unexpected energizing of the entire machine could occur, without the protection of an energy control program that would isolate the machine and thereby render it inoperative. More specifically, the Secretary bases the alleged violation on Westvaco's failure to lockout the slotting section while the helper made his adjustments.

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<sup>5</sup>This is the procedure that the helper followed at the time of the OSHA compliance officer's complaint investigation; it represents the cited condition. After that investigation, a hinged barrier guard was installed that covers the slotter section. When the helper raises this barrier guard to reach the area requiring adjustments, the metal on the guard is detected by a sensing device that activates another stop control, which is on the same circuit as the stop buttons. According to the Secretary's expert witness, William Murphy, whose qualifications are discussed later, see *infra* note 15, this guard is not "interlocked" because there is no electrical device that actually locks the guard in place.

<sup>6</sup>After the compliance officer's investigation, Westvaco installed a key-operated switch at the location where the machine separates. After separating the machine, the operator maintains exclusive control of the key until the machine is once again together.

Westvaco claims that it was not required to provide an energy control program to protect the helper because it is covered by the exception to the requirements of the lockout/tagout standard at the end of 29 C.F.R. § 1910.147(a)(2)(ii), which provides:

(ii) Normal production operations are not covered by this standard . . . . 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 . . . where work is actually performed upon the material being processed . . . 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 [“Machinery and Machine Guarding”] of this part).

(Emphasis added).

## II. *Did Westvaco Prove that the Helper’s Adjustments Fall Within the Exception?*

The party claiming the benefit of an exception bears the burden of proving that it comes within that exception. *E.g., Falcon Steel Co.*, 16 BNA OSHC 1179, 1181, 1993 CCH OSHD ¶ 30,059, p. 41,329 (No. 89-2883, 1993) (consolidated); *Dover Elevator Co.*, 15 BNA OSHC 1378, 1381, 1991 CCH OSHD ¶ 29,524, p. 39,849 (No. 88-2642, 1991).

### A. *What the Exception Requires*

According to the Secretary, “the lockout/tagout standard excepts from coverage certain types of *minor* servicing during *normal production operations* so long as the employee is adequately protected from the hazard by *effective alternative means*.” Under the language of the exception, the types of minor servicing excepted are “routine, repetitive, and integral to the use of the equipment for production.” These characteristics are not in dispute in this case.

Westvaco does not agree with the Secretary’s reading of the exception’s requirements quoted above. Its interpretation would substantially reduce what must be proven to come

under the exception. It argues that “there are two exceptions to the lockout requirements that govern this case,” citing 53 Fed. Reg. 15,498 (1988)(preamble to proposed rule)<sup>7</sup> and 54 Fed. Reg. 36,661-62 (1989)(preamble to final rule).<sup>8</sup> However, there is nothing in the record to support this claim. We have reviewed the referenced pages of the preambles to the proposed rule and final rule and conclude that the language Westvaco relies on does not describe a separate exception, but rather different aspects of the rationale for what became a single exception at the end of section 1910.147(a)(2)(ii). Westvaco also claims that, according to its reading of the preamble at 55 Fed. Reg. 38,679, amending 54 Fed. Reg. 36,662, servicing and maintenance activities are divided into two categories, which Westvaco describes as:

- (1) those that must be performed with the machine locked out . . . and (2) those minor servicing activities that can be performed when the machine is not

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<sup>7</sup>The preamble to the proposed rule, 53 Fed. Reg. 15,498 (1988), reads as follows:

The Agency recognizes that there are certain servicing operations which, by their very nature, must take place without deenergization, such as the testing of energized equipment or processes. Additionally, certain normal production operations, which are not intended for coverage by this standard, such as repetitive minor adjustments, can sometimes safely be done w[ith]out the machine, equipment or process being deenergized and locked out and/or tagged out, with the use of specific control devices, work practices, employee training and other measures.

The proposed rule designated as 29 C.F.R. § 1910.147(a)(2)(iii)(B) provided:

Servicing . . . which takes place during normal production operations, such as . . . making minor adjustments . . . are not covered by the standard, if it is necessary to perform such servicing . . . with the machine . . . energized, and if such servicing . . . is performed using alternative measures which the employer can demonstrate will provide effective protection.

<sup>8</sup>In the preamble to the final standard, 54 Fed. Reg. 36,661 (1989), OSHA recognized that “the proposed provision was not clear enough” concerning the types of operations meeting, or not meeting, the exception and the criteria to be applied in each situation. The preamble clarified that:

Minor tool adjustments and changes or other minor servicing activities performed during normal production operations, are not covered by lockout or tagout requirements if the activities are routine, repetitive and integral to the production operation, provided that there is an alternative means being used . . . which will provide effective protection to employees.

54 Fed. Reg. 66,661-62. OSHA also noted the problems that arose from the proposed rule’s requirement that the employer demonstrate that it was necessary to perform the operation with the machine energized. After recognizing that “some servicing operations must be performed with the power on,” OSHA did not deem it necessary in the final exception to require that demonstration by the employer. 54 Fed. Reg. 36,661.

locked out as long as the employee doing the work is protected by either control switches under his/her exclusive control, local disconnects, interlocked barrier guards or other alternative protective measures.

Westvaco's category (1) consists of the requirement in the proposed exception that was deemed unnecessary in the final exception. See *supra* notes 7 and 8. While Westvaco's category (2) purports to present the exception at issue, in that it refers to the requirements that the servicing be "minor" and that effective alternative protection be used, this assertion ignores the remaining element of the exception, the requirement that the servicing must be done "during normal production operations."<sup>9</sup> Westvaco also contends that "[t]he real question in this case is whether Westvaco utilizes an alternative procedure to lockout that prevents unintended activation of the machine when the helper is in a machine danger zone." We agree with Westvaco that a showing that effective alternative protection is provided is necessary to meet the exception. However, it is but one of three elements that must be proven to satisfy the exception.

Having found no support for Westvaco's view of the exception, we must agree with the Secretary's reading of the exception. Therefore, we conclude that, in order to show that the helper's adjustments come within the exception, Westvaco has the burden of proving that the helper's adjustments are (1) minor, (2) take place during normal production operations, and that (3) effective alternative protection is provided.

*B. Did Westvaco Prove that the Adjustments Were Made "During Normal Production Operations"?*

To determine whether Westvaco has met its burden of proving that the helper's adjustments come within the exception, we first consider whether it established that the helper's adjustments to the slotter section "take place during normal production operations."

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<sup>9</sup>The sentence in the preamble to the amendments to the final rule at 55 Fed. Reg. 38,679, upon which Westvaco particularly relies for its category (2), specifically recognizes this requirement: "Safeguarding for minor servicing *during normal production operations* may include, for example, interlocked barrier guards, local disconnects or control switches which are under the exclusive control of the employee performing the minor servicing . . . ." (emphasis added).

*Judge's Decision*

In his decision, the judge noted that “normal production operations” is defined in 29 C.F.R. § 1910.147(b) as “[t]he utilization of a machine or equipment to perform its intended production function.” Finding this definition rather vague, he focused on the definition of “setting up” in 29 C.F.R. § 1910.147(b), which reads: “[a]ny work performed to prepare a machine or equipment to perform its normal production operation.” The judge noted that “setting up” is listed as an activity under the definition of “servicing and/or maintenance” in section 1910.147(b),<sup>10</sup> and that servicing and maintenance activities are expressly covered by the lockout standard, under 29 C.F.R. § 1910.147(a)(2)(i). He stated that, based on the plain meaning of the exception and these definitions, “work performed on the machine while the machine is not being operated to actually produce its product is either servicing or maintenance.” The judge further stated that

work that is performed *before* the normal production operation in order to *prepare* the machine for production is a specific service activity, called setting up. Setting up does not occur during normal production operations. Therefore, setting up cannot, by definition, fall within the exception to § 1910.147(a)(2)(ii).

(Emphases added).

He concluded that the helper’s adjustments come under the definition of “setting up” because they “were made to customize each individual order; the adjustments prepared, or set up, the machine for the next order, or production operation.” He relied on the preamble at 55 Fed. Reg. 38,680 (1990), amending the final rule’s preamble at 54 Fed. Reg. 36,667 (1989) to read:

Anything that is done to prepare a machine or equipment to perform its normal production operation, such as changing a machine part (e.g., changing

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<sup>10</sup>“Servicing and/or maintenance” is defined in section 1910.147(b) as:

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

(First emphasis added).

the blade of a power saw), is not considered utilization of a machine or equipment and is classified as servicing or maintenance rather than normal production operations.

The judge stated that “[h]aving determined that the helper’s adjustments fall within the definition of ‘setting up,’ a service activity that is not a part of normal production operation[s], it is concluded that the helper’s adjustments are not covered by the exception . . . .”

#### *Westvaco’s Arguments*

Westvaco contends that the judge erred in interpreting the standard when he held that the exception could not apply to activity that he characterized as setting up, and that the exception applies only to servicing that is performed while the machine is actually making a product.<sup>11</sup> It maintains that “[a]ny type of servicing, including set up, could fall within” the exception as long as the exception’s other criteria are met. It argues that, contrary to the judge’s narrow interpretation, the language in the exception “focuses on the nature of the work being performed, not on the moment in time when the work occurs.” Westvaco asserts that the helper’s adjustments affect the size of the product and “are made when production moves from one customer order to another.” It likens the helper’s adjustments to “chang[ing] the speed of the machine by adjusting belt drives or other components which are normally guarded” or “adjust[ing] the movement of a long-bed milling machine worktable,” which are recognized in the amended preamble as meeting the exception where effective alternative safeguarding is provided. 55 Fed. Reg. 38,680 (1990), amending 54 Fed. Reg. 36,666 (1989). Westvaco argues that machine speed changes and worktable adjustments are activities that could be performed either between orders, like the helper’s adjustments, or while a particular order is running.

Thomas Seagraves, Westvaco’s production manager, testified that the production cycle consists of the time it takes to make the adjustments to the slotter and printer sections

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<sup>11</sup>Westvaco does not discuss separately each of the three elements of the exception at issue (whether the adjustments are minor, made during normal production operations, and whether effective alternative protection was provided). Rather it presents most of its contentions by combining its discussion of all three factors in the exception at issue in this case, and sometimes including factors not in dispute (whether the adjustments are routine, repetitive, and integral to the use of the machine).

together with the time to actually process the order through the press. Westvaco asserts, as Seagraves testified, that the inclusion of the adjustments in the normal production operations is underscored by the fact that the adjustments are performed by production employees, not maintenance personnel.

#### *Discussion*

The judge found that the helper's adjustments of the shaft heads to accommodate each customer's specifications in anticipation of the next production run is "setting up," or, as defined in the standard, "work performed to *prepare* a machine or equipment to perform its normal production operation." (emphasis added). We agree with this determination. We reject Westvaco's claim that this element of the exception focuses only on the nature of the work being performed and not on the moment in time when the work occurs. While the nature of the work is important to consider, in this case the fact that the work is done *prior to* production runs is critical in determining if the adjustments are made during normal production operations.

The plain meaning of the word "prepare" as it is used to define "setting up" in section 1910.147(b) includes the idea of activity *before* some event. One dictionary defines "prepare" as "to make ready beforehand for some purpose." *Webster's Third New International Dictionary* 1790 (1986 unabridged). Under this definition, the helper's adjustments to the shaft heads are clearly done to "prepare" the printer/slotter machine for normal production operations.

Furthermore, adjustments made to *prepare* for normal production operations cannot, at the same point in time, be adjustments that are made "*during* normal production operations." (emphasis added). Work performed "*during*" is defined as work "at some point in the course of." *Id.* at 703. Such work occurs at a different time than adjustments made "beforehand," or while setting up. Based on this definitional distinction, we reject Westvaco's argument that the judge erred in finding that the exception cannot apply to setting up.<sup>12</sup> Therefore, we conclude that because the helper's adjustments constituted

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<sup>12</sup>The judge further suggested, in reliance on the quoted portion of the preamble at 55 Fed. Reg. 38,680, that setting up automatically falls outside the exception because it is "servicing," a type of activity to which the  
(continued...)

“setting up,” they cannot, based on the standard’s definition of that term, be considered to take place “during normal production operations.”<sup>13</sup> See, e.g., *Globe Industries, Inc.*, 10 BNA OSHC 1596, 1598, 1982 CCH OSHD ¶ 26,048, p. 32,718 (No. 77-4313, 1982) (Commission should give reasonable, common-sense interpretations to standards), and cases cited therein. In light of this disposition, we need not reach Westvaco’s argument concerning the judge’s further finding that the exception applies only to work performed on the machine while the machine is actually making its product.

To prove that its case comes within the exception, the employer must show that the adjustments are minor *and* made during normal production operations, *and* that effective alternative protection is provided. In light of our determination above that Westvaco failed to prove that the helper’s adjustments were made during normal production operations, we conclude that Westvaco has not proven that its case falls within the exception at the end of section 1910.147(a)(2)(ii). Therefore, we need not reach the other factors in dispute, whether the adjustments are “minor” and whether they are made “using alternative measures which provide effective protection.”

Based on the above, we conclude that Westvaco has failed to prove that the helper’s adjustments fall within the exception at the end of section 1910.147(a)(2)(ii). Accordingly, we find that the cited standard, section 1910.147(c)(1) applies, and that, as Westvaco acknowledges, its terms were not met because the slotter section was not locked out.

### III. *Did Westvaco Prove the Infeasibility Defense?*

To prove the affirmative defense of infeasibility, the employer must show that “(1) literal compliance with the terms of the cited standard was infeasible under the existing

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<sup>12</sup>(...continued)

standard applies. We agree with Westvaco that this reasoning is inappropriate. While it is true that the lockout/tagout standard is generally applicable to servicing and maintenance, not to normal production operations, what is at issue here is an *exception* to the standard’s general applicability provisions. The exception provision at issue here recognizes that there are certain types of servicing that must be done during normal production operations, and, for those activities, the standard does not apply if the other requirements of the exception are established.

<sup>13</sup>We note that our ruling here is limited to the definitional distinction that prevents an activity that qualifies as “setting up” from also being an activity that takes place “during normal production operations.” Other types of “servicing and/or maintenance” work listed in that term’s definition, see *supra* note 10, such as “unjammings of machines,” could, depending on their respective definitions, be done during normal production operations.

circumstances and (2) an alternative protective measure was used or there was no feasible alternative measure.”<sup>14</sup> *Mosser Constr. Co.*, 15 BNA OSHC 1408, 1416, 1992 CCH OSHD ¶ 29,546, p. 39,907 (No. 89-1027, 1991), *citing Seibel Modern Mfg. & Welding Corp.*, 15 BNA OSHC 1218, 1226, 1228, 1991 CCH OSHD ¶ 29,442, pp. 39,682 & 39,685 (No. 88-821, 1991).

Westvaco generally contends that compliance would not be feasible because energy was required to jog the heads in the slotter section and to keep the ink circulating in the printer section. However, as discussed above, the Secretary does not contend that the energy required for the jog mode posed a hazard to the helper, or that the energy required for ink circulation posed a hazard to the operator. Rather, the Secretary asserts that the energy against which the helper needs protection is the energization of the *entire* machine.

Westvaco also argues that it would be infeasible to implement the abatement measures suggested by the Secretary’s witnesses compliance officer Jack Peterson, who conducted the complaint investigation, and expert William Murphy, the Area Director for the OSHA Cincinnati Office, who conducted the discovery inspection.

William Murphy, who was qualified by the judge as an expert in the lockout/tagout field,<sup>15</sup> testified that Westvaco could abate the violative condition by installing a hasp and

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<sup>14</sup>An affirmative defense ordinarily must be initially pleaded by the employer in its answer, according to Rule 36(b) of the Commission’s Rules of Procedure, 29 C.F.R. § 2200.36(b). Westvaco did not specifically raise the particular affirmative defense of infeasibility in its answer. However, the Secretary does not take issue with its inclusion as an issue in the direction for review. Because the issue has been briefed by the parties, we will consider it. *See generally Bill C. Carroll Co.*, 7 BNA OSHC 1806, 1810, 1979 CCH OSHD ¶ 23,940, pp. 29,032-33 (No. 76-2748, 1979) (Secretary on notice about unpreventable employee misconduct contention). *See* Rule 107 of the Commission’s Rules of Procedure, 29 C.F.R. § 2200.107.

<sup>15</sup>Murphy had been Area Director of the OSHA Cincinnati Office since 1979. He testified as follows concerning his background and experience in lockout. He had worked as an OSHA compliance officer from 1973 until 1977, when he became a supervisor of compliance officers. Prior to his OSHA jobs, he worked on machines that performed the same functions as the printer/slotter machine at issue here. At OSHA Murphy developed a sheet on lockout policy under section 5(a)(1) of the Act, 29 U.S.C. § 654, the general duty clause, that was used by his own as well as other OSHA offices within OSHA’s Region V. He also conducted numerous training sessions and seminars on lockout for such organizations as the National Safety Council and the General Motors UAW Training Center. He also had been an instructor in machine guarding, including lockout, at OSHA’s training institute in Illinois. When the draft lockout/tagout standard was issued, he provided comments on it for his own office, which were submitted as the Region’s comments. In those comments, he focused on the exception at issue here, when minor adjustments take place during normal  
(continued...)

small lock on the slotter gear at the point where the machine separates. He stated that, with the hasp installed, the machine could not be accidentally closed up once the separation had been accomplished.

Westvaco's production manager Seagraves acknowledged in his testimony that installation of the hasp and lock would "prevent the drive train from activating itself." However, he expressed the view that "clos[ing] one section of the press onto the other with this bulky item in between" could possibly break the gears. When asked on cross-examination about his testimony that the hasp and lock would wreck the gears, Seagraves responded that "we've had discussions about it. We have not gone to the extent of putting that particular type of guard on the machine."

The judge found that Murphy's suggestion was "both simple and expedient." He determined that there was "nothing in the record that would preclude" use of the small lock and hasp on the slotter gear to protect the helper.

Although Seagraves speculated that the gears could be wrecked if the machine were closed with the hasp and lock between the sections, this would seem to occur only if the sections were accidentally pushed back together. Without further explanation, Seagraves' speculation does not rebut Murphy's testimony that the hasp and lock would be a feasible means to abate in compliance with the standard.<sup>16</sup> We therefore agree with the judge and conclude that, based on the testimony above, Westvaco has not proven by a preponderance of the evidence that Murphy's suggested abatement measure would be infeasible.

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<sup>15</sup>(...continued)  
production operations.

After the Secretary moved at the hearing to have Murphy qualified as an expert, Westvaco's counsel conducted a short *voir dire*, during which Murphy stated that the lockout cases in which he had been previously qualified as an expert were brought under section 5(a)(1) because they preceded the issuance of the standard at section 1910.147. Westvaco did not object to having Murphy certified as a lockout expert.

<sup>16</sup>As noted above, following the compliance officer's investigation, the basis for the citation item at issue here, Westvaco installed a key-operated switch at the separation point of the printer/slotter machine. See *supra* note 6. Murphy observed that switch during his discovery inspection, noting that the operator kept the key after separating the machine. He opined that, although it would not technically satisfy the standard, Westvaco could provide the helper with effective alternative protection from the hazard of unexpected energization under these changed conditions by entrusting the key to the exclusive control of the helper, who generally takes more time to make his adjustments than the operator.

In addition to Murphy, the compliance officer offered testimony concerning a suggested means of abatement. However, because we find that Westvaco has not established that Murphy's suggestion was infeasible, we need not reach Westvaco's argument that the separate disconnect feature proposed by the compliance officer was infeasible. Nor do we need to consider whether Westvaco established the second element of the defense, that it provided an alternative protective measure.

Having concluded that Westvaco failed to prove that at least one of the suggested means of abatement was infeasible, we determine that Westvaco has not proven the affirmative defense. We therefore find that Westvaco violated section 1910.147(c)(1).

#### IV. *Was the Violation Properly Characterized as Serious?*

The judge rejected Westvaco's claim that, if a violation were found, it should be characterized as *de minimis*. He stated that such a characterization is proper only where there is a negligible relationship to safety and health and abatement would be inappropriate. The judge stated that the helper was left unprotected while making his adjustments to the shaft heads, and his hands were in the immediate area of the slotting, scoring, and trim knives. Finding that the helper faced the hazard of his hands being crushed or amputated, the judge determined that the violation had more than a negligible relationship to safety; he classified it as serious.

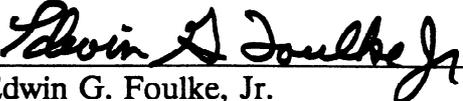
Westvaco argues that the judge erred in characterizing the violation as serious, thereby rejecting its argument that the violation was *de minimis*.

A *de minimis* violation is one having no direct or immediate relationship to employee safety, where "the hazard is so trifling that an abatement order would not significantly promote the objectives of the Act." *Dover Elevator Co.*, 15 BNA OSHC at 1382, 1991 CCH OSHD at p. 39,850. Here the hazard is not a trifling one. The unexpected energization of the machine could injure the helper, even causing amputation. Because an abatement order would eliminate this hazard, we conclude that the violation is not *de minimis*. We also conclude that the judge properly characterized the violation as serious under section 17(k) of the Act, 29 U.S.C. § 666(k), because there is a substantial probability that serious physical harm could result if unexpected energization occurred.

## V. Order

For the reasons stated above, we conclude that Westvaco committed a serious violation of the lockout/tagout standard at section 1910.147(c)(1). Having considered the penalty factors in section 17(j) of the Act, 29 U.S.C. § 666(j), we find the penalty of \$560 proposed by OSHA and assessed by the judge to be appropriate. We therefore assess a penalty of \$560 for the violation of section 1910.147(c)(1).

It is so ordered.

  
Edwin G. Foulke, Jr.  
Chairman

  
Velma Montoya  
Commissioner

Dated: September 14, 1993



UNITED STATES OF AMERICA  
**OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION**  
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1120 20th Street, N.W. — 9th Floor  
Washington, DC 20036-3419

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SECRETARY OF LABOR,

Complainant,

v.

WESTVACO CORP.,

Respondent.

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Docket No. 90-1341

**NOTICE OF COMMISSION DECISION**

The attached decision by the Occupational Safety and Health Review Commission was issued on September 14, 1993. **ANY PERSON ADVERSELY AFFECTED OR AGGRIEVED WHO WISHES TO OBTAIN REVIEW OF THIS DECISION MUST FILE A NOTICE OF APPEAL WITH THE APPROPRIATE FEDERAL COURT OF APPEALS WITHIN 60 DAYS OF THE DATE OF THIS DECISION.** See Section 11 of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 660.

FOR THE COMMISSION

Ray H. Darling, Jr.  
Executive Secretary

September 14, 1993  
Date

Docket No. 90-1341

NOTICE IS GIVEN TO THE FOLLOWING:

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SECRETARY OF LABOR  
Complainant,  
v.  
WESTVACO  
Respondent.

OSHRC DOCKET  
NO. 90-1341

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 April 3, 1992. The decision of the Judge will become a final order of the Commission on May 4, 1992 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 April 23, 1992 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  
1825 K St. N.W., Room 401  
Washington, D.C. 20006-1246

Petitioning parties shall also mail a copy to:

Daniel J. Mick, Esq.  
Counsel for Regional Trial Litigation  
Office of the Solicitor, U.S. DOL  
Room S4004  
200 Constitution Avenue, N.W.  
Washington, D.C. 20210

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) 634-7950.

FOR THE COMMISSION

*Ray H. Darling, Jr.*  
Ray H. Darling, Jr.  
Executive Secretary

Date: April 3, 1992

DOCKET NO. 90-1341

NOTICE IS GIVEN TO THE FOLLOWING:

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standard, § 1910.147, which became effective on January 2, 1990. This appears to be a case of first impression for interpretation of the new standard by the Commission.<sup>1</sup>

### Background

Westvaco manufactures corrugated shipping cartons at its Eaton, Ohio, facility (Tr. 167). On February 14, 1990, OSHA compliance officer Jack Peterson conducted an inspection of Westvaco's plant pursuant to a formal employee complaint regarding excessive noise at the facility. The complaint was later determined to be without merit (Tr. 28).

During the course of his inspection, Peterson asked Westvaco representatives if the company had a lockout procedure (Tr. 31). Peterson reviewed a document presented to him, entitled "Guidelines For Applicability and Use of Lockout/Tagout Procedures" (Exh. C-3). Peterson concluded that the document was not a lockout/tagout program, but rather an instruction outlining the elements of such a program for a manufacturing plant (Tr. 32-33). Peterson expanded the scope of his inspection to include Westvaco's lockout program as it was actually applied (Tr. 35-36).

The Westvaco plant's production operations are divided into two sections. The first section is the corrugator section, which produces solid sheets of multi-layer paper. The second section is the converting operation (Tr. 167-168).

One of the machines used in the converting operation is a 35-inch printer/slotter machine (Exhs. C-4, R-2; Tr. 37, 169), which is the central focus of this case. The machine comprises four sections: a feed table, two print stations, and a slotting/scoring section (Exh. R-2). The machine converts corrugated paperboard into corrugated cartons and boxes, according to customer specifications (Tr. 168). The machine prints graphics on the corrugated paperboard and then feeds the printed, corrugated paperboard through a series of shafts that have slotting, scoring and trim knives (Tr. 171-172). Two employees, an operator and a helper, operate the machine (Tr. 179-180).

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<sup>1</sup> The parties have called to the attention of this court *International Union, United Automobile, Aerospace and Agricultural Implement Workers of America v. OSHA*, No. 89-1559 (D. C. Cir. July 12, 1991)[slip opinion], wherein the lockout/tagout standard was remanded to OSHA for reconsideration of certain aspects of the standard's promulgation. In a subsequent order, dated September 16, 1991; however, the Circuit refused to stay application of the lockout/tagout standard during the remand procedures. This case has no present effect upon the outcome of the instant action.

The slotting/scoring section of the machine contains two sets of shafts. Each shaft has a number of heads. The first set of shafts contains the heads that perform the cutting and scoring operation. The second set of shafts contains the heads that perform the slotting operation (Exhs. R-9, R-10; Tr. 200-201). At issue in this case is the method used by Westvaco to adjust the position of the heads on the shafts.

Approximately every two hours, three or four times a shift, a customer order is completed on the machine. Every order is unique; therefore, adjustments must be made for each new order to the slotting, scoring and trim knives (Tr. 181). The adjustments take from 15 to 45 minutes to complete (Tr. 195). The adjustments are initiated when the last sheet of an order runs through the machine (Tr. 181).

Peterson observed adjustments being made on the machine at the end of an order (Tr. 37). The employees removed and added cutting components and made other adjustments to the slotting, scoring, and trim knives. The employees' hands were in the immediate area of the knives. The adjustments took between 15 and 30 minutes to complete (Tr. 38-39).

The on/off switch for the machine is located at its in-feed section (printer section), approximately twelve feet from the slotting/scoring section. The employee cannot see the on/off switch while he is working at the slotting/scoring section (Exh. C-8; Tr. 50-51). A push button control circuit is located on either side of the slotting/scoring section (Exhs. C-4, C-5).

When the machine is ready for adjustment, the helper activates the stop button on the control panel at the printer section. The helper then moves to the slotting/scoring section, where he activates at least one of the red stop controls located at that section. He proceeds to raise the conveyor transport arms to gain access to the slotting/scoring section (Tr. 181, 184).

The helper must position six heads on each shaft. Each head has a matching head on the shaft below, which also has to be relocated and properly positioned (Tr. 187). Power is required each time an adjustment is made because the helper must visually verify that the slot and knife are lined up properly (Tr. 202-203). The machine cannot be de-energized because of the need for power to "jog" the heads to visually verify their positions. The

machine also needs power to allow the inking systems to function properly, continually circulating the ink so it does not dry up within the system (Tr. 215).

While an order is being run, the operator is located at the machine's stacking area, 20 to 30 feet away from the press (Tr. 180). When the customer order is complete, the operator finishes his paperwork and goes to an area where the machine splits. He uses a switch to open the machine. During an order change, the operator is responsible for changing the inking system and the printing plates, and relocating the pull collars if necessary (Tr. 188). The operator's work at the split in the machine usually takes about a third of the time required for the helper's adjustments in the slotting/scoring section (Tr. 216). At the time of Peterson's inspection, the practice was not to split the machine during the initial adjustments made to the slotter by the helper. Peterson observed the helper making adjustments in the slotting system before the machine was split (Tr. 54,56). Subsequent to the issuance of the citation, Westvaco installed a barrier cage guard. The guard was on the same circuitry as the stop buttons (Tr. 129-130).

#### The Lockout/Tagout Standard

29 C.F.R. § 1910.147(c)(1) provides:

The employer shall establish a program consisting of an energy control procedure and employee training to ensure that before any employee performs any servicing or maintenance on a machine or equipment when the unexpected energizing, start up or release of stored energy could occur and cause injury, the machine or equipment shall be isolated, and rendered inoperative, in accordance with paragraph (c)(4) of this section.<sup>2</sup>

The Secretary contends that Westvaco was in serious violation of this standard. Westvaco does not dispute that at the time of the inspection, the machine was not locked out while the helper adjusted the machine's shaft heads (Tr. 225).

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<sup>2</sup> This standard was amended slightly after Westvaco received the citation for the alleged violation. The new standard reads: "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, start up or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source, and rendered inoperative."

It must first be determined whether the cited standard applies to the conditions existing at the time of the inspection. *Astra Pharmaceutical Products, Inc.*, 9 BNA OSHC 2126, 1981 CCH OSHD ¶ 25,258 (No. 78-6247, 1979), *aff'd sub nom., Astra Pharmaceutical v. OSHRC*, 681 F.2d 69 (1st Cir. 1982).

29 C.F.R. § 1910.147(a)(2) provides in pertinent part:

- (i) 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.

Westvaco seeks refuge in an exception to the above-cited 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).

In order to meet the requirements of this exception, Westvaco must show that (1) the adjustments made to the shaft heads were minor, (2) the adjustments were made during normal production operations, and (3) alternative measures were used to protect the helper during the adjustments. Westvaco contends that all three of these requirements have been met, while the Secretary contends that Westvaco met none of them.

The second element will be addressed first, because it is the easiest to resolve and is thus the quickest way to show that the helper's adjustments do not fall within the ambit of the exception.

The exception mandates that the adjustments “*take place during normal production operations.*” The standard defines normal production operations, at § 1910.147(b), as: “The utilization of a machine or equipment to perform its intended production function.” This definition by itself is rather vague. Its limits come into better focus when reference is made to the definition of “setting up,” which is *not* a production operation: “Any work performed to prepare a machine or equipment to perform its normal production operation.” Setting up is one of the activities included in the “servicing and/or maintenance” definition. The activities listed in that definition are expressly covered by the lockout standard, as stated in § 1910.147(a)(i).

The plain meaning of the exception, read in conjunction with the definitions, is that work performed on the machine while the machine is not being operated to actually produce its product is either servicing or maintenance. Furthermore, work that is performed before the normal production operation in order to prepare the machine for production is a specific service activity, called setting up. Setting up does not occur during normal production operations. Therefore, setting up cannot, by definition, fall within the exception to § 1910.147(a)(2)(ii).

Applying the standard to the facts at issue, it is determined that the helper was setting up when he made the adjustments to the shaft heads. The adjustments were made to customize each individual order; the adjustments prepared, or set up, the machine for the next order, or production operation.

Reference to the amended preamble of the lockout standard bolsters this interpretation of the standard:

Anything that is done to prepare a machine or equipment to perform its normal production operation, such as changing a machine part (*e.g.*, changing the blade of a power saw), is not considered utilization of a machine or equipment and is classified as servicing or maintenance rather than normal production operations.’

Federal Register 38,680 amending 54 Federal Register 36,667. Changing a saw blade is analogous to adjusting heads to score and slot corrugated paperboard in a different configuration.

Westvaco argues in its reply brief that, “[t]his passage has no bearing on the minor servicing exception. The words of the passage, as amended, particularly when read in context, are referring to the distinction between ‘normal production operations’ and ‘servicing or maintenance.’ That distinction is not relevant to this case because the minor servicing exception carves out a class of servicing activities that do not have to be performed under full lockout requirements” (Westvaco’s Reply Brief, p. 4). It is unclear what Westvaco means by this. The distinction between “normal production operations” and “servicing and/or maintenance” is critical to the minor servicing exception. The exception expressly does not apply if the minor servicing does not take place during normal production operations.

Having determined that the helper’s adjustments fall within the definition of “setting up,” a service activity that is not a part of normal production operation, it is concluded that the helper’s adjustments are not covered by the exception to paragraph (a)(2)(i).

The other two elements of the exception as applied to this case will be briefly addressed. The first element requires that the adjustments be “minor.” Westvaco and the Secretary hold differing opinions as to what constitutes “minor.”

The Secretary contends that the adjustments made by the helper are not minor, primarily because of the time factor. Adjustments take from 15 to 45 minutes. The Secretary asserts that this is *prima facie* evidence that the adjustments are major.

Westvaco points out that nothing in the standard or its preamble mentions time as a factor in the determination of what is “minor” (Tr. 79-83). The company focuses not on the amount of time required to make the adjustments, but the actual activity involved in making the adjustments. Each adjustment consists of loosening, moving, and tightening a head. The adjustments are made by unskilled production personnel. Recourse to the dictionary reveals that “minor” is “[l]esser or smaller in amount, extent, or size.” *American Heritage Dictionary*, 800 (2nd Ed. 1982). Although this definition is rather vague, it does support Westvaco’s argument in that it omits any reference to time. It is not necessary, however, to decide the issue of whether the adjustments are minor.

The third element requires that the company provide an alternative means of protection to employees working on a machine that is not locked out. Westvaco had two

stop buttons on the front of the machine and one on the rear. All three buttons were on the same circuitry. This system is not an energy isolating device as defined by § 1910.147(b). There was no redundancy in the system; if one button failed, all three would fail (Tr. 131-134).<sup>3</sup> Westvaco failed to provide adequate alternative protection to locking out.

Westvaco did not have a lockout program in place for the printer/slotter machine. The adjustments made to the heads between production runs did not fall within the exception to § 1910.147(d)(2)(ii). Therefore, Westvaco was in violation of the standard.

#### The Violation Was Serious

Westvaco argues that even if it was in violation of the standard, the violation should be classified as *de minimis*. “A violation is properly characterized as *de minimis* where it has only a negligible relationship to safety and health and where it is thus inappropriate to require that the violation be abated or to assess a penalty.” *National Rolling Mills Company*, 4 BNA OSHC 1719, 1720, 1976 CCH OSHD ¶ 21,114 (No. 7987, 1976).

Westvaco’s violation of § 1910.147(C)(1) left the helper unprotected while making adjustments to the shaft heads of the machine. The helper’s hands were in the immediate area of the slotting, scoring, and trim knives (Tr. 38-39). The hazard to the employee was possible crushing or amputation of his hands. The violation has more than a negligible relationship to safety and will be classified as serious.

#### Methods of Abatement

The Secretary proposed two methods of abatement. Peterson recommended that Westvaco lock out the machine at its slotter section, while still maintaining ink circulation and “jog” energy (Tr. 71-73).

William Murphy, the Area Director for Cincinnati’s OSHA office, suggested another method of abatement. Murphy suggested that the printer and slotter section be separated at the beginning of each set up. This court has found nothing in the record that would preclude this arrangement. Westvaco could then install a small lock and clasp on the slotter gear. The machine could still jog the heads of the slotter section while preventing an

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<sup>3</sup> This conclusion is based upon the testimony of Area Director William Murphy, who has had extensive training and experience in the lockout/tagout field and was considered a credible witness.

inadvertent activation, since the slotter gear would be unable to fully engage with the printer section (Tr. 142). Murphy's suggestion for abatement is both simple and expedient. With the printer and slotter sections separated, the helper would retain possession of the key while he is working on the heads. Use of this method would render it physically impossible for the helper to work in the danger area of the heads and activate the machine at the same time (Tr. 144).

#### Penalty

Under section 17(j) of the Act, the Commission is required to find and give due consideration to the size of the employer's business, the gravity of the offense, the good faith of the employer, and the history of previous violations in determining the appropriate penalty.

Upon due consideration of the relevant factors, it is determined that a penalty of \$560.00 is appropriate.

#### FINDINGS OF FACT AND CONCLUSIONS OF LAW

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Federal Rule of Civil Procedure 52(a).

#### ORDER

Based upon the foregoing decision, it is hereby ORDERED that:

1. Item 1 of the citation is affirmed and a penalty of \$560.00 is assessed, and
2. Item 2 of the citation is affirmed and a penalty of \$350.00 is assessed, in accordance with the partial settlement agreement.

  
EDWIN G. SALYERS  
Judge