



United States of America
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
1120 20th Street, N.W., Ninth Floor
Washington, DC 20036-3457

SECRETARY OF LABOR,

Complainant,

v.

DOVER HIGH PERFORMANCE PLASTICS,
INC.,

Respondent.

OSHRC Docket No. 14-1268

ON BRIEFS:

Ronald J. Gottlieb, Senior Appellate Attorney; Charles F. James, Counsel for Appellate Litigation; Ann S. Rosenthal, Associate Solicitor of Labor for Occupational Safety and Health; Katherine E. Bissell, Deputy Solicitor for Regional Enforcement, U.S. Department of Labor, Washington, D.C.

For the Complainant

Mark D. Katz, Esq., Ulmer & Berne LLP, Cleveland, OH

For the Respondent

DECISION

Before: SULLIVAN, Chairman; ATTWOOD and LAIHOW, Commissioners

BY THE COMMISSION:

Dover High Performance Plastics, Inc. fabricates custom plastic parts. In April 2014, the Occupational Safety and Health Administration conducted an inspection of the company's Dover, Ohio, facility in response to an employee complaint. Following the inspection, OSHA issued Dover a single-item willful citation alleging a violation of 29 C.F.R. § 1910.212(a)(1) for failing to provide adequate guarding on seven of its computer-numerically-controlled machines, specifically five lathes and two mills.

Following a hearing, Administrative Law Judge Dennis L. Phillips affirmed the citation as willful and assessed the proposed \$49,000 penalty. For the reasons set forth below, we affirm the citation only with respect to the lathes, recharacterize the violation as serious, and assess a \$3,500 penalty.

BACKGROUND

Dover uses lathes and mills to manufacture a variety of plastic parts. Both types of machines are enclosed and have openings with doors that provide operators access to the inside of the machine.¹ It is undisputed that at the time of the citation, Dover's operators used both the lathes and mills with the doors either open or removed.

When operating the lathes, Dover operators place a plastic blank on the machine's spindle by reaching approximately two feet inside the lathe's opening, which is approximately 17 inches wide and extends from the operator's hips to shoulders. The operator then presses a button outside the enclosure to begin the production cycle, during which the spindle rotates at speeds of 250 to 1200 revolutions per minute, while cutting tools held in a turret move into the blank and fashion the plastic part. The lathe's production cycle lasts anywhere from ten seconds to two minutes, at which point the turret automatically withdraws from the finished part and the spindle stops rotating. The operator then reaches back into the machine, removes the completed part, and begins the process again by inserting a new blank.²

When operating the mills, Dover operators place a plastic blank on a fixture that is mounted to a moveable table positioned near each mill's opening. The operator then activates the mill by pressing a button outside the opening. The mill's table moves back approximately 32 inches and a vertical spindle that is holding and spinning a cutting tool descends into the blank. Once the cutting tool is finished, it automatically ascends, and the table returns to its original position. A hand-held air hose hangs near each mill's opening, and inside each mill near the cutting tool is an air-line designed to keep chips off the tool.

In 2012, a Dover operator was injured while operating a lathe. The operator had reached his hand into the opening to adjust a "crooked" part. At the time, the lathes were programmed to start automatically, so operators had a predetermined amount of time to unload a completed part and load a new blank before the next production cycle began. The operator did not withdraw his

¹ In 2007, OSHA issued Dover a citation for failing to guard its mills in violation of the same machine guarding standard at issue here. In settling that citation, the company represented to OSHA in a corrective action worksheet that it installed the doors on the machines.

² This process is known as a "hand-fed" job. Lathe operators also perform "rod-fed" jobs, which can take up to four hours and do not require manually loading or unloading plastic pieces. Rather, the lathe automatically advances a portion of a plastic rod onto the spindle. An air nozzle mounted near the spindle is available to blow chips and shavings away from the moving parts. On review, the Secretary does not allege a violation with respect to rod-fed jobs.

hand before the next cycle began and the cutting tool cut the back of his hand. After the accident, Dover reprogrammed its lathes so that the machines stop but do not power off between production cycles, and the operators must manually push a button to initiate the next cycle.

DISCUSSION

The cited provision, in relevant part, requires that:

One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks.

29 C.F.R. § 1910.212(a)(1). The only element of the Secretary's prima facie case at issue on review is whether Dover's lathe and mill operators were exposed to the violative condition.³

A. Exposure

To prove exposure, "the Secretary must show either that Respondent's employees were actually exposed to the violative condition or that it is 'reasonably predictable . . . by operational necessity or otherwise (including inadvertence), that employees have been, are, or will be in the zone of danger.'" *S & G Packaging Co.*, 19 BNA OSHC 1503, 1506 (No. 98-1107, 2001) (quoting *Fabricated Metal Prods., Inc.*, 18 BNA OSHC 1072, 1074 (No. 93-1853, 1997) (citations omitted); see also *Phoenix Roofing, Inc.*, 17 BNA OSHC 1076, 1079 (No. 90-2148, 1995) ("Exposure to a violative condition may be established by showing actual exposure *or* that access to the hazard was reasonably predictable."), *aff'd*, 79 F.3d 1146 (5th Cir. 1996) (unpublished) (emphasis added). The "zone of danger" is defined as the "area surrounding the violative condition that presents the danger to employees [that] the standard is intended to prevent." *RGM Constr. Co.*, 17 BNA OSHC 1229, 1234 (No. 91-2107, 1995); see also *Gilles & Cotting, Inc.*, 3 BNA OSHC 2002, 2003 (No. 504, 1976) (identifying three different zones of danger relating to a scaffolding violation: the swing platform employees were working on; the impact area under the

³ To establish a violation, "the Secretary must show by a preponderance of the evidence that: (1) the cited standard applies, (2) there was a failure to comply with the cited standard, (3) employees had access to the violative condition, and (4) the cited employer either knew or could have known of the condition with the exercise of reasonable diligence." *Astra Pharm. Prods., Inc.*, 9 BNA OSHC 2126, 2129 (No. 78-6247, 1981), *aff'd in relevant part*, 681 F.2d 69 (1st Cir. 1982). Dover does not challenge the judge's finding that the Secretary established noncompliance with the cited standard. On review, the parties were asked to brief exposure and characterization, the only two issues raised in Dover's petition for discretionary review. The Commission generally does not consider issues not raised by the parties on review, and we therefore decline to review the judge's finding of noncompliance here. See *P. Gioioso & Sons, Inc.*, 6 BNA OSHC 1617, 1618 (No. 16215, 1978) (Commission declined to review judge's rulings on remaining alleged violations where the parties did not take issue with them); 29 C.F.R. § 2200.92(a).

platform where tools and equipment could be strewn; and the rooftop area affected by the platform's supporting structure); *Fabricated Metal*, 18 BNA OSHC at 1074 (finding that the zones of danger were the unguarded points of operation and camshafts, as the citation alleged violations of 29 C.F.R. § 1910.212(a)(3)(ii) (unguarded point of operation) and § 1910.219(c)(2) (unguarded horizontal shafting)). "The scope of the zone of danger is relative to the wording of the standard and the nature of the hazard at issue." *Fabricated Metal*, 18 BNA OSHC at 1074 n.7 (citing *Gilles & Cotting*, 3 BNA OSHC at 2003).

Here, the citation does not define the zone of danger on either machine, but simply states that "employees operated [the machines] without adequate guarding to protect employees from the moving parts." Before the judge, the Secretary maintained that the zone of danger is within the confines of the machines, "where the employees are exposed to the hazards of moving parts, pinch points, rotating parts, and entanglements." The judge agreed, finding that "the zone of danger includes the confines of the machine" because the Secretary established that "the machine's moving parts can be accessed from any place within the machine when the . . . door is open." On review, Dover argues this was error, pointing to the fact that the rotating spindle and tool are both located at least two feet within each machine's enclosure.

We agree with the company. The text of § 1910.212(a)(1) dictates that the zone of danger only includes areas that present "hazards such as those created by . . . point of operation ingoing nip points, rotating parts, [or] flying chips and sparks." 29 C.F.R. § 1910.212(a)(1). Because there is no dispute that these "hazards" require contact with the unguarded moving parts, the zone of danger does not include the entire enclosure of each machine—that is, areas within the enclosure where contact is not possible. Rather, the zone of danger is limited to the area surrounding the rotating spindle or tool where contact may be possible. Thus, the question before us is whether the Secretary has established that it was reasonably predictable Dover's operators would come sufficiently close to the moving parts inside the lathes and mills so as to be exposed to the cited hazard. *Fabricated Metal*, 18 BNA OSHC at 1074.

Lathes

The judge concluded that it was "reasonably predictable that a lathe operator would misjudge the machine's timing and make contact with the point of operation during a production cycle," as "employees will not be able to maintain the constant vigilance and perfect timing" that the fast-paced, repetitive production cycle requires. Specifically, the judge found that because the operator manually unloads the finished part but does not manually control the end of the cycle

(i.e., stopping the spindle from spinning), the operator can easily misjudge when the spindle will stop and reach in to unload the finished part, clean shavings, or adjust air hoses while the spindle is still rotating.

On review, Dover argues that the judge’s reasoning is flawed because the operators, “due to their familiarity with the equipment, could easily determine when the rotation of the spindle had stopped” and would therefore only perform tasks inside the confines of the machines between production cycles.⁴ We disagree. The record shows that the lathe’s production cycle takes anywhere from ten seconds to two minutes. Therefore, as the Secretary estimates—without challenge from Dover—each operator places their hands inside the lathe “up to 600 times or more a day, when they insert and remove plastic on the spindle.” The record also shows that their hands come within less than an inch of the spindle each time they reach into the lathe. Thus, as the judge found, operating the lathes requires Dover’s operators to time their entry to the end of a production cycle, and making such quick, repetitive judgments is subject to error, particularly when performed by less experienced operators. *See Slyter Chair, Inc.*, 4 BNA OSHC 1110, 1111-12 (No. 1263, 1976) (protections included in machine guarding standard were designed to protect against human error). Indeed, the lathe operator’s injury in 2012 occurred when he misjudged the start of the production cycle, which at the time was programmed to occur automatically, and made contact with the cutting tool as it moved towards the spindle.⁵ Under these circumstances, we conclude that it is reasonably predictable, irrespective of their experience or familiarity with the lathes, that operators could misjudge when the spindle stopped rotating and thereby inadvertently enter the zone of danger posed by the lathes’ unguarded moving parts.⁶

⁴ Dover also contests the judge’s finding of exposure as to the lathes based, in part, on “the recurring need to clear out debris from inside the machines by hand and air wands[.]” Given our conclusion that exposure is established on other grounds, we need not address this claim.

⁵ Quoting *Rockwell International Corp.*, 9 BNA OSHC 1092, 1098 (No. 12470, 1980), Dover argues that the absence of any injuries since it reprogrammed its lathes following the 2012 incident “buttresses [its] contention of no exposure to injury.” In *Rockwell*, however, the Commission found that the Secretary’s theory of exposure was “wholly speculative,” as operators did not hold the pieces being worked upon and had no cause to place their hands under the descending ram of the cited machines. *Id.* In contrast, the operators here were required to repeatedly place their hands inside the lathe and time their actions to avoid contacting the machine’s moving parts.

⁶ Dover points to prior Commission cases where exposure was not established and argues that the distance between the operator and the moving parts here was greater than in those cases. In all the cases cited by Dover, however, the Commission emphasized that there is no hard and fast rule for determining exposure in a machine guarding case—rather, exposure must be determined on a case-

Mills

The judge concluded that it was reasonably predictable the mill operators would enter the machine's zone of danger based on two factual findings: (1) the operator could reach into the mill to remove debris during the production cycle; and (2) while standing outside the mill during the operating cycle, the operator could "somehow" enter the confines of the mill, including by being accidentally bumped into it by another worker. On review, the Secretary adds that employee exposure was also reasonably predictable whenever an operator had to adjust air nozzles that are mounted inside each mill.

The record, however, does not support finding exposure under any of these theories. With regard to the judge's first theory, George Bitikofer, the employee who operates both mills at issue, testified that when clearing accumulated debris with the hand-held air hose that hangs by the machine's opening, there is no need to lean into the machine to get the hose's nozzle closer to the shavings. Similarly, he testified that when debris accumulates in a chip tray, he removes and cleans the tray when the mill is in shutdown mode, "completely stopped."

As to the judge's second theory, the Secretary has provided no evidence regarding the actual distances among the facility's machines, all of which are located in the same work area. As such, there is simply no basis on which to find that the machines are in close proximity. Moreover, the record lacks details regarding the arrangement of the machines or how close employees were to each other such that accidental contact between or among them was possible.⁷ In fact, Matthew

by-case basis depending on "the manner in which the machine functions and the way it is operated." *Jefferson Smurfit Corp.*, 15 BNA OSHC 1419, 1421 (No. 89-553, 1991); *Fabricated Metal*, 18 BNA OSHC at 1074. As such, it is irrelevant that the distance between the operator and lathe's moving parts may be greater here than in previous cases. It is simply enough that the Secretary established, based on "the manner in which the [lathe] functions," that operator exposure to the moving parts of the lathes was reasonably predictable. *Id.*

⁷ The Secretary does not rely on the possibility of tripping or slipping from something on the floor as the cause of Dover's employees bumping into each other. Indeed, aside from the parties' stipulation that "[t]here was no oil or other substance on the floor in the area of the cited machines which cause [sic] an operator to lose his footing" (which would undermine any such claim), there is no mention in the record of anything on the floor that could cause a slip or trip. As for any other inadvertent contact between workers, the record fails to establish that such contact could result in reasonably predictable contact with a mill's moving part, particularly where those parts are located at least two feet within the confines of the enclosed machine. *See Fabricated Metal*, 18 BNA OSHC at 1075 (inadvertent contact from slip or fall too remote where employees remained at least one to two feet away from shaft and splash guards, other containers blocked easy access to shaft, and shaft was two feet above the floor and slightly recessed).

Bitikofer, with twenty-two years of experience as an operator at Dover, and vice-president Jeffrey Stingel, who has worked for Dover since it was formed in 1990, both testified that they had neither “experienced such a bumping [n]or had [they] seen or heard of any such incident.”⁸

Finally, as to the Secretary’s theory that exposure was reasonably predictable when operators adjust air nozzles mounted inside the mills, there is no evidence that the mills were running when operators performed this task or that there was any reason why they might be inclined to do so.⁹ For all these reasons, we find that the Secretary has failed to establish exposure with respect to the mills and affirm the citation only with respect to the lathes.

B. Characterization

“Willful violations are characterized by an intentional or knowing disregard for the requirements of the Act or a plain indifference to employee safety, in which the employer manifests a heightened awareness that its conduct violates the Act or that the conditions at its workplace present a hazard.” *Barbosa Grp., Inc.*, 21 BNA OSHC 1865, 1868 (No. 02-0865, 2007) (quotations omitted). However, “[t]he Commission, and many circuit courts, have long held that a violation is not willful if the employer shows that it ‘exhibited a good faith, reasonable belief that its conduct conformed to law.’ ” *Jim Boyd Constr., Inc.*, 26 BNA OSHC 1109, 1112 (No. 11-2559, 2016) (quoting *Am. Wrecking Corp. v. Sec’y of Labor*, 351 F.3d 1254, 1263 (D.C. Cir. 2003)). To establish good faith, the employer bears the burden of proving that its belief was objectively reasonable under the circumstances or, in other words, “nonfrivolous.” *Morrison-Knudsen Co.*, 16 BNA OSHC 1105, 1124 (No. 88-0572, 1993) (quoting *McLaughlin v. Union Oil*

⁸ To the extent the Secretary argues that contact with the mill’s spindle (which holds the tool) was reasonably predictable because operators repetitively reach in to load and unload parts, this theory is also unsupported by the record. Unlike the lathe, the blank is loaded onto—and the completed part is unloaded from—a stationary fixture on the mill’s table, and no machining takes place until the table moves from the “home” position near the operator to a point 32 inches away where the spindle descends from its retracted position. The spindle therefore does not come near the part being machined until the table moves 32 inches away from the operator. Similarly, when the operator rotates the part for additional machining, or removes the completed part, the table is in the home position and the spindle is in its retracted position. In short, unlike the lathes, there is no possibility of mistiming a mill’s cycle and inadvertently contacting the spindle.

⁹ Although not explicitly relied on by the Secretary, we note that testimony from his expert witness suggests that operators occasionally use the hand-held air hose to remove “[s]ome of the chips [that] get into every little ninny and crack in the back. [In] [s]ome cases you’ve got to get very close if you want to thoroughly get them out of there” At the same time, though, the expert acknowledged that “it doesn’t take a lot of air pressure to move the [plastic or] metal chips[.]” which undermines his claim that the air hose must be positioned close to the debris to remove it.

Co. of Cal., 869 F.2d 1039, 1047 (7th Cir. 1989)); *see also N. Landing Line Constr. Co.*, 19 BNA OSHC 1465, 1476 (No. 96-0721, 2001).

In affirming the violation as willful, the judge found that Dover had a heightened awareness of the cited standard's requirement to guard against moving parts due to (1) the 2007 prior citation and the company's means of abatement (installing guards); (2) warnings given to operators and posted on the machines;¹⁰ and (3) the 2012 accident involving the lathe operator. The judge also found that "[d]espite its heightened awareness . . . , Dover continued to operate with the [machine] doors open in disregard of the standard's requirements and with indifference to the safety of its employees." Finally, the judge rejected Dover's good faith belief defense, finding the company's belief that it was in compliance with the standard was not objectively reasonable.

On review, Dover asserts, as it did before the judge, that it reasonably believed its reprogramming of the lathes following the 2012 accident obviated the need for guards because the reprogramming eliminated the most obvious aspect of the hazard—that an employee could be injured by the component of the lathe that begins to move when the production cycle automatically commences. In other words, Dover contends that it reasonably believed the employees' *only* exposure to moving parts was from the lathe's automatic start-up, so the programming change effectively eliminated all exposure to the lathe's moving parts and thus it was complying with the cited standard. In response, the Secretary contends that Dover's belief was frivolous because the reprogramming did not make a material change to the way the lathes operate.

We find that the record supports Dover's contention. Contrary to the Secretary's assertion, the reprogramming did make a material change—it eliminated the commencement of the production cycle before the operator has withdrawn his hand from the area surrounding the rotating spindle or tool where contact is possible. And, given that Dover was focused on the cause of the 2012 accident when it made that change, we find it was objectively reasonable for the company to believe this eliminated all exposure to the moving parts.¹¹ *Compare Morrison-Knudsen*, 16 BNA OSHC at 1127 (employer's failure to implement engineering controls and respiratory program was

¹⁰ The warning signs read "[d]o not attempt to put hands in beyond the oil guard while the machine is in operation and "[s]plash guards must be in closed position and engaged in interlock system" before starting the machine cycle.

¹¹ We note that lathe operator Matthew Bitikofer testified that he writes the computer code for the lathes and mills, and wrote the code for the lathe reprogramming after the 2012 accident. The fact that the machines' programmer is also an operator further supports the reasonableness of Dover's belief.

“unreasonably limited”), *with Spirit Homes, Inc.*, 20 BNA OSHC 1629, 1631 (Nos. 00-1807, 00-1808, 2004) (finding employer’s numerous effective measures to prevent any unsecured tools and roofing material from being knocked off the scaffold were not implemented in a “half-hearted” manner so lacking in good faith and reasonableness as to establish willfulness”).

The reasonableness of Dover’s belief is further bolstered by the testimony of its operators, who explained that they performed tasks inside the machine, such as inserting and removing parts, adjusting mounted air nozzles, and removing debris, only after the lathe’s parts stopped moving. Dover’s operators also stated that while the lathe was running they remained stationed at the opening of the enclosure, approximately two feet away from the moving parts. This testimony, coupled with Dover’s efforts to reprogram the machine to address the cause of the 2012 accident, establishes the reasonableness of the company’s belief that it was in compliance with the standard. For the same reasons, we reject the judge’s reliance on the lathe’s warning signs as a basis for willfulness, which Dover could reasonably have believed were rendered inapplicable given the programming change and the fact that the company was machining plastic not metal.¹² Accordingly, we recharacterize the violation as serious.

C. Penalty

The judge assessed the proposed \$7,000 penalty for each of the seven instances alleged in the citation, for a total penalty of \$49,000. On review, Dover does not dispute the penalty amount. Because we affirm the citation only with respect to the lathes and recharacterize the violation as serious, we find that a total penalty of \$3,500 is appropriate under the circumstances. *See* 29 U.S.C. § 666(j) (penalty assessment factors).

¹² Dover claims that the warning signs are inapplicable because it manufactures plastic parts, which do not require oil or a similar lubricant when they are being tooled, and the manufacturer expected the machines to be used for metal parts. We find Dover’s belief objectively reasonable yet misplaced. The distinction between machining plastic and metal does not change the fact that operators could still misjudge the end of a lathe’s production cycle and enter the zone of danger.

ORDER

We affirm the citation only with respect to the lathes, recharacterize the violation as serious, and assess a total penalty of \$3,500.

SO ORDERED.

/s/
James J. Sullivan, Jr.
Chairman

/s/
Cynthia L. Attwood
Commissioner

/s/
Amanda Wood Laihow
Commissioner

Dated: September 25, 2020



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Secretary of Labor,

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Dover High Performance Plastics,

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APPEARANCES:

Patrick DePace, Esquire,
Department of Labor, Office of the Solicitor,
Cleveland, Ohio
For the Secretary

Mark D. Katz, Esquire,
Ulmer & Berne LLP,
Cleveland, Ohio
For Respondent

BEFORE:

Dennis L. Phillips
Administrative Law Judge

DECISION AND ORDER

This proceeding is before the Occupational Safety and Health Review Commission (the Commission or OSHRC) pursuant to § 10(c) of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 659(c) (the Act). On April 4, 2014, Compliance Officer (CO) Matthew Marcinko began an inspection of Dover High Performance Plastics (Dover or Respondent) in response to a complaint of several safety issues, including Computer Numerical Control (CNC) lathes and mills being operated without necessary guards.¹³ Dover is located at 140 Williams Drive NW, Dover, Ohio and manufactures plastic products.

On July 23, 2014, the Occupational Safety and Health Administration (OSHA) issued a citation and notification of penalty (citation) to Respondent. The citation alleged one willful violation of the machine guarding standard with a proposed penalty of \$49,000. Dover timely contested the citation.

A two-day hearing was held in Cleveland, Ohio on May 5-6, 2015. Seven witnesses testified at the hearing: CO Marcinko; Jeffrey Stingel, vice president of manufacturing; Paul Palmer, vice president of sales and marketing; George Bitikofer, mill operator; Matthew Bitikofer, lathe operator; Brian Bitikofer, sales and new business development manager; and Seth McCoy, lathe operator. Both parties simultaneously filed post-hearing briefs and reply briefs. Respondent filed a supplemental brief and the Secretary filed a reply to the supplemental brief.¹⁴ The primary issue in dispute is whether Dover's employees were exposed to the unguarded moving parts of the cited CNC¹⁵ lathes and mills.

For the reasons that follow, the Court affirms the citation and assesses a total penalty of \$49,000.

¹³ ANSI B11.23-2002 (Safety Requirements for Machining Centers and Automatic, Numerically Controlled Milling, Drilling and Boring Machines) (Approved June 14, 2002) (ANSI B11.23-2002) defines guard as “[a] barrier, which prevents entry into the work zone or other hazard area [zone].” ANSI B11.22-2002 (Safety Requirements for Turning Centers and Automatic, Numerically Controlled Turning Machines) (ANSI B11.22-2002) similarly defines a guard. (Exs. 8, p. 11, 9, p. 11).

¹⁴ The Court granted Respondent's motion to file a supplement brief in response to the Eighth Circuit's decision of October 13, 2015 in *Sec'y of Labor v. Loren Cook Co.*, 803 F.3d 935 (8th Cir. 2015) (en banc).

¹⁵ ANSI B11.23-2002 defines CNC as the automatic control of a process performed by a device that makes use of numeric data introduced while the operation is in progress. (Ex. 8, p. 12).

Admitted Facts

The parties submitted the following admitted facts in their Joint Pre-Hearing Statement. (*See* Joint Pre-Hearing Statement, pp. 4-5 Admitted Facts #1 through #10 (JPHS Fact #)).

1. The moving parts of the cited machines are approximately two feet within the confines of the machine.
2. OSHA took no measurements of the distance between any part of the operator's body and the moving parts of the machines.
3. OSHA took no photos of any part of an operator's body entering the zone of danger on the cited machines.
4. None of OSHA's interview statements of the machine operators state the distance of any part of their bodies from the moving parts of the machines while they are operating.
5. The same condition was previously cited by OSHA, however the alleged hazard was designated to have "Low probability" at that time.
6. Interlocks are not required under the cited standard.
7. The alleged hazard of parts being manufactured and/or tooling from the machines being ejected from the machine are not mentioned anywhere in the OSHA investigation file.
8. There is no operational need for the operator to have any part of his body within the zone of danger or the confines of the cited machines.¹⁶
9. There was no oil or other substance on the floor in the area of the cited machines which cause an operator to lose his footing.
10. The Compliance Officer, in recommending the subject citation used as a standard that 1910.212 was violated if it was "possible" that an employee could have any part of his body enter the zone of danger on the cited machines.

¹⁶ During the hearing, the parties clarified JPHS Fact # 8 applied when the machines are running. (Tr. 403-04).

Jurisdiction

Based upon the record, the Court finds Respondent, at all relevant times, was engaged in a business affecting commerce and was an employer within the meaning of sections 3(3) and 3(5) of the Act, 29 U.S.C. §§ 652(3) and (5).¹⁷ The Court concludes that the Commission has jurisdiction over the parties and subject matter in this case.

Background & Relevant Testimony

Dover fabricates high performance plastic parts for companies throughout the world; including valve manufacturers, such as Warren Rupp, and the automotive, aerospace, and road equipment industries. Dover has approximately 40 employees. It produces parts made out of polytetrafluoroethylene, also known as Teflon, and other materials including nylons. Dover's machines compress and mold polytetrafluoroethylene. The company uses 25 to 30 machines to manufacture more than 7,000 different parts. These parts include gaskets, washers, insulators and seals. (Tr. 47-50, 53).

Machines at Dover

Dover uses different machines to manufacturer its parts, including automatic molding pressers, Brown & Sharpe screw machines, drill presses, CNC mills, CNC lathes and engine lathes.¹⁸ The citation alleges five Miyano CNC lathe and two Excell CNC mill machines were operated without proper guarding of the machine's moving parts. The five CNC lathes are referred to individually as lathe #7, lathe #15, lathe #19, lathe #37, and lathe #38. The two CNC mills are referred to individually as mill #510 and mill #810. Dover purchased the machines in used condition in the late 1990s, with the exception of mill #810, which was purchased in about 2007. (Tr. 53-55, 145, 171).

¹⁷ Respondent admitted it was engaged in a business affecting interstate commerce and was an employer employing employees. *Answer*, p. 1, ¶ III. The record supports this admission.

¹⁸ Engine lathes are man-powered where a tool head (turret) is cranked in and out. (Tr. 53-54).

The CNC lathes and CNC mills are used to tool (or machine) blank plastic workpieces into finished parts by means of a spindle that rotates at speeds from 250-1,200 revolutions per minute (rpm). The primary difference between a CNC lathe and CNC mill is the position of the workpiece during production. In a CNC lathe, the blank workpiece is attached to a spindle, which rotates, as a tool is applied to produce the finished part. In a CNC mill, the tool is attached to a rotating spindle and the blank workpiece remains stationary on the table during the machining process. (Tr. 62, 67-68, 222, 298; Ex. 15).

The CNC Lathes

The five lathes produced finished parts through either a hand-loading or a rod-loading process. For a rod-loaded job, multiple finished parts are produced from a 6-foot section of blank workpieces loaded into the CNC lathe. The CNC lathe automatically feeds each individual workpiece through the tooling process until all the workpieces have been machined, at which point the machine “shuts off.”¹⁹ A rod-loaded job can take three to four hours to complete, allowing an operator to run more than one machine at a time. For a hand-loaded job, operators place their hands inside the machines and load each blank workpiece to be manufactured onto the spindle of the lathe. After the cycle is complete, operators again place their hands inside the machines to remove each finished part. (Tr. 73, 214, 311, 441-42, 437).

Along the front of each CNC lathe, a “splash guard” door²⁰ moved on a track from left to right to either enclose the machine’s moving parts or be open to provide access to the point of operation where the workpiece was loaded. The splash guards could be closed and when closed serve as a barrier between the operators and the point of operation. Lathe ##7, 19, 37 and 38 each have a window through which an operator can observe the progress of the machining operation, without being exposed to the lathes’ moving parts when the splash guard door is closed. (Tr. 278; Exs. 17-18, 21-26).

¹⁹ Employees do not reach into the machines to insert blank workpieces or remove parts in a rod-fed operation. (Tr. 311).

²⁰ This device was referred to as a “splash guard,” “door,” “guard,” or “oil guard” and in this decision these terms are used interchangeably.

Each CNC lathe's control panel was above the splash guard door. When the splash guard door was open, the opening into the CNC lathe was about 17 inches wide and the height was roughly the distance from an employee's hip to shoulder. The splash guard door had a window area to allow a view into the machine with the door closed. (Tr. 81, 272, 276, 278, 280; Exs. 17, 19-23, 25-26).

Each CNC lathe was manufactured with an interlock device; however, none of the interlocks were functional when Dover purchased the machines.²¹ An interlock is an "electronic safety device" within the meaning of the cited standard. A functional interlock would not allow the machine to run the production cycle with an open splash guard door. A label²² on lathe #7 indicated it had a LS-26 splash guard interlock system, but the mechanism was broken and nonfunctional. The splash guard door on lathe #7 did not easily move on its track. CO Marcinko observed an employee attempting to open the door on lathe #7 by using two hands and then jerking the door up and down to get it to move along its track. (Tr. 87, 269-73, 332, 345-46; Exs. 17-18).

Instead of plastic or glass, lathe #15's splash guard door had a fabricated guard over the missing window area that consisted of approximately six vertical bars with several inches of space between each bar. The "window" opening was 12 inches from top to bottom. Lathe #15's fabricated guard would not prevent an employee from reaching into the point of operation through the gaps between the metal bars while the machine was running. The bars would also not prevent items from coming out of the machine. The interlock mechanism on lathe #15 was held back by a wire making the interlock not functional. Lathe #15 could not be operated by rod feeding. (Tr. 74, 273-76; Exs. 15,19-20).

²¹ The parties do not dispute the interlocks were not functioning at the time of the OSHA inspection. (R. Br., p. 4).

²² The photograph shows the label as "LS-26 SPLASH GUA INTERLOC"; the outer right edge of the label was missing. (Tr. 271-72; Exs. 17-18).

Lathe #19 had signs indicating there were two interlock devices, LS-26 and LS-27;²³ the interlocks were not functional. CO Marcinko observed lathe #19 in operation with its door open. (Tr. 276-79; Ex. 21).

Lathe #37 did not have a splash guard door. It was missing when Dover purchased the machine. Instead, a large piece of cardboard was used to cover the open area of the CNC lathe to keep debris chips or oil used for production from coming out of the machine onto the floor. CO Marcinko photographed a warning sign on lathe #37 and testified that similar signs appeared on most of the other machines. The sign had the word DANGER across the top and included the warning, “Do Not Open Oil Guard Safety Door While Machine is in Operation.” The warning sign also listed eight specific items to do “BEFORE STARTING MACHINE CYCLE,” including “Splashguard must be in closed position and engaged in interlock system” and “Do not attempt to put your hand in beyond oil guard, while machine is in operation.” (Tr. 171, 279-81; Exs. 23-24).

CO Marcinko observed lathe #38 in operation and saw that when the door was opened during operation it did not stop, so the interlock was not functional. The plastic in the window of lathe #38’s door was so aged, dirty, and distorted an operator could not see through it to check the progress of the production cycle. CO Marcinko observed its operator, Matthew Bitikofer, open the door a few inches so he could see the production cycle. (Tr. 282-84; Exs. 25-26).

The CNC Mills

CNC mills at Dover are used to profile (reshape or tool) or drill holes into a blank plastic workpiece. Both CNC mill machines had a sliding splash guard door that could be shut and latched.

²³ The photograph shows the labels as “LS-26 SPLASH GUARD INTERLOCK” and “LS-27 SPLASH GUARD INTERLOCK”. (Ex. 21).

Neither mill #510 nor mill #810 were manufactured with an interlock system. Both CNC mills had a warning sign above the spindle area that read:

WARNING

The CNC unit may suddenly run Table, Spindle head, or Spindle rotation.

DO NOT open door unless machine control is in manual mode and Spindle stop is depressed.

The warning sign also had a depiction of fingers being amputated when too close to a spinning tool and a warning symbol, consisting of an exclamation point inside a triangle, that preceded the word “WARNING.” (Tr. 223-25, 284-88; Exs. 27, 29-30).

Relevant Testimony

Jeffrey Stingel

Jeffrey Stingel has been the vice-president of manufacturing at Dover since the company’s formation in 1990. His duties include purchasing, receiving, sales, operations, and safety. Mr. Stingel received no training on occupational safety or machine guarding at Dover. Mr. Stingel stated that Dover no longer had a safety officer and that safety was everyone’s responsibility. (Tr. 46-47, 57, 105, 463).

Mr. Stingel had 20 years of experience operating lathes. In the 1980s, he attended lathe training provided by the manufacturer, Miyano. Mr. Stingel had operated Dover’s CNC lathes and mills.²⁴ He had operated both a lathe and a mill as recently as a year and one-half ago. (Tr. 56-58).

Mr. Stingel testified Dover’s screw machines were guarded with sliding doors. Its presses were also guarded with electric eyes, also referred to as light curtains. These machine guards did not impede the production of the screw machines or presses. (Tr. 50, 52-53).

²⁴ Mr. Stingel has never operated a lathe or a mill on metal parts. (Tr. 473).

After watching a video in the courtroom of Matthew Bitikofer operating a CNC lathe demonstrating a hand-loaded job, Mr. Stingel testified that there was nothing between the operator and the CNC lathe's point of operation shown in the video. He said Matthew Bitikofer was shown standing before an open door about two feet away from the point of operation.²⁵ Mr. Stingel testified that he measured the distance himself. He testified that the CNC lathe automatically stops after the piece is done. After reaching into the point of operation work area and removing the finished piece, the operator replaces it with a new piece by again reaching into the point of operation work area. Mr. Stingel testified the operator then turns the CNC lathe back on manually. Mr. Stingel also said that the operator can press a red button on the CNC lathe to stop it for any reason. He stated that the door on the CNC lathe served as a splash guard. The door was open in the video and remained open during the production cycle.²⁶ Mr. Stingel testified that Dover did not require operators to keep the splash guards closed during operation. He said that it was an option. (Tr. 64-65, 70, 74-75, 125; Ex. C).

Mr. Stingel was also shown a video of the front and rear view operation of a CNC mill. This too was a hand-loaded job. He testified that the video showed an operator first putting a part on an arbor and then capping the part so that the part stays on. He said the table then moves away from the operator and a drill comes down and drills a little hole in the part. The table then moves back toward the operator, who then manually indexes (turns) the part, and hits a button that moves the table back under the drill where the process is repeated and another hole is drilled. Mr. Stingel testified there were also splash guard doors for the CNC mills. These splash guard doors were not always closed during operation. It was the operator's choice to close the splash guard doors. Mr. Stingel testified that mill operator George Bitikofer measured a distance of about 32 to 36 inches separating the front of the door of a mill and the point of

²⁵ Mr. Stingel also testified that the photograph of Matthew Bitikofer at Ex. 26 showed him standing at the splash guard/door about two feet from the point of operation. (Tr. 89-90; Ex. 26).

²⁶ Mr. Stingel testified that the splash guard on lathe #7 would not be closed during hand-loaded job operations. He said it would sometimes be closed during rod jobs.

operation.²⁷ He also testified that “[i]t could be about a foot” from where the table moves and the mill’s door. (Tr. 66-69, 74-76, 125; Ex. D).

Mr. Stingel testified that the CNC lathes had interlocks that were not being used at Dover. He explained that an interlock device would stop the machine’s operation when the access door was opened. Mr. Stingel knew the interlocks on the lathes at Dover were not “active” and did not work.²⁸ He said “I never felt it was necessary to have them [interlocks] work.” He explained that Dover had not disabled the interlocks on the CNC lathes; the lathes were purchased in used condition and the interlocks were not functional when bought. He also testified that he was unaware of machines that continued to operate after interlock alarms sounded. The two CNC mill machines also arrived at Dover without any interlock devices. (Tr. 85-88, 100, 117, 122, 126; Ex. 11, p 1).

Mr. Stingel testified that he had not read the CNC lathe operating manual at Dover in its entirety, which was 500 or so pages in length. He acknowledged that the CNC lathe operating manual contained the following material:

²⁷ Mr. Stingel testified that he and George Bitikofer made their measurements between the splash guard/doors and points of operation in the CNC lathes and mills because Mr. Stingel thought there was a rule that operators had to be two feet away from moving parts. (Tr. 125).

²⁸ Mr. Stingel testified:

Q. Okay. Are the interlocks active on any of the CNC lathes?

A. No.

(Tr. 86).

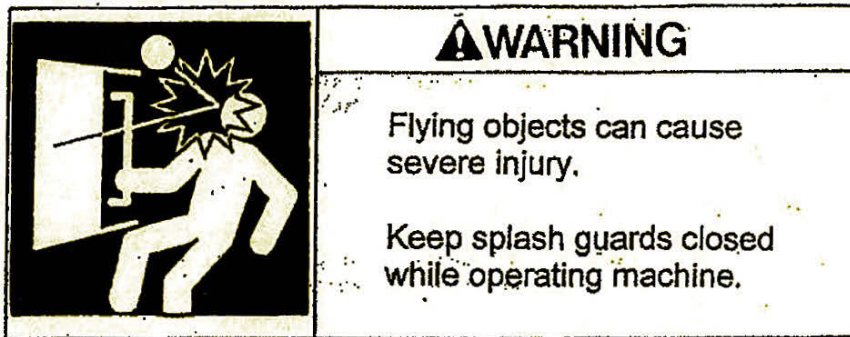
19. SPLASH GUARD INTERLOCK AND DOOR INTERLOCK

19.1 Splash guard interlock

The splash guards are located at the front of the machine to prevent flying objects such as workpieces, jaws, chips, coolant splashes, etc. from the spindle area.

The splash guards have electrical interlocks with an interlock switch and its keys, called the splash guard interlock.

The splash guard interlock works only when the splash guard interlock switch on the operating panel is ON. Namely, if the interlock switch is off, the splash guard interlock does not work at all.



<p style="text-align: center;">⚠ WARNING</p> <p>FAILURE TO FOLLOW THESE <u>CAN</u> RESULT IN SEVERE INJURY OR DEATH.</p> <ol style="list-style-type: none">1. To protect against MOVING PARTS while operating machine: Keep all splash guards, covers, doors, and other protective devices in place. If removed, replace before operating.2. To prevent FLYING OBJECTS, MOVING PARTS, or HAZARDOUS VOLTAGE:<ol style="list-style-type: none">(1) Keep the splash guard interlock switch (located on the operating panel) and the door interlock switch (located on the control box door) ON, while operating machine.(2) Remove these interlock keys.
--

(Tr. 101-03, 292-94; Ex. 7, p. 6).

The manual's upper warning also had a depiction of a person pulling open the splash guard/door being struck in the head by a round object. The manual's lower warning had a warning symbol consisting

of a triangle sign with an exclamation point inside that preceded the word “WARNING.” Mr. Stingel testified that he read these warnings as requiring the splash guards/doors be shut only when there was “stuff that’s going to be flying around in there [inside the area that would be enclosed if the doors were shut] or splashing material.” He did not believe the warnings required the doors to be shut to protect against moving parts. He confirmed that it was Dover’s practice to operate the CNC mills and CNC lathes with the splash guard doors open. He knew Dover’s CNC lathes and CNC mills were regularly being operated without the splash guard doors being closed. He believed that, because Dover manufactured plastic parts instead of metal parts, the warnings to keep the splash guard doors closed did not apply.²⁹ He also felt the warning to close the splash guard doors did not apply because in his 40 years in the business he had never seen anything come out and hurt anyone. Mr. Stingel admitted that he made the “ultimate decision” that it was acceptable to run the machines with the splash/guard doors open. Dover had never required its operators to keep the splash guard doors closed during a production cycle. Mr. Stingel said operators sometimes watched the point of operation during the production cycle while the splash guard door was partially open to insure that “the chips are lapping up.”³⁰ He stated operators needed to occasionally look inside of the machines to observe progress being made on the part. (Tr. 75, 88-89, 98-103, 105, 113, 465, 473; Exs. 7, at p. 6, 26).

Mr. Stingel stated Dover had a general rule that no one was to reach past the door opening of CNC lathes while a workpiece was being tooled. He said it was a hazard for employees to do so for both CNC lathes and CNC mills. Mr. Stingel testified Matthew Bitikofer trained employees on CNC lathe operations and instructed them to keep their hands out of the machine. They were told to use the stop button before putting their hands in the machine to make an adjustment. He stated Dover had a

²⁹ He testified that his understanding, originating from someone called “Bro” at Miyano, was splash guards were intended to prevent coolant, oil and other materials from splashing out of the machine. He said Miyano “taught us with the doors opened” in Chicago in the late 1980’s. He assumed “Bro” knew there were warnings on Miyano’s machines to the contrary. He could not say whether anyone else told him splash guards were only intended to prevent coolant, oil, and other materials from splashing out of the machine in the past 25 years. (Tr. 473-76).

³⁰ Dover’s CNC lathes had vacuum hoses to help collect chips and debris inside the machines. (Tr. 439-42; Ex. C).

disciplinary policy for employees that did not follow the rule; however, no one had ever been disciplined. (Tr. 71, 82, 94-95).

Mr. Stingel admitted he had seen someone put their hands beyond the open door, within two feet of the point of operation, during the operation of a CNC lathe. Mr. Stingel testified Darren Mullet cut and injured his finger on a CNC lathe on October 3, 2012 during its production cycle.³¹ His injury was treated with one stitch. Mr. Stingel was his supervisor. At that time, the CNC lathes were programmed to tool the workpiece and then pause for a programmed period of time. During the pause, the operator unloaded the finished part and loaded the next blank workpiece to be tooled. The machine began tooling the next workpiece based on its programmed timing. Mr. Mullet was injured when he attempted to straighten a workpiece on the spindle, at the point of operation beyond the splash door, and the machine started the tooling process while his hand was still at the point of operation.³² He said Mr. Mullet violated a Dover work rule by reaching his hand into the machine while it was still cycling. Mr. Stingel did not know why the work rule had been insufficient to protect operators from the hazard. Mr. Stingel testified he verbally warned Mr. Mullet not to reach back into the point of operation once a part was inserted in the spindle even though he “really wasn’t doing anything at that point wrong.” Mr. Stingel stated that on October 3, 2012 it was acceptable for a Dover operator to put their hand in the point of operation. He admitted that had the splash guard been closed Mr. Mullet would not have been exposed to injury. He further agreed there was no potential for operators to put their hand into the point of operation when the splash guard/door was closed. He also agreed the machine would stop if the interlocks were active and an operator opened the door. (Tr. 71-72, 76-78, 90-94, 476-77; Ex. 3).

Mr. Stingel stated that he was familiar with three other reported CNC lathe-related injuries at Dover. In April 2012, Mr. Mullet cut himself on lathe #15 with an X-ACTO knife used to deburr a chip on a workpiece. His injury did not occur during the production cycle. In March 2013, Francisco Partillo

³¹ Dover’s Accident Report stated that a tool cut into the back of Mr. Mullet’s hand. (Ex. 3).

³² Dover’s Accident Report stated Mr. Mullet “[d]idn’t get hand out of machine in time while fixing a crooked part.” (Tr. 77; Ex. 3).

cut his hand on a part within a machine that was on, but not cycling, when he was cleaning out chips. He also testified that Chris McCoy sustained a minor injury when he reached into a machine that was “off” to clean off some chips. When removing his hand from inside the machine, Chris McCoy cut it on a sharp tool inside the machine. (Tr. 127-33, 468).

Mr. Stingel testified that one of the CNC lathes [lathe #37] displayed a splash guard label that stated:

DANGER

Do Not attempt to change, alter or modify the software or mechanism of the machine.

Any unauthorized change or modification of the software or mechanism will be cause for voiding the manufacturer’s warranties and liability, for any injury or damage claim resulting from such activities.

Do Not Open Oil Guard Safety Door While Machine is in Operation.

BEFORE STARTING MACHINE CYCLE ...

4) **Splash guard must be in closed position and engaged in interlock system. ...**

8) Do not attempt to put your hand in beyond oil guard, while machine is in operation.

(emphasis in bold added)

Mr. Stingel admitted he had read the warning sign. He testified that he discounted its reference to an “Oil Guard.”³³ He further testified the CNC warning sign had been on the lathe since Dover bought the used CNC lathe more than ten years before. (Tr. 96, 100; Ex. 24).

³³ At first, Mr. Stingel testified he did not know what an oil guard was and that it was not referring to the splash guard. Later, he testified that: “The term oil guard, I’m not sure if that means the same as a splash guard or not, I really don’t know.” Finally he said: “I would have thought it meant splash guard.” Based upon his demeanor in the courtroom, the Court views Mr. Stingel’s testimony to be somewhat evasive on this point. The Court finds Mr. Stingel had interpreted the label’s use of “oil guard” as synonymous to “splash guard.” (Tr. 97, 465, 483).

Mr. Stingel also admitted that he had seen the warning sign on a CNC mill at Dover that stated the following:

WARNING

The CNC Unit may suddenly run
Table, Spindle head, or Spindle rotation.
DO NOT open door unless machine
control is in manual mode and
Spindle stop button is depressed.

The warning sign also had a depiction of fingers being amputated when too close to a spinning tool and a triangle sign with an exclamation point inside that preceded the word “WARNING.”

Mr. Stingel admitted he understood the warning sign to mean “don’t open up the door if it’s [the CNC mill] running.” He testified that Dover operators did not heed the warning and kept the doors open when the CNC mills were running; just as seen on the video at Exhibit D. (Tr. 99-101; Exs. 30, D).

After Mr. Mullet’s 2012 accident, Dover changed the lathe’s programming so that the tooling process begins only after the operator manually hits the start button; it no longer had a pre-timed automatic start. Mr. Stingel testified that Dover did not consider requiring the use of active interlocks on the machines after Mr. Mullet’s accident because he “never felt there was a safety reason for it.” He testified that since the programming change he had not seen anybody reach into the area of the point of operation while a CNC lathe was running. Mr. Stingel stated this change in procedure resulted in a faster overall production rate. He also testified that Dover had talked about requiring splash guards/doors to be closed at all times during production; but that practice was never “put into place.” (Tr. 76, 91, 94, 105-06, 465).

Mr. Stingel admitted opening and closing the splash guard door for each cycle could increase the production time of hand-loaded jobs. For a workpiece with a 5 minute production cycle there would be

little effect; however, if the production cycle for a workpiece was only 10 seconds long, the additional 5-10 seconds spent to open and close the door for each cycle would have a noticeable effect on overall production time.³⁴ (Tr. 105-06, 120).

On May 29, 2014, Mr. Stingel gave the COs a signed witness statement consisting of two pages.³⁵ In summary, Mr. Stingel's written statement stated "The guards should always be put on." Mr. Stingel testified that he was referring to "everything in that plant," including "the CNC lathes." At the trial, he clarified this broad-sweeping statement by saying he did not require splash guards on CNC lathes. He also clarified his written statement by testifying Dover did not require "front door" guards on the CNC mills.³⁶ Mr. Stingel's written statement further stated: "I tell employees to close the doors." At trial, Mr. Stingel testified that he was referring to only those rare instances, that occur maybe once or twice a year, where a job is run with coolant. He said:

I tell those guys on the CNCs, when they're running coolant, I always tell them to close the doors, although I don't have to because that's like running through the carwash with your window down. There's nobody going to have those doors open with that coolant flying out. I don't want it on the floor. They don't want it on their clothes. And we don't want to have a mess to clean up, or a possible safety problem.³⁷(Tr. 109-12; Ex. 11, p. 1).

³⁴ Mr. Stingel testified that a portion of the written statement from his interview with the COs was incorrect. In particular, he felt the statement's notation that he said "If the guards are always being used, it slows production down by 50%" did not accurately reflect what he actually told the COs. He testified when asked by the COs would production slow down if Dover closed the doors, he initially told the COs "if you add a step to any operation it has the possibility of slowing it down." He also testified he told the COs in a 5 or 6 minute mill cycle closing the door would have no effect on production, but "if you've got something where one of those tools is just coming in and hitting it and they're out of there in 10 seconds, and it takes you that to close the door, I don't know, 50 percent." (Tr. 107-08, 120-21; Ex. 11).

³⁵ The statement: "I have read and had the opportunity to correct this statement and these facts are true and correct to the best of my knowledge and belief. Public Law 91-596, Paragraph 17(g) makes it a criminal offense to knowingly make a false statement or misrepresentation in this statement[.]" appears above Mr. Stingel's signature on both pages. Mr. Stingel testified he signed his statement "under protest" after being told by the COs to sign it. He testified he told the COs he "didn't agree with it [his statement]." (Tr. 107-08; Ex. 11).

³⁶ At trial, Mr. Stingel testified:

Q. So why would you say the guards should always be put on?

A. I didn't say that. It's every machine. It's a general statement. Guards should always be put on the machines if they are guards."

(Tr. 110; Ex. 11, p. 1).

³⁷ The Court finds Mr. Stingel's explanation clarifying at trial what he meant in his May 29, 2014 written statement when he said that he told employees to close the doors to be incredulous. The Court finds that Mr. Stingel was not truthful when he said in his written statement that he told employees to close the doors. This was an attempt by

In both his written statement and courtroom testimony, Mr. Stingel admitted at the time of the OSHA inspection lathe #37 had “a piece of cardboard where the splash guard would be.” His written statement further explained that “Machine #37 has not had a guard for 10 years because it did not come with one.”³⁸ He acknowledged that a splash guard has since been installed. In both his written statement and courtroom testimony, Mr. Stingel admitted, at the time of the OSHA inspection, lathe #7 had a damaged roller door since it was purchased in the 1980’s. He testified that “the bearings are all wobbly.” He said that the door was “hard to open and close.” In his written statement he admitted that the machine’s operator “may not use this door every single time,” In both his written statement and courtroom testimony, Mr. Stingel admitted “sometimes interlocks are broken” and one interlock was tied back with wire. (Tr. 114-16, 122-23; Exs. 11, 23).

Mr. Stingel stated that operators were paid a straight hourly rate and not paid based on production numbers, so there was no financial incentive to keep the splash guard doors open to speed up the process. He also said he never saw employees bumping into each other in the machine shop. He also testified he never heard of a tool or part breaking within a machine and either staying within, or flying out of, the machine. He also testified he did not know it was an OSHA violation to run CNC lathes with the splash guard doors open. He did not believe it was a hazard to do so. (Tr. 106, 470-72, 484).

Mr. Stingel was Dover’s vice president of manufacturing in 2008. He agreed Dover told OSHA in its January, 2008 Certificate of Abatement that operators were told to use all supplied machine guards. He did not recall Dover employees being informed that guards must remain on the machine while in operation. (Tr. 487-88; Ex. 6).

Dover management to mislead OSHA’s COs and evade responsibility for allowing employees to regularly operate CNC lathes and CNC mills with the splash guards/doors open.

³⁸ At trial, Mr. Stingel contradicted his prior written statement when he testified employees used cardboard to cover the opening “until they got the door re-retrofitted. Because the door wasn’t sliding.” The Court finds employees used cardboard not because the door was not sliding. Instead, they used cardboard as a substitute because the splash guard door was missing from lathe #37. (Tr. 114-15; Exs. 11, p. 1, 23).

Mr. Stingel acknowledged there was a time when machine operators reached into machines, while the machines were running, to grab parts off the machine. He stated “[b]ut the first part off the machine sometimes it just wouldn’t face off right, they would reach in and they would grab it [the part].”³⁹ Mr. Stingel further testified that this practice was eventually changed and the parts “now fall onto the wire” and the operator can “pull the parts out” from inside the machine after the cycle is complete.⁴⁰ (Tr. 466-67, 477-80).

Matthew M. Bitikofer

Matthew Bitikofer has worked as a machinist at Dover for 22 years. He was the senior lathe operator and wrote the programming for the CNC machines. He operated the CNC lathes, primarily lathes ##37 and 38. He has never had any specific training on machine guarding. He said he “very rarely” kept the doors closed on the two CNC lathes he operated. On May 29, 2014, he told OSHA COs “[w]e are told now to keep the doors closed.” (Tr. 206-10, 435-36; Ex. 10).

Matthew Bitikofer ran both hand and rod-loaded operations. Most of the jobs he ran were rod-loaded jobs.⁴¹ Dover tries to keep all of the rod-loaded jobs on his two CNC lathe machines. The hand-loaded jobs were generally assigned to newer employees. The production cycle for a rod-loaded job could last 3-4 hours. He just needs to check the machine every hour. The machine automatically stops when the rod is depleted. He could operate two or three machines at a time when running a rod-loaded job. His two CNC lathes are side by side so he can watch them both. (Tr. 206, 209, 213-14, 436-37, 449).

Matthew Bitikofer usually ran a job with the splash guard doors open, depending on what job was in the machine, because he liked to watch the production cycle.⁴² However, he stated it was not necessary

³⁹ Mr. Stingel stated this “rarely happened.” (Tr. 466).

⁴⁰ The Court is unable to conclude when this change occurred.

⁴¹ He also referred to rod-loaded jobs as “bar fed” jobs. (Tr. 209-10).

⁴² Matthew Bitikofer testified he did not perceive being exposed to a hazard when doing so because he really did not have to do anything other than just watch the parts drop into a pan. (Tr. 438).

to watch the production cycle for a rod-fed job. He closed the splash guard door to keep coolant from spraying on him and if a job could get oil on the floor.⁴³ Lathe #37 was missing its splash guard door, so he created a splash guard made of cardboard to cover the opening.⁴⁴ He used a splash guard made out of cardboard whenever a job required it. In one instance, he cut a hole in the cardboard and put tape over the hole so that he could actually see into the machine; but the cardboard got saturated with oil. He admitted it was Dover's work practice to leave the splash guard doors open during production.⁴⁵ On May 29, 2014, he told OSHA's COs that interlocks on the machine and guarding would slow down all production by 20 percent. At the hearing, he testified that it would slow production on certain hand-loaded jobs if the splash guard door was closed while producing each finished part. (Tr. 206-07, 210-16, 438; Exs. 10, 23).

On April 4, 2014, Matthew Bitikofer told CO Marcinko he only recalled that one CNC machine, lathe #15, had interlocks on it. He further told CO Marcinko the interlock on lathe #15 had been "tied" more than 10 years before. He also stated that the interlocks worked, but were impeding Dover's operation. (Ex. 15).

For a hand-loaded job, the production cycle for a finished part could range from 30 seconds to 2 minutes. The operator watched the progress of the workpiece to determine when it was finished. He believed the operator developed a rhythm for the production cycle's timing to unload the finished part and load the next blank workpiece. He testified that he had concerns operating CNC lathes with the splash guard closed would affect production during hand-loaded jobs. (Tr. 209, 216, 436-37, 452).

Matthew Bitikofer is shown operating lathe #19 in a video demonstrating a hand-loaded job.⁴⁶ He is seen inserting a circular plastic workpiece onto the spindle opening four separate times.⁴⁷ After

⁴³ Oil that drips from air lines can get all over the floor and make it slippery. (Tr. 213).

⁴⁴ Matthew Bitikofer told CO Marcinko on April 4, 2014 that lathe #37 had been at Dover for about 10 years, and it never had a splash guard door on it. (Ex. 15).

⁴⁵ He testified that there was no work rule that required employees to operate CNC lathes with the doors closed. "It is undisputed that Dover did not require that its operators close the doors of the cited machines while they were in operation." (Tr. 207; R. Br., p. 4).

⁴⁶ The video of lathe #19 is less than about 2 minutes in duration. (Ex. C).

⁴⁷ The video shows Matthew Bitikofer finishing a ball seed part eventually to be used as a valve in a pump. (Tr. 444).

inserting each workpiece, he quickly presses the green “CYCLE START” button located above the LS-26 Splash Guard Interlock label above the left side of the machine opening.⁴⁸ He is shown doing so four separate times. The spindle holding the workpiece starts rotating and the tool is shown moving to the workpiece to machine the workpiece at the point of operation. The tool then moves away from the point of operation and the turret turns to put a different tool in position to further machine the workpiece. The tool again moves to the point of operation to modify the workpiece and when finished returns to the home position. The machining of each workpiece shown in the video takes less than 20 seconds. The spindle holding the machined part usually stops rotating about a second and one-half after the tooling sequence is finished.⁴⁹ Matthew Bitikofer testified he could see when the spindle stopped when he could read the writing on the “set screw.” (Tr. 442-43, 452; Exs. 1, 2, C).

Matthew Bitikofer is seen in the video removing three workpieces that had been separately machined from the spindle inside lathe #19. On at least two occasions, he is also shown reaching inside lathe #19 after a workpiece had been machined to use his fingers to clear some of the plastic debris caught in, on or around the spindle and its opening. He stated “you need to get your finger in there and make sure everything goes up to the chip sucker. Because if it gets plugged, then they just start packing up.”⁵⁰ The video also shows Matthew Bitikofer, during a machining cycle, holding another workpiece to be placed into the spindle in his left hand while his right arm is shown resting on the top of the opening of

⁴⁸ Matthew Bitikofer is not shown at any time in the video pressing either lathe #19’s “Power On” or “Power off” buttons located to the far left of the green “CYCLE START” button. In its post-hearing brief, Respondent asserts lathes remain under power in hand-fed operations; but are “at rest” while blanks are hand loaded into the lathe. (Exs. 2, C; R. Br., pp. 2-4).

⁴⁹ Matthew Bitikofer testified:

Q. [Extraneous material omitted] When that tooling stops at the end of its cycle, what effect does it have on the spindle spinning?

A. They usually stop. When the tools back out, the spindle stops. Because the last line the program reads is the spindle stop, which, I don’t know, maybe a second and a half at the most it takes to stop. I mean it’s pretty quick. (Tr. 442).

⁵⁰ Matthew Bitikofer testified operators may need to interrupt an ongoing job to clear out debris chips and stringy or rubberish material from inside of the machines. He stated “some of these materials are a real pain in the a**.” He testified this is done when the machine has stopped cycling. (Tr. 453-54).

lathe #19. He testified at that time his hand was a “couple of inches” from being inside lathe #19. (Tr. 441-42, 450; Exs. 2, C).

The CNC lathes were equipped with an air nozzle and hose positioned to help blow the debris chips away from the point of operation into the vacuum hose just below. If debris chips needed to be cleaned out during the machining cycle, Matthew Bitikofer testified he “takes the continuous buttons off” shutting down the machine, cleans the chips out, and then restarts the machine by “hit[ting] the continuous and hit[ting] the green button.”⁵¹ (Tr. 438-41; Ex. 2).

Matthew Bitikofer trained new employees on the operation of the CNC lathes. He told the operators that he trained the main safety rule was to “[k]eep your hands out of the machine when it’s running.” He stated it took five to seven years before he could operate lathes independently.⁵² (Tr. 207-08, 435-36, 448, 460).

Matthew Bitikofer testified there was no reason for an employee to put his hand into the machine during a production cycle.⁵³ He told the employees he trained that the machine could not tell the difference between a piece of plastic and a finger. He testified that if operators put their hand in a running machine, “chances are you’re going to lose it.” (Tr. 214-15, 436).

In the last five years, he had not seen anyone put their hand in the machine during a production cycle. The only accident he knew of was Mr. Mullet’s in October, 2012. At that time, the CNC lathe’s program ran a “continuous cycle” that included a pre-programmed pause for the operator to unload the finished part and then load the next blank workpiece. At the time, Mr. Mullet was a “tender” and had

⁵¹ The Court finds that the video of lathe #19 more accurately depicts how and when: 1) chips and debris are removed from the spindle by the operator reaching into the lathe with his fingers and 2) the green CYCLE START button is hit by the operator to start the machining cycle of a workpiece. The video does not show Matthew Bitikofer hitting any button to cut the power to the machine before cleaning chips or debris out. The Court finds lathe #19’s power remained on throughout the video. (Exs. 2, C).

⁵² He testified that one of the current employees was still learning lathe operations after about 7 years, which is longer than most of the employees he trained. (Tr. 448, 459).

⁵³ Many years ago the operators put their hands in to “catch” the finished parts for some jobs. A wire catcher is now used for that type of job. (Tr. 211-12, 444-46, 477-80).

only worked at Dover for 2 years. Matthew Bitikofer explained that a tender does not set-up a machine; he “babysits” it while it is cycling. He admitted that an operator could not put his hand into a running machine if the splash guard door was closed and interlocked because once an operator opened the door the interlock would stop the machine’s cycle. (Tr. 208, 214-16, 448, 456).

After Mr. Mullet’s accident, Matthew Bitikofer modified the CNC lathe’s programming so that an operator had to manually start the production cycle for each workpiece. There were no longer “continuous cycle” jobs at Dover. He somewhat recalled Dover having some problems with splash guards or interlocks in an OSHA inspection that preceded OSHA’s 2014 inspection. (Tr. 210-11, 214, 455).

Matthew Bitikofer had never seen an operator bump into another while operating a machine. He stated there was no dress code at Dover and machine operators could wear long sleeve shirts. He testified he knew of no event when clothing was caught in the equipment. (Tr. 437-38, 461-62).

George Bitikofer

George Bitikofer⁵⁴ has worked at Dover for 25 years.⁵⁵ He has been in the plastics manufacturing industry since 1966. He operated Dover’s two CNC mill machines, ##510 and 810, and makes secondary tooling. CNC mills typically perform drilling operations and part profiles.⁵⁶ He had not received any safety training at Dover. He learned the operation of CNC mill machines by reading the programming manual, which he said did not include information about safety and machine guarding. (Tr. 220-23, 234, 247).

When the splash guard door was open, the CNC mill machine had a large doorway opening that allowed the operator to load and unload the workpieces being machined. The machine’s controls were to

⁵⁴ George is the uncle of Matthew Bitikofer. (Tr. 179).

⁵⁵ He had also been an original owner; he is no longer an owner or partner. Mary Lynn Schwab now owns Dover. (Tr. 220, 482).

⁵⁶ Part profiling shapes parts to whatever is required. (Tr. 223-24).

the right of the opening. George Bitikofer generally did not shut the splash guard door during production. Occasionally, he shut the door to keep the debris created during the production cycle or coolant from coming out onto the floor and causing a hazard there. He estimated that it took about 5-10 seconds to open and close the door for each cycle.⁵⁷ He testified, depending on the part being made, the machine's operating cycle can be a couple seconds or a couple minutes. (Tr. 227-30, 240-45; Exs. 1, 13, D).

George Bitikofer is the operator shown in the video demonstrating a hand-fed production cycle on mill #810.⁵⁸ Just inside the doorway opening is a table that moves horizontally from the front of the machine (near the opened doorway) to the back of the machine (where the blank workpiece is tooled).⁵⁹ When the table is near the opened access door for loading and workpiece positioning it is in its "home" position. The video shows George Bitikofer loading a blank workpiece⁶⁰ onto a "fixture" (also referred to as an arbor) that holds it in place on the table. The workpiece does not move during the production process. On the video, George Bitikofer presses the start button and the table moves horizontally away from the door and toward the back to position the workpiece below the spindle that holds the rotating drill bit (or other machining tool). The drill bit moves vertically down to drill a hole in the blank workpiece. After the hole is drilled, the tool moves vertically up to its resting position and the table moves to its home position. George Bitikofer then repositioned and rotated the workpiece 180 degrees by reaching into the CNC mill machine through the opened doors so another hole can be drilled and repeats the process. (Tr. 223-26, 346; Exs. 1, D).

George Bitikofer testified that while the workpiece is being tooled, an air hose inside the mill, near the tool, removes the powder and debris produced. Occasionally, while standing at the open

⁵⁷ On May 29, 2014, George Bitikofer told OSHA COs "[i]nterlocks would slow down production on the mill. It takes longer on certain parts to open and close the doors than to complete the parts." (Ex. 13).

⁵⁸ The video shows a "Mill Rear View Operation" just over 1 and 1/2 minutes in duration and a "Mill Front View Operation" less than 2 minutes long. The video is dated October 27, 2014.

⁵⁹ The CNC mill door opening is high and wide. The door opening is as tall as the operator and begins above the operator's knees, but below his waist. It appears to be wide enough for two operators to stand alongside each other before it. (Exs. 1, D).

⁶⁰ The blank workpiece is the piece of material; e.g., plastic, before it has been modified on a CNC lathe or CNC mill.

doorway, George Bitikofer used a second air hose that hangs to the right of the access door to blow away excess debris chips during the production cycle.⁶¹ He testified that he did not lean into the CNC mill machines to remove these chips. Chips and debris also accumulated in a tray that was removed and emptied when the CNC mill machine was shut down. (Tr. 230-33).

George Bitikofer measured the distance from the doorway opening to the spindle at 32 inches on both CNC mill machines. He stated that someone could lean into the CNC mill machine itself to get his hand or arm under the spindle. He testified he had not done so during a production cycle. George Bitikofer had also never seen anyone put their hand under the spindle of a CNC mill at Dover. He did not know the precise distance between the edge of the table, in its home position, and the machine's opening.⁶² (Tr. 226-27, 234-36, 239).

George Bitikofer testified that a warning was posted on one of the CNC mill machines that stated "Do not open door unless machine control is in manual mode and spindle stop button is depressed." He admitted that he did not heed the warning when operating the two CNC mill machines. He opened the door when the CNC machine was not in the manual mode. He also left the doors open while the spindle was operating. He further admitted that an operator could reach inside a mill machine to the spindle if the doors were open; but could not if the doors were closed. (Tr. 240-42; Ex. 30).

Paul Palmer

⁶¹ George Bitikofer described the chips as "Teflon nylon chips" that were debris generated from the machining of a finished part. The chips may also be referred to as "shavings." (Tr. 228; Ex. E).

⁶² He testified that the distance from the table's edge, in its home position, to the opening was less than 32 inches. He also testified that a vice mounted to the table was also less than 32 inches from the opening when the table was in its home position. The video at Ex. D shows that the table's edge and the vice, in the table's home position, are very near the opening; much less than 32 inches. CO Marcinko testified the table came almost to the edge of the CNC mill machine. Mr. Stingel estimated the table came within a foot of the door. (Tr. 66-69, 235-39, 343; Ex. D).

Paul Palmer has been Dover's vice president of sales and marketing since 1990. He accompanied CO Marcinko during his "walk-around" of the facility on April 4, 2014. Mr. Palmer had no experience as a lathe or mill operator. However, he had observed mills and lathes operate. (Tr. 55-56, 144-45, 155).

In a written statement that he signed and gave to the COs on May 29, 2014, Mr. Palmer stated: "Using these machines with guards adds to cost and time." He also stated "[s]ome parts need to be grabbed before they drop."⁶³ He further stated that, although the CNC "machines were originally designed to default back to 'zero' after every piece, they could now "be stopped and started back up without going back to 'zero.'"⁶⁴ He stated "I would guess that using the doors reduces production 25%."⁶⁵ He also stated that Dover fabricated [splash] guards for the screw machines after OSHA's 2008 inspection.⁶⁶ At trial, Mr. Palmer did not dispute making these statements. (Tr. 148, 153-54; Ex. 12).

The Court finds the explanations Mr. Palmer gave at trial in an attempt to undermine his May 29, 2014 written statement to lack credibility.

Brian Bitikofer

Brian Bitikofer has worked at Dover for 23 years. Several of his family members worked at Dover: George Bitikofer is his father, Matthew Bitikofer is his cousin, and his son, Cole, also worked at Dover. During the first 2 years, he operated lathes. He then became Dover's Midwest sales manager and for the past two years was also responsible for new business development. He said he accompanied CO Marcinko during his April 4, 2014 inspection. (Tr. 164-66, 179).

Brian Bitikofer testified the CNC lathes at Dover were "sometimes" operated with their splash guards open. The last time he operated a CNC lathe was about 5 years before, to fill in for a sick

⁶³ Mr. Palmer testified at trial that he had just "assumed" operators were grabbing parts "a long time ago" to stop them from being dinged and rejected. He admitted operators had to have guard doors open to allow them to quickly grab parts inside the machine with their hands before parts fell to the ground. He further admitted operators could not grab the parts inside the machines at all if the guard doors were closed. (Tr. 150, 156-57, 160-161).

⁶⁴ At trial, Mr. Palmer testified he was trying to show how "very intelligent" the operators were. (Tr. 152).

⁶⁵ Mr. Palmer testified at trial that the statement was "just a wild guess." (Tr. 153, 157).

⁶⁶ At trial, Mr. Palmer testified that was an assumption on his part. (Tr. 153).

employee. When he was a CNC lathe operator he generally had the splash guard door open. He stated that it had been many years since it had been a practice for an operator to put his hands in the machine during a cycle. (Tr. 165, 178).

On May 29, 2014, he signed a written witness statement during OSHA's second visit to Dover.⁶⁷ He asserted that Dover bought all of its machines in used condition in both his written statement and during his hearing testimony. He also testified he had seen a CNC machine [lathe #37] with cardboard on it a few times over the years, and never with a [splash guard] door. In both his written statement and during his hearing testimony, he stated that he made sure Dover made a door for lathe #37 within two days of the OSHA inspection. He testified that the machines' "interlocks are not functioning."⁶⁸ He agreed during his testimony that "[u]sing the interlocks will kill production 25-50% and would hurt competition."⁶⁹ At the trial he testified that he was referring to "hand load parts" and not to other unidentified product that would not be affected.⁷⁰ (Tr. 166, 170-73, 176; Ex. 16).

In both his written statement and hearing testimony, he acknowledged the cage screen on the one CNC machine [lathe #15] was an area where an employee could still put a hand or arm through the guard while the machine was running.⁷¹ (Tr. 173-75; Exs. 16, 19-20).

Brian Bitikofer testified the assertion in his written statement that "[p]rograms are now created to still function in alarm" was an error. He testified "Programs aren't wrote specifically to bypass safety." He said an "alarm" was an event that immediately stops the machine in its production cycle. For example, a machine could go into alarm mode and stop if: a) the machine turret "over travels," b)

⁶⁷ The witness statement included the following above his signature:

I have read and had the opportunity to correct this statement and these facts are true and correct to the best of my knowledge and belief. Public Law 91-595, Paragraph 17(g) makes it a criminal offense to knowingly make a false statement or misrepresentation in this statement. (Ex. 16).

⁶⁸ He pointed out an interlock device on CNC lathe No. 15, at "B". (Tr. 180-81; Ex. 19).

⁶⁹ This was consistent with the assertion made in his written statement. (Ex. 16).

⁷⁰ Brian Bitikofer testified that he felt pressured to come up with a quantifiable number. (Tr. 178; Ex. 16).

⁷¹ Although this was so, Brian Bitikofer stated he had not seen it happen during his years of employment at Dover. (Tr. 173-75; Ex. 16).

hydraulic oil pressure was low, or c) the operator hit the red emergency master stop button.⁷² (Tr. 173, 181-83).

Seth McCoy

Seth McCoy has worked for Dover for seven years. He is a CNC Machinist and operated lathe #7.⁷³ He learned to operate the lathe from Matthew Bitikofer.⁷⁴ Mr. McCoy testified that he and other lathe operators at Dover “sometimes” operated the lathe with the splash guard door open. On May 29, 2014, Mr. McCoy asserted in a written statement to OSHA’s CO: “Honestly, ‘I only close the door when it is convenient.’” He further asserted in the written statement: “I have heard of employees reaching into the machine while it is running and getting hurt.”⁷⁵ Mr. McCoy testified that an operator could get his hand caught in a moving part if he reached an arm’s length, about two feet, into the machine, and this could be a hazard were he to do so. He closed the door if debris chips were flying out of the machine.⁷⁶ He testified that Mr. Stingel has told him to keep the splash guard door closed. He said Dover had a rule to keep the splash guard door closed as long as he worked there.⁷⁷ He also testified that the “DANGER” sign shown at exhibit 24 was posted on a machine at Dover. (Tr. 184-88, 193-96; Exs. 14, 24).

He witnessed Mr. Mullet’s lathe injury that occurred at Dover on October 3, 2012. Mr. Mullet had reached into a running lathe to adjust a workpiece on the spindle, when the tool moved and cut the back of his hand. After the Mullet accident, Mr. McCoy testified that Dover was more firm about

⁷² He pointed out a Master alarm red button on lathe #15, at “C”. (Tr. 181; Ex. 19).

⁷³ In his written statement to the OSHA COs dated May 29, 2014, Mr. McCoy described lathe #7 as “the machine with damaged rollers for door.” (Ex. 14).

⁷⁴ He testified that Matthew Bitikofer had not talked about putting hands within the confines of the machine while it was running with “moving parts” during his training. (Tr. 195).

⁷⁵ Seth McCoy testified that his brother Chris McCoy, a CNC operator, sustained a small cut reaching into a lathe that had its power on to clear out a chip. The Court credits Seth McCoy’s testimony that the lathe’s power was on over Mr. Stingel’s testimony that it was his [Mr. Stingel’s] understanding the “machine was off.” (Tr. 191-92, 199-200, 468).

⁷⁶ Seth McCoy testified that the chips he was referring to were similar to those at Exhibit I. (Tr. 195-96; Ex. I).

⁷⁷ He testified that Dover had never disciplined anyone for operating a CNC lathe with the door open. His testimony was consistent with his May 29, 2014 written statement where he stated: “I do not know anyone who has been disciplined for running machines without closing the doors.” (Tr. 187; Ex. 14).

shutting the doors and operators took control of the start of the production cycle. (Tr. 188-90, 197; Ex. 3).

Mr. McCoy testified that, during his May 29, 2014 interview, he felt the COs had threatened him with jail if he did not tell the truth.⁷⁸ He said the COs threatened him after he initially told them he always operated his lathe with the splash guard door closed.⁷⁹ Mr. McCoy admitted that he had lied during the May 29, 2014 interview when he told the COs he closed the CNC lathe's door for each production cycle.⁸⁰ (Tr. 201-04; Ex. 14).

CO Matthew Marcinko

Matthew Marcinko has been an OSHA CO for 3 ½ years. He is a member of an OSHA response team that responds to fatalities, accidents, and complaints. He received a bachelor's degree in occupational safety and health from Columbia Southern University (CSU) in 2008. He earned a master's degree in occupational safety and health from CSU in 2013.⁸¹ He has completed OSHA's training for safety and machine guarding.⁸² He has conducted prior inspections of facilities with mills and lathes, including the inspection of CNC type machines. (Tr. 249, 256-57).

⁷⁸ The witness statement that he signed included above his signature the following: "I have read and had the opportunity to correct this statement and these facts are true and correct to the best of my knowledge and belief. Public Law 91-596, Paragraph 17(g) makes it a criminal offense to knowingly make a false statement or misrepresentation in this statement." (Ex. 14).

⁷⁹ Lathe #7, which Mr. McCoy operated, is the lathe where CO Marcinko observed an employee having significant trouble moving the splash guard door. (Tr. 269-71).

⁸⁰ From the transcript of Mr. McCoy's testimony:

Q. And on line 5 there's a sentence that starts halfway on the line. It says: I am always using the door and closing it while that machine is running. Do you see that?

A. Yeah.

Q. Was that accurate?

A. No.

Q. That wasn't true?

A. No. That was when they threatened me." (Tr. 204).

⁸¹ CO Marcinko testified that CSU was an online, nationally accredited university. (Tr. 304-05).

⁸² From about 2007 through 2011, CO Marcinko worked as a civilian employee with the United States Army's Corps of Engineers (COE). While there, he was a tools and parts attendant, maintenance mechanic, and a safety officer. He worked in the construction, maritime, manufacturing and general industries while at the COE. He received some general machine guarding and safety training while working there. He occasionally assisted machinists operating mills and lathes, that were not CNC, at the COE. He also served a total of seven years on

He began Dover's inspection on April 4, 2014, after OSHA received a complaint regarding safety problems at Dover. The complaint alleged that CNC machines were operated with guard doors open, guards were not on the screw machines, the light curtains on the presses were non-functional, eye protection was not being used, and exits were improper. (Tr. 258).

CO Marcinko visited the Dover facility two times, April 4, 2014 and May 29, 2014. He began the first visit by conducting an opening conference with Mr. Palmer.⁸³ He reviewed the issues in the complaint that had prompted the inspection and then conducted a walk-around inspection of the facility. He interviewed Messrs. Palmer and Matthew Bitikofer on this visit. He observed the layout of the CNC lathes and the operation of four CNC lathes.⁸⁴ He immediately observed the splash guards were open on all four of the CNC lathes that employees were operating.⁸⁵ He was concerned about the open splash guard doors. He also investigated the safety issues related to the screw machines, presses, exit doors, and eye protection. He spent a total of 3-4 hours at Dover that day; 30-45 minutes of that time was spent on the production floor. (Tr. 258-65).

CO Marcinko testified that during one of his inspections at Dover he took a photograph of lathe #7 showing a label and base (also referred to as the interlock block where a swing arm would normally be attached) for an interlock; but the rest of the interlock was missing.⁸⁶ He testified that an interlock was a device that provides guarding by "protecting the operator from going into the point of operation or any moving parts. Once that door is open, it stops the machine automatically and is considered a safe zone now for an employee to, you know, grab anything out, whatever they need to do inside that piece of

active duty in the US Army from about 1998 through 2001, and 2002 through 2006. He also worked as a forklift operator at Northwest Pipe Company, for six months in about 2001, where he received machine guard training. (Tr. 249-256).

⁸³ CO Marcinko stated there was another employee at the opening conference. On direct examination, the CO identified the second person as Mike Poland. On cross-examination, he identified the person as Brian Bitikofer, but then stated he was unsure of the second person's name. The Court notes Brian Bitikofer testified he accompanied CO Marcinko during the April 4, 2014 inspection. (Tr. 259-60, 166, 307-08).

⁸⁴ He testified that Dover had five CNC lathes in one room. (Tr. 261).

⁸⁵ He testified that these CNC lathes included lathe ##7, 19 and 38. (Tr. 262).

⁸⁶ CO Marcinko testified that "LS-26 splash [guard] interlock" appeared on the label. (Tr. 271; Exs. 17-18).

equipment.”⁸⁷ CO Marcinko testified that the interlock device was not functional on lathe #7. (Tr. 270-73, 285; Exs. 17-18).

On his May 29 visit, he held a second opening conference with Mr. Stingel. On this visit, he was accompanied by another CO he was mentoring, Jeff Bobo. CO Marcinko conducted interviews with several Dover employees and CO Bobo took notes. At the end of each interview, the COs asked the employees to sign a written statement. On May 29, 2014, CO Marcinko took a photograph of lathe #15 that shows “where the interlock was located that had the wire holding the interlock back.” He testified “there’s a swing arm there [at “B” on the photograph at exhibit 19] that had the tie wire around it holding it back.” He testified that the interlock device on lathe #15 was not functional because it “had been defeated with the tie wire.” CO Marcinko testified he personally saw the tie wire and identified the tie wire holding the interlock back on the photograph at exhibit 20, at “A”. On this visit, COs Marcinko and Bobo also measured a fabricated guard on the outside of the door of lathe #15. There were openings in the fabricated door guard. He also testified that he and CO Bobo measured the distance from the opening in lathe #19 to the point of operation.⁸⁸ They also measured the width of the opening with the door in the open position at about 17 inches that he had observed in operation. CO Marcinko also took a photograph of lathe #19 that showed two placards that stated “LS-26 Splash Guard Interlock” and “LS-27 Splash Guard Interlock.” He testified that the interlock device on CNC lathe #19 was not functional. CO Marcinko also testified that he took the photograph at Exhibit 23 that showed the splash guard made of cardboard on lathe #37.⁸⁹ He also took the photograph at exhibit 24 that showed the danger label that was on the majority, if not all, of the CNC machines. He testified that item no. 8 on the danger label on lathe

⁸⁷ The machine manual states:
19.2 Door interlock

The door interlock switch is located on the door of the control box. When the door interlock switch is ON, if tried to open the door, the machine power goes OFF automatically. The door interlock switch has keys, called the door interlock keys, to turn the switch ON/OFF.
(Ex. 7, p. 8).

⁸⁸ CO Marcinko testified that he saw that CNC lathe operators were within arm’s reach of the point of operation.
(Tr. 314-15).

⁸⁹ CO Marcinko testified he took the photograph showing the cardboard on April 4, 2014. He believed the cardboard has been replaced with a sliding door by May 29, 2014. (Tr. 334-35).

#37 warned operators not to “attempt to put your hand in beyond oil guard, while machine is in operation.”⁹⁰ (Tr. 265-66, 273-80, 307; Exs. 19, at “B”, 20-24).

CO Marcinko also testified that he took the photograph at exhibit 25 of lathe #38. He testified the photograph showed the absence of an interlocking device.⁹¹ The absence of a functioning interlock device was confirmed when he observed that lathe #38 did not turn off when the splash guard door was opened and closed while the lathe was operating. Either he or CO Bobo also took a photograph of Matthew Bitikofer looking inside lathe #38 as it was operating with the splash guard door partially open. (Tr. 282-84; Exs. 25-26).

CO Marcinko also testified that he took the photograph at exhibit 27 of mill # 510. He testified the photograph showed a latching mechanism to secure the door. He testified there was no interlock device on the doors of mill #510. CO Marcinko further testified that he took the photograph at exhibit 29 of mill #810. He testified that there was no interlock device on the doors of mill #810. CO Marcinko testified that employees are still exposed to a moving parts hazard if the CNC mill splash guard doors are open even in rod-fed CNC mill jobs where operators are not required to put their hands into the machines repeatedly. (Tr. 285-87, 311, 345-46; Exs. 27, 29).

CO Marcinko held a total of three closing conferences to apprise Dover of his findings; one each at the first and second visits and another prior to issuing the citation. He testified he based the citation on the hazard from moving parts and not of flying parts or objects. (Tr. 318, 320, 342-43).

CO Marcinko described the layout of the production area as a box-shaped formation where each machine’s door faced the interior of the box area and the operators stood facing away from each other looking toward each machine. He believed there was a risk of the operators accidentally bumping into

⁹⁰ CO Marcinko testified that “oil guard” was the same as “splash guard.” (Tr. 280-81).

⁹¹ CO Marcinko testified that the two CNC mill machines were not manufactured with interlocks. He further testified that after 2001 ANSI required interlocks be placed on CNC milling machines as moveable doors. He said ANSI was not incorporated into the OSHA standard, but were considered nationally recognized consensus standards. He testified that this was a requirement ANSI imposed on the employer. (Tr. 355-56).

each other because they faced away from each other and it was “such a tight area.” He observed operators working at lathes ##7 and 19 in close proximity of each other and thought they could bump into each other. During his inspections, he observed the CNC lathes operating making small washers. He saw operators putting their hands in and out of the machines about every 20 seconds. (Tr. 261-62, 295, 299, 338-39).

CO Marcinko also observed lathe #38 running a rod-loaded job with the splash guard door open. He believed its operator, Matthew Bitikofer, was exposed to the hazard of moving parts during the production cycle. CO Marcinko testified Dover was cited for the potential of an amputation hazard resulting from moving parts of the machines. He said a hand caught in between the moving table and the edge of a CNC mill machine could cause a fracture to the hand or a finger amputation. (Tr. 311-12, 320, 344).

He also believed Matthew Bitikofer could have been exposed to the machine’s point of operation when he saw him use an air wand to clean off the workpiece during the production cycle. (Tr. 311-12).

CO Marcinko was concerned that during certain production cycles the tooling could move at such a slow rate of speed as to appear to be at rest. He was concerned employees might not be able to readily tell when the spindle was spinning. When repetitively loading 300 to 600 identical parts per day, the operator could assume the cycle was finished and inadvertently reach his or her hand in and make contact with the point of operation with a spindle rotating at 250 to 1,200 rpms. (Tr. 299, 337-38).

CO Marcinko was told there was no safety policy on clothing or jewelry worn by operators. He believed clothing, e.g., long sleeve shirts or hooded sweatshirts, could get caught on a moving part and pulled into the machine when an operator reached up to use the CNC lathe’s control panel located above the guard door opening. He also testified operators performing rod-fed operations were exposed to a rotating part hazard when the splash guard doors were open. He testified that employee exposure existed where it was possible for an employee to get his hand into the moving parts of a machine. He testified the

phrase “electronic safety devices” in the cited standard, 29 C.F.R. § 1910.212, includes interlocks. (Tr. 295-97, 311, 316, 332, 345-46; Exs. 1-2; JPHS Fact #10).

On the CNC mills, CO Marcinko testified there was also a hazard if an employee’s hand was caught between the moving table and the machine’s front wall. (Tr. 343).

CO Marcinko testified that he conducted the employee interviews at Dover according to his normal procedure where, before an employee signs a statement either the employee reads the statement or CO Marcinko reads it aloud, the employee can make any changes the employee wants to make. He did not coerce or threaten employees during his interviews.⁹² After his interviews with managers and employees, he had the impression that it would significantly affect production speed if the splash guard doors were closed for every production cycle. (Tr. 266-67, 361).

CO Marcinko recalled being told Dover changed its procedures to require operators “to manually hit the start button in order to start the operation” following Mr. Mullet’s injury. He said that change in a work practice rule was not the best way to eliminate exposure to the hazard. He stated that the best way to prevent hazard exposure altogether was by using an engineer control measure, such as guarding. He described a “hierarchy of controls” of best practices starting with engineer control measures,

⁹² He did warn Seth McCoy to tell the truth. Seth McCoy had told him during the interview that he shut the splash guard door on lathe #7 “every single time” for every production cycle. CO Marcinko believed it was unlikely that Mr. McCoy closed the splash guard door numerous times a day given how difficult it was to close the door on lathe #7 because it had bad rollers on the bottom of the sliding door. CO Marcinko read section 17(g) of the Act to Seth McCoy to advise him of the consequences of providing false information. Seth McCoy then became defensive. Section 17(g) of the Act states:

(g) Whoever knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to this Act shall, upon conviction, be punished by a fine of not more \$10,000, or by imprisonment for not more than six months, or by both.

The Court finds the COs did not threaten or coerce Seth McCoy during his May 29, 2014 interview. Seth McCoy admitted during his testimony that he had initially lied to the COs during the inspection interview. CO Marcinko’s testimony as to how he conducts interviews was consistent and credible. (Tr. 267-71; Exs. 14, 17).

administrative control measures, Personal Protective Equipment (PPE), and ending with work practices [rules]. (Tr. 359-60).

CO Marcinko testified Dover was previously cited by OSHA for point of operation and nip point hazards under 29 C.F.R. § 1910.212(a)(1)⁹³ and (3)(ii) on CNC milling and Brown and Sharpe screw machines at the same plant location.⁹⁴ He further testified the prior citation was resolved by an informal settlement agreement dated January 2, 2008 where Dover agreed to abate the violations. He also testified that Dover provided a written certification dated January 10, 2008 that certified corrective action had been completed.⁹⁵ (Tr. 289-91; Exs. 5-6).

CO Marcinko testified that he considered the citation to be willful because Dover had a heightened awareness of the standards and hazards at issue from the 2012 Mullet injury, previous citation violations, doors being left wide open, and lack of effort to prevent employees from reaching into the machines to the point of operation.⁹⁶ He said OSHA did not give Dover any credit for good faith since the violation was classified as willful. (Tr. 301-02).

James Washam

The Secretary presented James Washam as an expert on machine guarding issues. The Secretary asserted Mr. Washam's testimony would show that it was reasonably predictable for an operator to place his hand in the zone of danger during a machine's production cycle. (S. Br. 32).

⁹³ The citation stated:

29 C.F.R. 1910.212(a)(1): Machine guarding was not provided to protect operator(s) and other employees from hazard(s) created by moving parts of the CNC Milling Machine. (Ex. 5, p. 9).

⁹⁴ Exhibit 5 shows the citation for these violations was issued by OSHA on December 20, 2007.

⁹⁵ The Certification stated:

Correction completed

Additional machine guards were taken out of storage and placed on the machine. Employees were informed that the guards must remain on machine while in operation.

(Ex. 6, pp. 1-2).

⁹⁶ CO Marcinko testified that management representatives; including Messrs. Stingel, Palmer and Brian Bitikofer, told him using interlocks and keeping the doors closed would reduce production by 25 to 50 percent. (Tr. 361).

Mr. Washam has over 50 years of experience in machine guarding safety. He started his career operating mills and lathes. From 1979 through 2007, he worked for OSHA in several capacities, including compliance officer, Assistant Area Director, and Region 5's machine guarding lockout coordinator. Thereafter, he consulted and provided training to OSHA's Training Institute and major corporations, including Siemens Corporation and Merrick, for three years. In 2010, he resumed working at OSHA as Region 5's machine guarding lockout coordinator on a part-time basis, three days each week. Mr. Washam has developed and presented training about machine guarding safety for employees, training centers, and associations during his career. Additionally, Mr. Washam participated in the ANSI committee for an industry consensus standard on machine guarding. He has been an expert witness in six OSHA cases, including three machine guarding cases and three machine lockout cases. (Tr. 371-85).

The Court found Mr. Washam qualified as an expert in machine guarding based on his knowledge, skill, experience, training and education over the course of 50 years. Respondent had no issue with Mr. Washam's qualifications regarding the technical aspects of how to guard a machine or whether the guards are adequate. He testified this case involved whether or not the: a) machines were guarded and b) employees were exposed. (Tr. 388, 395).

Mr. Washam prepared a written expert report dated February 10, 2015. Mr. Washam's expert opinion was based on OSHA's file,⁹⁷ his experience observing CNC mills and CNC lathes, his knowledge, related ANSI industry standards, applicable OSHA standards, accident reports, and testimony at the hearing. (Tr. 389-99, 416, 420).

Mr. Washam stated he was generally familiar with the types of CNC mills and CNC lathes used at Dover's facility and had previously observed them in operation. After watching the videos of Dover's

⁹⁷ The OSHA file included photographs, OSHA-1B's/worksheets, the CO's notes, witness statements, and Dover's videos of its CNC lathe and CNC mill in operation. (Tr. 389, 416).

CNC mill and CNC lathe, he determined Dover's use and operation was not unique. (Tr. 388-89, 399; Exs. 1-2).

Mr. Washam stated the hazards presented by the lack of guarding on the CNC mills and CNC lathes at Dover included those from moving tables that may create pinch points, contact with moving parts, tooling and other parts being run, tooling breakage, and parts or tools flying out of machine. Entanglement of hair, jewelry, or clothing in moving parts also presented a hazard.⁹⁸ Mr. Washam stated amputations could occur from entanglements, contact with rotating parts, and/or pinch points created by moving tables. He testified that the hazards at Dover were recognized by the ANSI standards. (Tr. 399-403, 414-15, 427).

Mr. Washam stated the zone of danger for the CNC mills and CNC lathes was the area within the confines of the machine's walls, including the wall formed when the moveable splash guard door was closed. He opined there was no operational necessity for an employee to be in the zone of danger (confines of the machine) when the machines were running during the machine's production cycle. But, Mr. Washam testified that there was a need for employees to be in the zone of danger at other times. He stated that employees were "not protected" from the zone of danger. He explained "there is nothing to prevent employees from doing any of these tasks that they would do when the machine is not running or at least not in motion, there's nothing to prevent them from doing the same types of tasks when the machine is operating or moving." He testified that "[t]he problem is that there is nothing to prevent them from [extraneous words omitted] not paying full attention to the operation and performing some of those tasks when the machine is actually in operation. So there's nothing to prevent them from getting into the actual hazardous motion of the machine while the machine is in operation, other than a work rule."⁹⁹ In his opinion, once an employee passed "the opening of the door opening [the employee] would be into the

⁹⁸ ANSI B11.23-2002 states that guards shall "[p]revent the accidental entry of clothing or body parts into the hazard area(s) that it is guarding." Likewise, ANSI B11.22-2002 states that guards shall "[p]revent the accidental entry of clothing or body parts into the hazard area(s) that it is guarding." (Exs. 8, p. 38, 9, p. 43).

⁹⁹ Mr. Washam testified he has investigated many accidents over the years involving some intentional actions by employees taking shortcuts. (Tr. 405).

danger zone.” He opined that there would be an operational necessity to go beyond the door opening to: 1) catch a part before it dropped into a pan to avoid nick or scuffs marks and/or 2) hit a start button right above the doors because the operators were “right in front of the door” and there was the potential for tools breaking or parts flying out of the machine. (Tr. 399, 403-06; JPHS Fact #8).

Mr. Washam further testified there was a need for an employee to be in the zone of danger at other times, such as, when loading a workpiece.¹⁰⁰ Mr. Washam believed it was reasonably predictable an employee would be in the zone of danger during a production cycle, to adjust an air nozzle or a coolant hose, when using an air wand, or cleaning out debris, because there was no guard to keep an operator away from moving parts.¹⁰¹ Further, Dover’s standard practice had operators standing next to the open doors during a production cycle. Mr. Washam believed an employee near the open door could inadvertently enter the zone of danger because of loss of attention due to the routine, repetitive nature of the work, by attempting to take a shortcut, by making an adjustment, or by misjudging the sequenced timing of the machine’s program.¹⁰² He also testified when the [CNC mill] table moved back “fairly close” to the CNC mill machine opening it appeared to create a “potential pinch point.”¹⁰³ (Tr. 403-06, 409-10, 422-23; JPHS Fact #8).

Mr. Washam opined that Dover’s programming change to the CNC lathe after the 2012 Mullet incident, which required the operator to manually start the next cycle rather than use a pre-timed automated start, had not eliminated the hazard to employees but lessened the probability of injury. He

¹⁰⁰ Mr. Washam testified similar hazards were present in rod-fed operations because the door guards were not closed and tools or parts could fly out of the machine. (Tr. 429).

¹⁰¹ Mr. Washam testified he was concerned operators would use air lines, nozzles, wands and hoses inside the machines to clean parts or blow chips away when the machines were not shut off, but were “at rest” between operational cycles. He opined it was “very likely” and “predictable” that another reach-in machine accident would occur at Dover even though no incidents occurred for several years. (Tr. 411, 426-27).

¹⁰² He testified that Dover’s practice allowing operators to run two machines at a time provided more reason for an operator to get out of sequence. He said “One machine is operating and the other one is down, vice versa, and that goes on all day. There might be more probability of reaching in to do something thinking the machine is off and it really is not.” (Tr. 406-07).

¹⁰³ Mr. Washam stated he could not say there actually was a pinch point until he knew the distance from the table’s edge to the machine’s wall. (Tr. 343, 423; R. Br., p. 11).

said Dover could have eliminated the exposure to the hazard by using the existing machine guard doors with proper safety interlocks, which would automatically break that safety circuit and actually prevent any motion from occurring inside the machine. (Tr. 408).

Mr. Washam stated that Dover's employees were not protected while using a machine because Dover relied on a general instruction to employees to keep their hands out of the machine. Mr. Washam testified a work rule, by itself, offers inadequate protection.¹⁰⁴ There was no guard or other barrier to prevent an employee from being exposed to the point of operation during a production cycle. A closed splash guard door would prevent contact. A functioning interlock on a splash guard door would stop the production cycle if the door was opened and prevent accidental contact. (Tr. 404-10).

Mr. Washam testified 29 C.F.R. § 1910.212 requires employers to guard against machine hazards in some manner. He said the standard does not specify a certain type of guard, such as an interlock, to use. He stated it was OSHA policy to use an ANSI standard as a guide to determine the proper application of safeguards where 29 C.F.R. § 1910.212 does not specify what type of guard must be used. Mr. Washam testified ANSI B11.23-2002 applied to Dover's two CNC milling machines and ANSI B11.22-2002 applied to Dover's CNC lathes.¹⁰⁵ (Tr. 412-13, 417; Exs. 8-9, B, p.2).

Overall, the Court finds Mr. Washam's testimony helpful to establish the type of hazards resulting from a lack of machine guarding and whether Dover had adequate measures in place. He is a credible source of information regarding safety and machine guarding for CNC lathes and CNC mills.

¹⁰⁴ Mr. Washam testified:

Q. And why isn't a work rule adequate?

A. Because you can't rely on the work rule to – if you could rely on work rules, then most machines wouldn't have to be guarded. Work rules and training are trying but they don't prevent somebody from getting into the zone of danger during the operating cycle. And the 212 standards that's been talked about here, they're talking about guards and devices to prevent exposure to the hazard as opposed to a work rule. Or training or whatever it might be. A physical device that prevents it. (Tr. 410).

¹⁰⁵ The ANSI standards state "American National Standards are promulgated through ANSI for voluntary use." (Exs. 8, p. 2, 9, p. 2).

Based on his extensive experience in the field of safety and machine guarding, and courtroom demeanor, the Court finds his testimony credible and persuasive.

CITATION

Secretary's Burden of Proof

To establish a violation of an OSHA standard, the Secretary must show by a preponderance of the evidence that: (1) the cited standard applies; (2) the terms of the standard were violated; (3) the employer knew, or with the exercise of reasonable diligence could have known, of the violative condition; and (4) one or more employees had access to the cited condition. *Astra Pharm. Prods.*, 9 BNA OSHC 2126, 2129 (No. 78-6247, 1981), *aff'd in relevant part*, 681 F.2d 69 (1st Cir. 1982).

Citation 1, Item 1

The Secretary cited Dover for a willful violation of 29 C.F.R. § 1910.212(a)(1) which requires:

(a) Machine guarding -- (1) Types of guarding. One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks. Examples of guarding methods are -- barrier guards, two-hand tripping devices, electronic safety devices, etc.

Specifically, the Secretary alleged that Dover did not provide adequate machine guarding to protect employees from the hazard of moving parts for seven pieces of equipment – five Miyano CNC automatic lathes and two Excell CNC mills.¹⁰⁶ For each machine, the citation alleged there was a lack of

¹⁰⁶ Respondent emphasized during the hearing and in its briefs the only hazard at issue was contact with a machine's moving parts. A review of the Secretary's post-hearing submissions shows the hazard alleged relates only to the moving parts on the lathes and mills; the Secretary presented no argument or instance for another hazard (for example, the hazard of ejected parts). Because the Secretary did not pursue an argument that Dover violated the machine guarding standard for the hazard of objects being ejected outside the machine, the Court will not address the arguments Respondent has set forth to refute this possible argument.

“adequate guarding to protect the employees from the moving parts of the lathe,¹⁰⁷ thereby exposing the employees to an amputation hazard.”¹⁰⁸ The seven cited machines are:

- a. Number 7 Miyano Machinery USA CNC automatic lathe, model number BNC-34, serial number BN30982L.
- b. Number 15 Miyano Machinery USA CNC automatic lathe, model number BNC-34, serial number BN30989C.
- c. Number 19 Miyano Machinery USA CNC automatic lathe, model number BNC-34, serial number BN32101C.
- d. Number 37 Miyano Machinery USA CNC automatic lathe, model number BNC-20S, serial number BN202765.
- e. Number 38 Miyano Machinery USA CNC automatic lathe, model number BNC-34S, serial number BD10356.
- f. Excell 510 CNC mill, model number XL-510, serial number ES78829.
- g. Excell 810 CNC mill, model number XL-810, serial number ES81726.

Respondent admitted the interlocks on the lathes were not functioning and that it did not require its operators to close the doors on the CNC mills and CNC lathes during the production cycle.

Respondent asserts the Secretary cannot prove the prima facie element of exposure to a hazard because its operators had no reason to be near the point of operation during a production cycle and the Secretary did not show inadvertent contact was reasonably predictable based on how operators used the machines. (R. Br. 4, 14-17).

¹⁰⁷ The Court finds the citation’s reference at paragraphs f. and g. relating to the two CNC mill machines to the moving parts of the “lathe,” instead of “mills,” as immaterial to the outcome of the case. Neither party raised this as an issue.

¹⁰⁸ This violation description was used for each of the seven cited machines. *See Complaint and Citation.*

Applicability and Violation of the Standard

29 C.F.R. § 1910.212(a)(1) requires employers to use one or more methods of machine guarding to provide protection to operators and other employees in the machine area from hazards created by, for example, point of operation, rotating parts, and flying chips. Examples of guarding methods include barrier guards and electronic safety devices, including interlocks. The standard does not specify which guarding method shall be used; it just mandates that a guarding method shall be used. Respondent does not dispute that the standard is applicable to the seven cited CNC machines and that its employees routinely operated the CNC mills and CNC lathes without guarding.¹⁰⁹ The Court further finds Respondent's employees routinely operated the CNC mills and CNC lathes without guarding in violation of the standard's requirements. The Court finds that the cited standard applies. (Tr. 412-13, 417).

Dover asserts the only hazard at issue in the instant case is related to employee exposure to a machine's moving parts and no other hazards. Dover cited *Carlyle Compressor v. OSHRC*, 683 F.2d 673, 675 (2nd Cir. 1982) and *Sec'y of Labor v. Loren Cook Co.*, 803 F.3d 935, 941 (8th Cir. 2015) to support its assertion that a tool or workpiece ejected from the machine is not covered under the cited standard. (R. Br. 5-7, 10; R. Supp. Br. 1-2).

Loren Cook is not apposite to the instant case. *Loren Cook* narrowly held that 29 C.F.R. § 1910.212 (a)(1) did not apply to the hazard of the anomalous ejection of a large 12-pound rotating metal workpiece from a lathe that was the basis of the alleged violation by the Secretary.¹¹⁰ 803 F.3d at 937. *Carlyle* held the standard did not cover the hazard of a thrown machine shaft. 683 F.2d at 675. Neither case is relevant to the hazard of exposure to moving parts in the instant case.

¹⁰⁹ In its Answer, Respondent asserted the alleged violations resulted from unpreventable employee misconduct and the alleged violations occurred more than 6 months prior to the issuance of the citation. *Answer* at ¶¶ VII, VIII. Respondent did not pursue either of these arguments. The Court deems these defenses abandoned. *See Ga. Pac. Corp.*, 15 BNA OSHC 1127, 1130 (No. 89-2713, 1991).

¹¹⁰ In its Response to Respondent's Supplement to Post-Hearing Brief, the Secretary asserts that the *Loren Cook* holding should not be construed as a blanket determination that 29 C.F.R. § 1910.212(a)(1) does not cover ejecting parts. (Sec. Suppl. Post-Hrg. Br., p. 1).

Further, neither case is from the likely circuit of appeal for the instant case. *See Kerns Bros. Tree Serv.*, 18 BNA OSHC 2064, 2067 (No. 96-1719, 2000) (“Where it is highly probable that a Commission decision would be appealed to a particular circuit, the Commission has generally applied the precedent of that circuit in deciding the case—even though it may differ from the Commission's precedent”). The Court finds these cases are inapposite to the instant case.

Knowledge

The Secretary must prove the employer either knew, or with the exercise of reasonable diligence could have known, of the violative condition. *Revoli Constr. Co.*, 19 BNA OSHC 1682, 1684 (No. 00-0315, 2001). The employer’s knowledge is directed to the physical condition that constitutes a violation. *Phoenix*, 17 BNA OSHC 1076, 1079-1080 (No. 90-2148, 1995), *aff’d*. 79 F.3d 1146 (5th Cir. 1996). It is not necessary to show that the employer knew or understood the condition was hazardous. *Id.*

Knowledge is imputed to the employer “through its supervisory employee.” *Am. Eng’g & Dev. Corp.*, 23 BNA OSHC 2093, 2095 (No. 10-0359, 2012) (citations omitted). Mr. Stingel, vice president of manufacturing, admitted it was his decision to allow the employees to routinely operate the lathes and mills without use of machine guarding. (Tr. 99-100, 103, 105).

Here, Dover’s management knew that 29 C.F.R. § 1910.212(a)(1) required CNC lathe and CNC mill machines be adequately guarded from hazards created by moving parts.¹¹¹ The Court finds that Dover also knew its employees routinely operated the CNC lathes and CNC mills without guarding. It further finds Dover’s management was well aware its employees routinely operated the CNC lathes and CNC mills with the splash guard doors open, leaving no barrier between the operators and the point of operation, or other moving parts. (Tr. 68-69, 75-76, 98-100, 103, 125, 288-89; Ex. 5, p. 9).

¹¹¹ In January, 2008, Dover certified to OSHA that: 1) “[a]dditional machine guards were taken out of storage and placed on the [CNC mill] machine[.]” and 2) its employees “were informed that the guards must remain on machine while in operation.” (Tr. 289-91; Ex. 6, p. 2).

Dover had ample warning that the splash guard doors on both the CNC lathes and CNC mills needed to be closed while the machines were operating. Lathe #37 and other machines had warning signs that said “DANGER,” “Do Not Open Oil Guard Safety Door While Machine is in Operation.” The warning signs also stated “Splashguard must be in closed position and engaged in interlock system” before starting the machine cycle. Both CNC mills also had warning signs above the spindle area that read “DO NOT open door unless machine control is in manual mode and Spindle stop is depressed.” The warning signs also had a depiction of fingers being amputated when too close to a spinning tool and a warning symbol consisting of a triangle sign with an exclamation point inside that preceded the word “WARNING.” Dover did not heed these warnings and chose to ignore them. (Tr. 99-101, 281, 286-88; Exs. 24, 29-30).

Dover also ignored additional clear warnings in the CNC lathe operating manual that said: “Keep splash guards closed while operating machine[.]” and “[t]o protect against MOVING PARTS while operating machine: Keep all splash guards, covers, doors, and other protective devices in place. If removed, replace before operating.” Another warning had a depiction of a person pulling open the splash guard/door being struck in the head by a round object. The manual also included a warning that said “FAILURE TO FOLLOW THESE CAN RESULT IN SEVERE INJURY OR DEATH.” (Tr. 101-03, 292-94; Ex. 7, p. 6).

Exposure

The parties agreed there was no operational necessity for an operator to have his hands in a machine during the production cycle. The citation is based on exposure through careless, inadvertent, or intentional contact with a machine’s moving parts. An employee would be exposed to a moving parts hazard by placing his or her hand within a CNC lathe or CNC mill while the machine is cycling. Lathe operators are repeatedly required to put and use their hands at the point of operation inside the machines to insert and retrieve parts and remove debris. This is expected to occur at a time when power is flowing to the lathes, but the lathes are not engaged in an active cycling manufacturing operation. There is a zone

of danger for employees within the confines of the CNC lathes and CNC mills at Dover. (Tr. 399, 405-06; JPHS Fact #8).

The Court finds the Secretary has proven it is reasonably predictable for an operator to carelessly, inadvertently, or intentionally contact the point of operation during a machine's production cycle.

The Commission has long held the definition of the hazard depends on how the machine functions and how it is operated. *Fabricated Metal Prods.*, 18 BNA OSHC 1072, 1074 (No. 93-1853, 1997). To establish exposure under the cited standard, "the Secretary . . . must show that it is reasonably predictable either by operational necessity or otherwise (including inadvertence), that employees have been, are, or will be in the zone of danger." *Id.*

The zone of danger is "that area surrounding the violative condition that presents the danger to employees [that] the standard is intended to prevent." *S&G Packaging Co., LLC*, 19 BNA OSHC 1503, 1506 (No. 98-1107, 2001) (citations omitted). Here, the cited standard protects employees from the moving parts of a CNC mill or CNC lathe.

The Secretary asserts the zone of danger is the entire area with the walls of the machine and while in the zone of danger an employee can inadvertently contact moving parts. The Secretary's expert stated that the zone of danger was "within the confines of the equipment." For both CNC mills and CNC lathes, the Secretary asserts the point of operation exposes an operator to injury from moving parts. The Secretary also asserts the CNC mill's moving table presents a hazard to the operator. (Tr. 320, 344, 399-401; S. Br. 24-25).

The point of operation "is the area on a machine where work is actually performed upon the material being processed." 29 C.F.R. § 1910.212(a)(3)(i). For the lathes, the point of operation is the location where the blank plastic workpiece is loaded onto the spindle about 2 feet away from the doorway's threshold. During production, the tool moves to the rotating workpiece to produce the part. (JPHS Fact #1).

For the mills, the blank workpiece is loaded onto a table near the doorway opening. When the production cycle begins, the table moves the blank workpiece toward the point of operation near the back of the machine, approximately two feet from the door's threshold. The rotating tool then moves vertically down to produce the part. (Tr. 226, 235; JPHS Fact #1; S. Br. 13).

The Respondent asserts the Secretary's definition of the zone of danger is too broad and the Secretary has not shown that being next to the open doorway presents a danger to an operator. Respondent asserts the Secretary's expert was considering hazards that are not at issue in the instant case. Nonetheless, while the Secretary's allegations in the instant case do not include every hazard that could occur from a lack of guarding, the Court finds the Secretary has shown that the machine's moving parts can be accessed from any place within the machine when the splash guard door is open. The zone of danger includes the confines of the machine. (R. Br. 7-13).

The Secretary argues that Dover's operators are exposed to the zone of danger in two ways. The first is when the operator misjudges the timing of the CNC lathe's cycle and makes contact with the point of operation before the spindle stops rotating or a CNC mill operator enters the zone of danger; e.g., to remove debris. The second is when an operator stands by the open doorway of the CNC lathes and CNC mills during the production cycle. (S. Br. 29, 32).

With respect to the Secretary's first argument, that an operator could make contact because he misjudges the timing of the production cycle, the Court finds it is reasonably predictable a CNC lathe operator could carelessly, inadvertently or intentionally contact the point of operation. The Commission has long recognized the machine guarding standard is designed to protect employees from human mistakes such as distraction, carelessness, and fatigue. *B. C. Crocker Cedar Prods.*, 4 BNA OSHC 1775, 1777 (No. 4387, 1976).

The Court finds the combined factors of the absence of the use of any guarding method, including splash guard doors left open¹¹² and nonfunctioning interlocks, the repetitive steps in the workpiece hand-loading process, the production cycle's automatic stop, the fast pace of production with operators standing alongside the open doors,¹¹³ the recurring need to clear out debris from inside the machines by hand and air wands,¹¹⁴ and the significant experience needed to master the lathe's operation, make it reasonably predictable a CNC lathe operator would misjudge the lathe's timing and make contact with the point of operation during a production cycle.¹¹⁵

Dover knew the interlocks on the five CNC lathes were not functional. Lathe #15's interlock was "tied back" for more than a decade showing a continuing, conscious decision to render its interlock useless. Dover also knew the two CNC mills had no interlocks. An interlock is an "electronic safety device" within the meaning of the cited standard. A functional interlock would not allow part production to occur with an open splash guard door. Because the interlocks on Dover's CNC lathes did not function and were missing on its CNC mills, doors could remain open during production and thus not provide a physical barrier between the operator and the point of operation. JPHS Fact #6 that states "[i]nterlocks are not required under the cited standard" does not absolve Dover from being found to have violated the cited standard. Interlocks were an electronic safety device that Dover could have used as a guarding method. It chose to not use interlocks, or any other suitable guarding method, as machine guarding to protect its employees from the hazard of moving parts. (Tr. 86-87, 275-76, 285-87, 332, 345-46; Exs. 15, 20).

¹¹² Aside from just leaving all of the five CNC lathe's splash guard doors open, lathe #7's door did not move well on its rollers, lathe #15 had vertical bars over its opening where a door should have been, lathe #37 used cardboard as a window, and lathe #38's window was so dirty its operators could not see through it. (Tr. 114-15, 123, 176, 269-71, 279, 283-84; Exs. 11, 23, 26).

¹¹³ The video at exhibit C shows Matthew Bitikofer resting his hand inches from the inner confines of a lathe. Should his hand slide for any reason, it would be within the zone of danger.

¹¹⁴ Respondent does not dispute that operators have occasion to have their hands inside of the machines to clean out chips and unplug vacuum hoses while the machines are "at rest," but powered on. (Tr. 439-42, 453; R. Br. 14-16).

¹¹⁵ The Secretary also asserted that running multiple machines could cause an operator to misjudge the timing. Matthew Bitikofer's testimony was that he ran multiple machines when he was running rod-loaded jobs that lasted several hours per cycle. (Tr. 437; S. Br. 26).

The steps of the workpiece hand-loading process for CNC lathes contribute to the likelihood of contact with the point of operation. The operator manually controls the start of the cycle, but not its end. The operator watches the production process and unloads the finished part when he believes the production cycle is finished. The spindle operates at 250 to 1,200 rpm during a production cycle. The spindle stops rotating after the tool backs away from the point of operation. When unloading the finished part, the operator can misjudge whether the spindle has stopped and make contact with the still rotating spindle. (Tr. 442).

Finally, the fast pace of successive production cycles contributes to the likelihood an employee will misjudge the timing and reach into a CNC lathe too soon. The CNC lathe operator unloads the finished part and loads the next blank workpiece in rapid succession. The record shows the full production cycle for a finished part can be 30 to 120 seconds. In the demonstration video, the production time for the finished part was less than 20 seconds. The video also shows that approximately three seconds elapse from the unloading of a finished part to the loading of the blank workpiece. This very rapid pace of production, with just seconds between cycles, done many times per day, makes it reasonably predictable an operator could misjudge the timing by a second or two and make contact with the rotating spindle.¹¹⁶ This would be especially true for less experienced employees because it can take 6-7 years for an employee to master the CNC lathe's operation. (Tr. 448, 460; Exs. 2, C).

Mr. Mullet's 2012 accident demonstrates that misjudging the timing of a production cycle leads to injury. Mr. Mullet was injured when the production cycle started while he was adjusting the workpiece inside a CNC lathe. Just as Mr. Mullet misjudged the timing of the automatic start, an employee could misjudge when the production cycle had finished and make contact with the point of operation while the spindle was still rotating. Had a guard been in place and used, it would have prevented Mr. Mullet's

¹¹⁶ This Court's finding is consistent with the opinion of the Secretary's expert, James Washam, a recognized expert in machine guarding with impressive experience. Respondent did not present any expert testimony rebutting Mr. Washam's opinion in this regard.

injury. If interlocks were functioning on his CNC lathe, the interlock would have prevented him from even being able to open the splash guard door while the machine was engaged in a cycling operation.

Finally, a quick production pace was important to Dover. Brian Bitikofer testified that the ability to quickly hand-load workpieces gave Dover a competitive advantage. Messrs. Stingel and Matthew Bitikofer acknowledged that closing the door for each production cycle could significantly effect production time, especially for short-cycle jobs. This focus on the pace of production supports the assertion that the fast pace contributes to the likelihood of a mistake.¹¹⁷ (Tr. 105-06, 173, 176-77, 209, 216; Exs. 13, 16).

Here, the evidence shows the specific nature of how the CNC lathes and CNC mills are operated by Dover's employees. By their own testimony, and by additional evidence including videos of the actual operation of both types of machines, it has been shown that Respondent's employees who operate CNC lathes and CNC mills must necessarily do many of their required tasks either within the confines of the machines or immediately adjacent thereto. While they are performing these tasks, the machines are repeatedly placed into and taken out of the cycled operation. The production cycle occurs over and over, hands in and hands out of the CNC lathes, the machine's operating cycle turned on and turned off, up to 600 times each day. It is reasonably predictable that Dover's employees will not be able to maintain the constant vigilance and perfect timing needed to avoid another incident involving contact with moving parts. A repeat of Mr. Mullet's accident is very possible through contact with moving parts an operator thought had stopped, but had in fact not stopped. (Ex. 7).

Secondly, the Secretary asserts that being next to the open door of these CNC machines during production also exposes an employee to the zone of danger. Leaving the splash guard doors open while the CNC machines are operating is a ready invitation for operators to enter into the zone of danger for whatever reason, including accident, carelessness and inadvertence; thereby being exposed to the hazard

¹¹⁷ If the operator touches the spindle a second too early he is exposed to a spindle rotating at speeds up to 1,200 rpm.

of moving parts. The record shows operators stood by the opening during the production cycle. The width of the lathe's opening was 17 inches and the height was roughly the distance from an employee's hip to shoulder. Operators routinely watched the process to determine if debris was accumulating on the workpiece. Further, to use the CNC lathe's control panel, for example to hit the cycle start button, the operator had to reach across the open doorway. CO Marcinko observed an employee using an air wand in the CNC lathe's doorway during a production cycle and an employee with his face next to an open door observing the workpiece's progress. The door opening for the two CNC mill machines was substantial in size; large enough for the upper body of an operator to stumble or fall into the zone of danger. (Tr. 282-83, 311-12, 399, 406; Exs. 21, 26; S. Br. 28).

Respondent refutes this argument by stating no Dover operator had ever contacted the machine's moving parts while using an air wand or using the control panel. Further, Respondent asserts this is analogous to the alleged exposure in *Fabricated Metal Prod.*, 18 BNA OSHC at 1073-75. (R. Br. 12; R. Reply 3). In *Fabricated*, an employee was observed using a hand wand to clean the equipment with compressed air 12-14 inches away from the point of operation. *Id.* at 1073. The Commission found it "remote at best" an employee would make contact with the point of operation as the result of a slip and fall. *Id.* at 1074.

The instant case differs from *Fabricated* in several ways. In *Fabricated*, the Commission found there was no reasonably predictable exposure to the point of operation from a slip and fall because boxes limited direct access to the area, the machine was equipped with a sensor to shut it down if it detected an adjustment to the machine, and the opening to the points of operation were small -- between 1/4 inch to 3 inches. *Id.*

The Court finds *Fabricated* is not analogous to the instant case. At Dover, there was no obstruction between the operator and the machine's moving parts. The machines had no sensor or other device to automatically stop the machine. The door openings for both the CNC lathes at CNC mills at

Dover were substantially larger. Finally, the point of operation could be reached from anywhere within the confines of the machine and not the limited openings of 1/4 inch to 3 inches in *Fabricated*.

Further, Dover cannot rely on its belief that employees are safe because there had been no prior accident other than Mr. Mullet's accident. The OSH Act is designed to prevent injury rather than waiting for "an employee to die or become injured." *Whirlpool Corp. v. Marshall*, 445 U.S. 1, 12 (1980). The Commission has held that a hazard is presumed to exist where a standard sets forth a particular method for employee safety. See *Otis Elevator Co.*, 24 BNA OSHC 1081, 1085 (No. 09-1278, 2013), *aff'd* 762 F.3d 116 (D.C. Cir. 2014). Here, the cited standard requires guarding of a machine's moving parts to prevent an injury. Relying on an employee's "common sense" or judgment rather than provide a guard is not a reasonable means of protection from a machine's moving parts. *H.B. Zachry Co. (Int'l)*, 8 BNA OSHC 1669, 1674 (No. 76-2617, 1980) (Machine guarding standard requires physical methods of guarding rather than methods of guarding that depend on human behavior; unguarded point of operation posed a hazard that could result in injury in the event of employee carelessness or inadvertence); see also *George C. Christopher & Sons, Inc.*, 10 BNA OSHC 1436, 1444 (No. 76-647, 1982) (Standards require guarding be provided by a device that itself prevents the operator from endangering himself; dependence upon employee behavior misplaced).

The Secretary also asserted that an operator could make inadvertent contact with moving parts if he stumbled or slipped his or her arm or hand into the opening of a CNC lathe or CNC mill machine. The close proximity of the machines with the operators facing away from each other make it predictable operators could bump into each other causing an arm or hand to enter into the zone of danger. The door openings of both the CNC lathes and CNC mills are large. An operator could lose his balance and fall into the zone of danger of an operating CNC mill machine.

Respondent refutes this point by stating this had never occurred and asserts the instant case is analogous to *Buffets, Inc.*, 21 BNA OSHC 1065, 1067 (No. 03-2097, 2005). In *Buffets* the Commission found there was no evidence of conditions that a slip and fall was a likelihood. *Id.* Unlike *Buffets*, the

issue here is not whether there is any substance or obstacle that would cause an operator to slip or fall. The hazard in the instant case results from the close proximity of the machines to one another, the operators' difficulty in seeing each other while operating their machines, and the openness of the zone of danger when the splash guard doors are not closed. The door opening of a CNC lathe is large enough for an employee to insert his arm or hand into the machine after being bumped by another employee. The opening was 17 inches wide and the height was roughly the distance from an employee's hip to shoulder. The CNC mill machine's opening is even larger. When CO Marcinko observed the operation, he saw that operators stood close to each other and faced away from each other. As a result, he believed it was predictable an operator could accidentally back into another while operating a machine. CO Marcinko's testimony was straightforward and convincing. The Court agrees that a long sleeve shirt or hooded sweatshirt could get entangled on a moving part. (Tr. 399; Exs. 21, 26; S. Br. 28).

Respondent also relies on other Commission cases to support its position its operators were not exposed to moving parts; e.g., *Delek Refining, Ltd.*, 25 BNA OSHC 1365, 1374 (No. 08-1386, 2015), *appeal docketed*, No. 15-60443 (5th Cir. June 22, 2015); *S. D. Beverly Enters., Inc.*, 21 BNA OSHC 1037, 1038-39, (Docket No. 01-202, 2005) (consolidated); *Miniature Nut & Screw Corp.*, 17 BNA OSHC 1557, 1561-63 (No. 93-2535, 1996); *Jefferson Smurfit Corp.*, 15 BNA OSHC 1419, 1421 (No. 89-0553, 1990); *Syntron, Inc.*, 11 BNA OSHC 1868, 1869 (No. 81-1491, 1984).

In *Delek*, the Commission found that no one worked near or had duties on the machines, there was no evidence employees were near the zone of danger, and that being 5-10 feet away was too far for inadvertent contact. *Delek*, 25 BNA OSHC at 1374.

By contrast, Dover's employees had duties at the machines, they were in and out of the zone of danger many times a day, and were routinely at the CNC lathe's point of operation. The Court finds *Delek* does not support Respondent's position.

In *Beverly*, the Secretary alleged employees were exposed to moving parts as an operational necessity. The Commission found there was no operational reason for an employee to have his hands at the point of operation and thus there was no exposure. *Beverly*, 21 BNA OSHC at 1038-39. The Commission noted that, unlike here, the Secretary “makes no claim that inadvertent contact with the rotating agitator could be made by Beverly’s employees during normal use of the unguarded A-200 mixer.” *Id.*, at 1038-39.

Here, the violation is based on accidental, careless, inadvertent or intentional contact with the point of operation; as such *Beverly* does not support Respondent’s position. Neither does *Miniature*. In *Miniature*, the Commission found there was no violation of 29 C.F.R. § 1910.212(a)(1) because there was no employee exposure to an unguarded nip point in a flat die thread roller used about once a week where a barrier, the bulk of the machine itself, was between the operator and a small brush an operator might reach for while the machine was not running. *Miniature*, 17 BNA OSHC at 1561-63. The instant case is distinguishable from *Miniature*. Here, the operator stands next to the zone of danger throughout the production cycle in order to quickly load a workpiece for the next cycle. Further, the operator is placing his hands in and out of CNC lathes at a rapid pace due to short cycle times, and there is no barrier between the operator and moving parts.

In *Jefferson*, the Commission rejected testimony presented on behalf of the Secretary that straight-line gluer¹¹⁸ operators routinely came within 2 to 5 inches of the unguarded nip points. *Jefferson*, 15 BNA OSHC at 1421. Instead, the Commission found there was no evidence of an occasion where an operator would be closer than 16 inches to the machine’s nip points. *Id.* at 1421. In contrast, here, it is undisputed operators are routinely at the point of operation to load and unload parts within CNC lathes

¹¹⁸ A “straight-line gluer” processes flat cardboard into finished boxes by passing the cardboard through a series of older bars and glue applicators which gradually form it into boxes of the prescribed size and shape. (*Jefferson*, 15 BNA OSHC at 1419).

and clear debris in both CNC lathes and CNC mill machines. *Jefferson* does not support Respondent's position.

In *Syntron*, the Commission found there was no violation because the evidence did not show the operator would have a reason to come close enough to unguarded portion of a saw blade. *Syntron*, 11 BNA OSHC at 1869 (Commissioner Cleary dissenting – Majority taking no account that operator could be injured through inadvertence). Here, the operators were routinely at the point of operation of CNC lathes. *Syntron* does not support the Respondent's position.

The Secretary also proved exposure to the hazard of moving parts for CNC mill operators. While a CNC mill operator does not load at the point of operation, the risks are the same for an operator standing near the CNC mill's open doorway. Because there is no barrier between the operator and the point of operation, an operator is able to reach into the machine to make adjustments or clear debris at any time. Dover cannot rely on an employee's judgement instead of providing a barrier or other guarding for protection from moving parts. Further, the CNC mill's opening is large enough for an operator's arm, hand or upper body part to enter into the zone of danger and make contact with moving parts. (Exs. 1, 28, 29).

The Court finds the Secretary has proved that it is reasonably predictable Dover's CNC lathe and CNC mill machine operators are exposed to moving parts due to the specific nature of how the machines are operated. The Court further finds the Secretary demonstrated the operators' practice of standing next to the open splash guard doorway during the production cycle makes it reasonably predictable careless, accidental, inadvertent, or intentional contact with the moving parts of a CNC lathe and CNC mill would occur. Finally, the Court finds the Secretary proved it was reasonably predictable operators were exposed to moving parts on the CNC lathes and CNC mills and did not provide the required guarding. The Secretary proved his prima facie case for Citation 1, Item 1.

Willful Characterization

The Secretary classified this violation as willful.¹¹⁹ A willful violation is done “with intentional, knowing or voluntary disregard for the requirements of the Act or with plain indifference to employee safety.” *Burkes Mech., Inc.*, 21 BNA OSHC 2136, 2140 (No. 04-0475, 2007) (*Burkes*) (citations omitted); *see also, Nat’l Eng’g & Contracting Co. v. Herman*, 181 F.3d 715, 721 (6th Cir. 1999) (finding conduct is willful if it is “intentional, deliberate, and voluntary”). “The Secretary must show that the employer was actually aware, at the time of the violative act, that the act was unlawful, or that it possessed a state of mind such that if it were informed of the standard, it would not care.” *Propellex Corp.*, 18 BNA OSHC 1677, 1684 (No. 96-0265, 1999) (citations omitted). A willful violation differs from a serious violation by a heightened awareness and either conscious disregard or plain indifference. *Williams Enter., Inc.*, 13 BNA OSHC 1249, 1256 (No. 85-355, 1987).

The Commission has repeatedly held that an employer who deliberately disregards known safety requirements acts willfully. In *Calang Corp.*, 14 BNA OSHC 1789, 1791 (No. 85-319, 1990), the Commission held that the "conscious disregard" of the requirements of the cited standards by an employer who had the standards explained to him was willful. In *Donovan v. Williams Enters.*, 744 F.2d 170 (D.C. Cir. 1984), the court affirmed a Commission decision that an employer who had failed to heed warnings that it was not in compliance with OSHA standards and abate the violations acted willfully. The court stated, "These facts alone are sufficient to establish 'intentional disregard of' and 'plain indifference' to OSHA's regulations." 744 F.2d at 180, *accord Valdak Corp.*, 17 BNA OSHC 1135, 1137 (No. 93-239, 1995), *aff'd*, 73 F.3d 1464 (8th Cir. 1996) (permitting a dangerous condition to exist for a long period of time was willful); *Morrison-Knudsen Co./Yonkers Contracting, Joint Venture*, 16 BNA OSHC 1105,

¹¹⁹ The Secretary also asserted the violation was serious. (S. Br. 33). A violation is classified as serious under § 17(k) of the Act if “there is substantial probability that death or serious physical harm could result” if an accident occurred. 29 U.S.C. § 666(k); *Compass Envtl., Inc.*, 23 BNA OSHC 1132, 1136 (No. 06-1036, 2010), *aff'd*, 663 F.3d 1164 (10th Cir. 2011). The Secretary need only establish any possible accident would most likely result in serious injury. *Wis. Elec. Power Co.*, 4 BNA OSHC 1783, 1787, n. 18 (No. 5209, 1976), *aff'd*, 567 F.2d 735 (7th Cir. 1977). The Court finds that serious physical harm is the likely result if an employee’s hand is caught in the moving part of the machine. The Court finds the Secretary has shown employees are exposed to a serious hazard as a result of Dover’s violation of the cited standard.

1127 (No. 88-572, 1993) (an employer who knowingly disregarded its consultant's advice acted willfully).

The Secretary asserts Dover had a heightened awareness of the need to guard the moving parts of CNC lathes and CNC mill machines through an OSHA citation issued December 20, 2007, the abatement Dover implemented in response to that citation, Dover's warnings to its employees to keep their hands out of the machine, the warning in the CNC lathe's operating manual, the warning labels on the CNC lathe and CNC mill machines, and the 2012 Mullet injury. Respondent asserts none of these are a basis to support a willful characterization. Respondent is wrong. In the aggregate here, they provide an ample basis to justify a willful characterization. (Tr. 71, 82, 95, 100, 207, 214; Exs. 5, 6; S. Br. 34-38).

The Secretary asserts the 2007 machine guarding citation, and the subsequent abatement, provided Dover with a heightened awareness of the unguarded condition of its machines and the standard's requirement to guard against moving parts. The Court agrees. The 2007 citation included violations of two machine guarding standards: 29 C.F.R. § 1910.212(a)(1) and 29 C.F.R. § 1910.213(a)(3)(ii). Dover's abatement certification to OSHA stated the machine guards had been installed on the machines and employees were instructed to use them during operations. (Ex. 6; S. Br. 34-35).

Respondent asserts two reasons why the 2007 citation and abatement did not provide heightened awareness: the machines were distinctly different than the instant case and current management team was not involved in the 2007 citation and abatement. Both arguments fail. (R. Br. 21-22).

The 2007 citation alleged a machine guarding violation for Dover's CNC milling machines. The difference between Dover's CNC mills and CNC lathes is not such that it is reasonable for Dover's management to believe machine guarding was required on a CNC mill, but not a CNC lathe. Both machines are used to modify blank workpieces and individually loaded by the operator. The primary

difference is the location of the workpiece. This difference does not support a reasonable belief the machine guarding requirement did not also apply to its lathes.

Respondent also states that, because Dover's current management team was not significantly involved in the abatement of the 2007 citation, there is no heightened awareness. Current management's asserted lack of significant involvement in the prior citation does not deprive Dover of heightened awareness. Dover cannot claim ignorance of the 2007 citation and abatement; a corporate entity's knowledge is through its key employees. *See Caterpillar, Inc.*, 17 BNA OSHC 1731, 1732 (No. 93-373, 1996), *aff'd*, 122 F.3d 437, 440-41 (7th Cir. 1997). An employer does not lose its "knowledge" when a supervisory employee no longer works for the organization; the employer retains the knowledge. *Id.* The knowledge Dover's safety officer, Mr. Wuske, gained during the 2007 citation and abatement was imputed to Dover and remained with the company after his employment ended. *See Caterpillar, Inc. v. OSHRC*, 122 F.3d 437, 440-41 (7th Cir. 1997), *aff'g*, 17 BNA OSHC 1731 (No. 93-373, 1996) (citations omitted). Further, Mr. Stingel has worked for Dover since the company was formed in 1990 and as vice president of manufacturing likely would have known if guards were removed from storage and installed on machines. Mr. Stingel also agreed Dover told OSHA in its January, 2008 Certificate of Abatement that operators were told to use all supplied machine guards. (Tr. 45-47, 57, 463; R. Br. 22).

The Court finds that the 2007 citation and subsequent abatement provided Dover with a heightened awareness of the requirements of the cited standard and need to guard the moving parts on its machines. Dover allowed its operators to not use guarding in disregard of the standard's requirements.

The Secretary asserts that Dover's warnings to its employees show a heightened awareness of the hazards. Further, Dover ignored the warnings on its machines and operating manual that stated the splash guard doors should be closed. Dover also ignored its own history and dismissed the hazard of making contact with moving parts by consciously deciding not to use guards for the CNC lathe and CNC mill machines. (S. Br. 35-37; Exs. 7, 24).

Mr. Stingel admitted Dover's machine operators did not comply with the warning signs on the machines. He testified that even though the warnings stated the "splash guard must be in closed position and engaged in interlock system," he believed, based on his 41 years of industry experience, it did not apply to the Dover's manufacturing process. (Tr. 98, 100; Ex. 24).

Mr. Stingel admitted he made the decision that operators could operate with the guard doors open and he knew operators generally ran the lathes with the doors open. He also knew employees were warned to keep their hands out of the machine during their training. (Tr. 95, 99, 100, 103).

The Court finds Dover's warnings to its employees show Dover was aware of the risk of injury to an operator. The Court finds Dover's choice to ignore the machine manufacturer's warning labels based on Mr. Stingel's experience in the industry was not reasonable. Messrs. Stingel, George Bitikofer, and Matthew Bitikofer each admitted that they had no training on machine guarding or safety generally. Dover management replaced the manufacturer's warnings with its own judgement, despite their lack of expertise in safety or machine guarding. This demonstrates a heightened awareness of the hazard as well as indifference to employee safety. (Tr. 47, 208, 234; Exs. 7, 24, 30).

Finally, after the 2012 Mullet accident, Dover continued to allow operators to keep the splash guard doors open during production. Instead of following the warnings to close the splash guard doors, Dover changed the program for the production cycle and still relied on a general instruction to its employees. Despite its heightened awareness from the accident, Dover continued to operate with the doors open in disregard of the standard's requirements and with indifference to the safety of its employees.

Dover asserts that a willful characterization is negated by its good faith belief that it was in compliance. "It is well established that a willful charge is not justified if an employer has made an objectively reasonable, good faith effort to comply with the standard or to eliminate a hazard even though the employer's efforts are not entirely effective or complete."

Spirit Homes, Inc., 20 BNA OSHC 1629, 1630 (No. 00-1807, 2004) (consolidated) (citations omitted); *see also Calang Corp.*, 14 BNA OSHC at 1791. The employer's belief must have been "non-frivolous." *Morrison-Knudsen Co./Yonkers Contracting Co.*, 16 BNA OSHC at 1127 (citations omitted). (R. Br. 23).

Dover's good faith belief is based on the lengthy experience of Messrs. Stingel and George Bitikofer, its operators feeling safe with the doors open, its programming fix after the 2012 Mullet accident, a 2010 OSHA inspection, and its lack of significant injuries. Dover also points out that it did not require the operators to keep the doors open and it did not pay its operators based on production. (R. Br. 23-25).

Respondent bears the burden of proof to show good faith. *Morrison-Knudsen Co./Yonkers Contracting Co.*, 16 BNA OSHC at 1127. An employer's subjective belief that it is in compliance with an OSHA standard is not sufficient to overcome a finding of willfulness. The test is "an objective one -- whether the employer's belief concerning a factual matter or concerning the interpretation of a standard was reasonable under the circumstances." *Williams Enters., Inc.*, 13 BNA OSHC at 1259. "[A]n employer is not necessarily spared from a finding of willfulness by taking any measure, regardless of how minimal, to enhance employee safety." *J.A. Jones Constr. Co.*, 15 BNA OSHC 2201, 2209 (No. 87-2059, 1993).

For the reasons that follow, the Court finds that Dover's beliefs and actions were not objectively reasonable and do not support a good faith belief it was in compliance or had abated the hazard. Neither management nor operators had safety training. Dover presented no evidence to show that management or operators had an understanding of safe operating practices or machine guarding requirements. Thus, Dover's reliance on their experience in the industry for machine safety issues is not objectively reasonable. (Tr. 47, 234, 247).

Dover cannot rely on an operator's belief he is safe or give employees the option to work safely. An employer "cannot shift to its employees the responsibility for assuring safe working procedures."

Pride Oil Well Servs., 15 BNA OSHC 1809, 1851 (No. 87-692, 1992) (citations omitted). This is especially true here because Dover provided no safety training to its employees. The Court finds Dover's reliance on its employees' perceptions they were safe does not support an objective good faith belief that guarding was not required or needed.

Dover also asserts its response to the 2012 Mullet accident demonstrates good faith. After the accident, Dover modified the CNC lathe's program to require a manual start of the production cycle in lieu of the automated start. This argument fails. The Mullet accident demonstrated that access to the point of operation during a production cycle could result in an injury. The Commission has consistently held the cited standard "requires physical methods of guarding rather than methods of guarding that depend on human behavior." *H. B. Zachry Co. Int'l*, 8 BNA OSHC at 1674 (citations omitted). Instead of using the splash guard door with a working interlock or other guarding system, Dover simply changed the machine's program and continued to rely on an operator to avoid placing his hands in the machine. Dover's response did not solve the problem of accidental contact with the machine's moving parts, as required by the cited standard and by the machine's own warnings. Thus, its response does not support a good faith belief the hazard was abated. (R. Br. 21).

Further, Dover cannot rely on a lack of significant injury history to establish good faith. Dover provided no safety training to its employees and simply relied on an employee to keep his hand out of the machine. An employer cannot rely on luck to prevent an injury. *See generally, Whirlpool Corp. v. Marshall*, 445 U.S. at 12 ("The Act does not wait for an employee to die or become injured. It authorizes the [...] issuance of citations in the hope that these will act to prevent deaths or injuries from ever occurring"). The Court finds Dover's lack of a significant injury history does not provide a basis for a good faith belief that it was in compliance with safety standards or had abated the hazard.

Dover asserts that Mr. Stingel had a good faith belief it was safe for the operators to keep the doors open during the production cycle because Dover was not machining metal or using coolant. A supervisor's belief that a condition is safe does not constitute reasonable, objective good faith. *See Sec'y*

of Labor v. Capital City Excavating Co., Inc., 712 F.2d 1008, 1010 (6th Cir. 1983) (foreman's good faith belief that trench was safe does not mitigate willfulness); *Gen. Motors Corp., CPCG Oklahoma City Plant*, 22 BNA OSHC 1019, 1044 (No. 91-2834, 2007) (consolidated) (affirming a willful violation where the employer's belief was neither "plausible nor reasonable"). (Tr. 465, 474-75; R. Br. 24-25).

The record does not provide support for Mr. Stingel's belief that guarding was needed only when working with metal or when using coolant. The warning in the operator's manual specifically states that the splash guard door should be closed while the machine is in operation.

Respondent also asserts that Dover had a good faith belief it was in compliance because it was not cited for a machine guarding violation after a 2010 OSHA inspection. This argument fails. "[I]t is well established that an employer cannot rely on the Secretary's failure to issue a citation" as proof of compliance. *Peterson Bros. Steel Erection Co.*, 16 BNA OSHC 1196, 1201 (No. 90-2304, 1993) (citations omitted), *aff'd* 26 F.3d 573 (5th Cir. 1994). (Tr. 302; R. Br. 22).

Finally, not having production quotas or compensation based on production speed does not provide an objective good faith belief that Dover was in compliance or operating safely.

The Court finds Dover's assertion it had a reasonable, good faith belief that it was operating its machines in compliance with OSHA standard or it had eliminated the hazard was not objectively reasonable and fails. The Court finds the record supports the characterization of a willful violation.

Penalty Amount

The Secretary properly classified this citation item as willful. The maximum penalty for a willful violation is \$70,000. 29 U.S.C. § 666(a). Section 17(j) of the Act requires the Commission to give due consideration to four criteria in assessing penalties: the size of the employer's business, the gravity of the violation, the employer's good faith, and its prior history of violations. *Compass Envtl., Inc.*, 23 BNA OSHC at 1137.

The Secretary proposed a penalty of \$49,000 which is a 30% reduction from the maximum penalty of \$70,000. CO Marcinko testified there was no penalty adjustment for good faith. The record is silent on the level of gravity that was assessed or the penalty reduction provided due to Dover's size by the Secretary. (Tr. 301-02).

The Court finds that the Secretary's proposed penalty of \$49,000 is reasonable and appropriate. In assessing its penalty, the Court has considered the size of Dover's business, the gravity of the violation, Dover's good faith or lack thereof, and its prior history of violations. The Court assesses a penalty of \$49,000.

Findings of Fact and Conclusions of Law

All findings of fact and conclusions of law relevant and necessary to a determination of the contested issues have been made above. *See* Fed. R. Civ. P. 52(a). All proposed findings of fact and conclusions of law inconsistent with this decision are denied.

ORDER

Based upon the foregoing findings of fact and conclusions of law, it is **ORDERED** that:

1. Citation 1, Item 1, alleging a willful violation of 29 C.F.R. § 1910.212 (a)(1) is AFFIRMED, and a penalty of \$49,000 is assessed.

Dated: June 20, 2016

Washington, D.C.

/s/

The Honorable Dennis L. Phillips

U.S. OSHRC Judge